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How Unequal Access to Personal and Professional Networks Impacts Success Among Construction Apprentices

Cameron Elliot Arnold
Portland State University

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How Unequal Access to Personal and Professional Networks Impacts Success Among
Construction Apprentices

by

Cameron Elliot Arnold

A thesis submitted in partial fulfillment of the
requirements for the degree of

Master of Science
in
Sociology

Thesis Committee:
Maura Kelly, Chair
Lindsey Wilkinson
Molly Benitez

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ABSTRACT

The construction industry is still primarily white male dominated, and while there is significant research on gendered experiences in the trades, there is not research on experiences and attitudes towards support that occurs outside of the trades across gender and other intersectional identities. My study aims to start filling the gap and answer the questions: how does access to personal and professional networks impact success among Oregon apprentices? How is access to and attitudes towards receiving support impacted by gender and race? To answer these questions this study uses qualitative interviews of Oregon apprentices who completed or terminated in 2018-2019. Utilizing organizational inequalities theories such as Acker's theories on gendered organization and inequality regimes in congruence with construction literature, I found that despite efforts from the Highway Workforce Construction Development Program to increase support for marginalized apprentices, women and apprentices of color still do not have the same access to support. I propose that Acker and other organizational inequality theories are expanded to include personal networks to fully understand how support impacts success.

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CHAPTER ONE: INTRODUCTION

In an interview conducted for this study, Hailey a white woman who completed her carpentry apprenticeship, said: “I almost quit [my apprenticeship]. Between Oregon Tradeswomen and one of my very favorite people in the carpenters union, I stayed.” Support during apprenticeship can be crucial for completion and integration into the trades for many women and apprentices of color. The construction fields continue to be white male dominated (Bilginsoy 2013; Denissen and Saguy 2014; Hunte 2016; Ibanez 2017; Kelly et al 2015; Kelly and Wilkinson 2020; Kelly et al 2022). Entrance into the construction trades is challenging for women and people of color and then, once in the trades, retention among these populations is low due to discrimination and harassment (Denissen and Saguy 2014; Hunte 2016; Ibanez 2017; Kelly et al 2015; Kelly and Wilkinson 2020; Kelly et al 2022). These experiences can be understood through Joan Acker’s concepts of gendered organizations (1990) and inequality regimes (2006), which discuss the ways in which men are prioritized over women in the workplace, particularly through job hierarchy and career progression. For example, men were given opportunity to get to know different areas of a business and are coached into manager roles while women are kept in lower-level positions (Acker 2006). Some studies on construction trades have noted the important role of professional networking, but few have focused specifically on networking as it relates to success (Denissen 2010; Kelly et al 2015; and Bamberry et al 2022).

While there is significant research on experiences of sexism and racism in the trades, there is gap of literature on experiences and access to personal networks, and how

that support impacts success across gender and race. Acker's theories primarily focus on professional networks that occur within the workplace, particularly those who have access to professional networks and therefore career progression. There is a gap in the literature on experiences and access to personal networks, and how that support impacts success across gender and race. Other organizational scholars have found that women tend to have weaker relationships and networks in particular workplace cultures, such as law and engineering, and in turn impacts success (Moore 1990; Drentea 1998; Kay and Hagan 1998; Dryburgh 1999; Peterson 2007; McDonald 2011; Sommerlad 2012; O'Connor 2013; Seron, Silbey, Cech, and Rubineau 2016; Gorman and Mosseri 2019). Further, Acker's (1990; 2006) theories do not fully address the forms of support received through personal networks that occur outside of the workplace, such as emotional support from family and friends, and how that might impact success.

To expand theories of organizational inequalities and address the relationship between access to personal and professional networks and success, I utilize Oregon Highway Construction Workforce Development Program evaluation interviews collected by Portland State University researchers (Kelly and Wilkinson 2020). The program evaluation determined that retention services provided through the program did improve completion (Kelly and Wilkinson 2020); but the evaluation did not examine the impact of other sources of support during apprenticeship described in participant interviews. This study aims to answer the following questions: how does access to personal and professional networks impact success among Oregon apprentices? How is access to and attitudes towards receiving support impacted by gender and race?

CHAPTER TWO: LITERATURE REVIEW

2.1 Gendered Organizations and Inequality Regimes

Acker's (1990) work on gendered organizations shows the ways in which organizations are inherently gendered; and how cultural views of gender are created and reproduced within organizations. Acker (1990) discusses that all organizations have some sort of hierarchy based on underlying gender assumptions, especially who is best suited for leadership and other work roles. Jobs within an organization are typically the basis for the hierarchy, and often assumed as gender neutral (Acker 1990). However, jobs that are low in the hierarchy require less complexity and responsibility and are predominantly filled by women (Acker 1990). Similarly, Ray (2019) critiques organizations as not inherently race neutral and that bureaucratic hierarchies reinforce and legitimize the association between racial identity and status. In addition, Ray (2019) finds that racialized organizations directly impact the agency of individuals who fall into particular racial groups through controlling use of time at work and outside work, disparate wages between white and non-white groups, hiring discrimination, etc. Due to the gendered and racialized nature of organizations, processes within organizations produce divisions of labor, allowed behavior, power, and gendered social structures (Acker 1990). Further, racialized organizations codify and distribute resources unequally (Ray 2019). Particularly in the white male dominated construction industry, the presence of women and people of color threaten ideologies of masculinity (Denissen and Saguy 2014), patriarchal hierarchies, and white dominance (Hunte 2016).

Acker's (2006) theory of inequality regimes further highlights the practices, processes, and meanings that uphold multiple forms of inequalities in organizations.

Inequalities in an organization may differ, but is based on class, gender, and racial processes (Acker 2006). For example, some ways inequality is produced in organizations is the requirement for work being based on the “ideal worker” (most commonly a white man), who can completely devote his attention to full-time work (Acker 2006). Further, from the beginning of the hiring process it is determined which jobs are suited for men and women (Acker 2006). For example, Mickey (2022) finds in the tech industry that most of the men have not had a formal interview in multiple years due to personal and professional networks in the industry, whereas women did not report receiving career boosts from networks in the tech industry. Acker (2006) also points out the ways informal interactions are gendered at the workplace, how workers interact with each other or not interact based on gendered assumptions. For example, Williams and colleagues (2012) found that women geoscientists have to regulate their attitudes to be seen as assertive, but not too assertive to be labeled a “bitch”. Organizations tend to reflect the larger society in some form, for example, larger organizations tend to have hierarchical positions that reflect class processes in society (Acker 2006). Incorporating insights from previous construction literature (Denissen and Saguy 2014; Kelly et al 2022) I expand theories of organized inequality (e.g., Acker 1990, 2006; Gorman and Mosseri 2019; Ray 2019) to address professional and personal networks that occur outside of the workplace; and examine how access can influence success in an occupation.

2.2 Negotiating Gender in White Male Dominated Trades

The construction trades continue to be viewed as inherently masculine work and continue to be white male dominated (Bilginsoy 2013; Denissen and Saguy 2014; Hunte 2016; Ibanez 2017; Kelly et al 2015; Kelly and Wilkinson 2020; Kelly et al 2022). One

study on highway construction trades apprentices in Oregon who started between 2010 and 2013, found that women and some racial/ethnic minority men (such as Black men and Native men) were less likely to complete their apprenticeship compared to white men (Kelly and Wilkinson 2020). Another study found that Black women in particular face the resistance of the trades industry to include Black individuals and women (Hunte 2016). Similarly, an ethnographic study on construction trades in the Midwest found that when dealing with mistakes, “outsiders” (women and people of color) were criticized more harshly, whereas white men were more likely to get the benefit of the doubt (Paap 2008).

Masculinity in the trades industry continues to advantage men through multiple avenues. For example, Ibanez (2017) found that demonstrating physical strength was an aspect of building culture, and women face the barrier of a perceived lack of physical strength. Another study found that tradeswomen experience sanctions for not being feminine enough *or* masculine enough and have found ways to utilize gender to navigate these male dominated spaces (Denissen 2010). Duke and colleagues found that men in the trades who are the primary provider strongly related loss of work as detrimental to their health and wellbeing (2013). Further, the men tended to use highly masculine terms in discussing layoffs, loss of work was tied with self-worth and competence; whereas the women tended to have anxiety over losing wages and did not tie layoffs to competence (Duke et al 2013). Whiteness in the construction culture is less frequently or explicitly discuss, but historical and ongoing exclusion happens as well as experiences of overt racism (see Paap 2008; Hunte 2016).

Due to the gendered and racialized culture of the trades, when women and people of color wish to join construction and manufacturing trades, they commonly experience a lack access to apprenticeship programs, low apprenticeship completion rates, and on the job discrimination and/or harassment before, during, and after apprenticeship (Denissen and Saguy 2014; Hunte 2016; Ibanez 2017; Kelly et al 2015; Kelly and Wilkinson 2020; Kelly et al 2022). While all workers in the trades may also experience difficulties with schedules that change regularly and needing to travel for work, these challenges (among others) affect women and people of color disproportionately (Galea et al. 2015; Kelly et al 2022). Further, in a survey of Oregon apprentices, people of color reported feeling disadvantaged on the job due to their race/ethnicity by being the only person of color on the job, feeling unwelcome, and/or instances of overt racism through slurs (Kelly et al 2015). Again, due to intersecting identities, Black women reported feeling that career advancement was impeded by patriarchal structures and white dominance (Hunte 2016).

Similarly, Galea and colleagues (2020) found that men and women experience differences in recruitment, retention efforts, and career progression: men get referred to jobs through professional and personal networks. When women were successful in the construction trades, Australian researchers found that success was associated with access to personal and professional networks, specifically through networking with other women (Bridges et al 2021). However, for some women having personal networks related to the trades determined whether or not they could enter the trades at all (Bridges et al 2021). Further, organizations could challenge white male dominance in the trades by targeting young women and girls during recruitment periods; however progressive policies are not easily adopted across all businesses (Bamberry et al 2022). To further explore these

issues, this study aims to fill the gap in the literature and examine personal networks and how that relates to success in the construction trades.

CHAPTER 3: BACKGROUND

As noted above, the data comes from the Oregon Highway Construction Workforce Development Program evaluation interviews collected by Portland State University researchers (Kelly and Wilkinson 2020). To improve retention of Oregon apprenticeship programs, and to increase diversity within the construction trades, the ODOT/BOLI Highway Construction Workforce Development Program (HCWDP) provides financial and non-financial support (Kelly et al 2022; Kelly and Wilkinson 2020), see Box 1. This allows apprentices to complete and accept more jobs, complete the apprenticeship program, and create a more diverse workforce. All current apprentices who are registered in eligible trades (i.e., carpenters, cement masons, ironworkers, laborers, operating engineers, and painters) and/or apprentices working on a highway or bridge job can access supportive services (Kelly et al 2022).

Box 1: Highway Construction Workforce Development Program Supportive Services

- First-year apprentices (\$500 maximum per apprentice) eligible for job readiness supplies. This includes: work tools, work clothing, and personal protective equipment (PPE)
- Fuel assistance (\$1,000 maximum) for travel to and from job sites and apprenticeship classes for more than 60 miles from home
- Assistance with lodging (\$1,500 maximum) and meals (\$250 maximum) for jobs more than 60 miles from home
- Childcare subsidies (maximum of \$10,000 per apprentice), increases made according to the household income, household size, and ages of children
- Hardship funds (maximum of \$1,000) for one-time financial challenges
- Non-financial support services, including a budget class, mentoring, and referrals to other services

Evaluations of this program have shown an increase in retention of the marginalized population and all race/gender groups (Kelly et al 2022; Kelly and Wilkinson 2020). More specifically, the proportion of apprentices in Oregon completing apprenticeships who were women and/or people of color went from 15 percent in 2010–2011 to 23 percent in 2018–2019 (Kelly and Wilkinson 2020). Further, highway trades apprentices who received any supportive services were 16 percent more likely to complete their apprenticeship; and apprentices who received specifically non-financial support were 20 percent more likely to complete their apprenticeship (Kelly et al 2022). Moreover, despite these and other ongoing efforts, diversifying the workforce has been a slow process and apprenticeships in Oregon remain white male dominated (Kelly and Wilkinson 2020; Kelly et al 2022). Additionally, previous evaluations have noted the role

of support from outside of the trades but have not fully explored the scope of these experiences or gender and racial differences in support. Increased financial support for marginalized apprentices does not fully address issues that those apprentices face, particularly regarding support from outside the trades; this study seeks to more fully understand where there are unmet needs impacting completion rates.

CHAPTER FOUR: RESEARCH METHODOLOGY

To examine the gender and racial differences in the access to and discussion of support through personal and professional networks, I analyzed interviews on construction apprenticeship support. As noted above the interviews were collected by Portland State University researchers from an Oregon Highway Construction Workforce Development Program evaluation (Kelly and Wilkinson 2020). The population is all Oregon apprentices working in eligible trades who had received services from the BOLI program and completed or terminated their apprenticeship in 2018 and 2019. The total population is 175 individuals who received services in that two-year period. A total of 30 interviews were conducted; two were excluded due to audio issues, two were excluded because the apprentices were still active at the time. The final sample is 26 interviews (see Table 1 for sample demographics).

The sample is non-random and stratified to ensure representation from both completed and terminated apprentices, men and women apprentices, white apprentices, and apprentices of color. There is one transman apprentice (he is counted with the men). Most of the apprentices self-identified as heterosexual, but there are a handful of queer apprentices. The average age of the sample is 34. Additionally, carpenters make up a significant portion of the sample, this is due to the high number of carpenters who received services from the program. This is a potential limitation because there is not strong representation from other trades, but the results are transferrable because the nature of the apprenticeship process is likely to hold across trades.

The Portland State University researchers recruited the sample through contact information provided by the Bureau of Labor and Industries. Interviews took place from

April to May 2020 only over the phone due to COVID-19. The interviews were audiotaped and transcribed, with an average of 28 minutes (ranging from 16 to 48 minutes). Interviews were conducted by a paid graduate student research assistant, under the supervision of faculty researchers. The topics addressed in the interviews were primarily regarding the types of financial and non-financial support and sources of said support (see Table 2). For example, interview questions looked like: “We would also like to know about non-financial help, this could be information, advice, or general support. How about from your union, have you received any non-financial support from them? What kind of help did you receive?” and “We would like to know if you received any (other) financial help during your apprenticeship. How about from your apprenticeship program, did you receive any financial help from them? What kind of help did you receive? How did it help?” In addition to asking about support from unions and apprenticeship programs, all apprentices were asked about financial and non-financial support from government assistance, employer, other trades people, family and friends, and partner (see Table 2). See Appendix A for full interview guide.

Table 1: Interview Demographics

Completed/Terminated in 2018-2019	N
Completed	16
Terminated	10
Race	
White	14
Black or African American	4
Hispanic or Latino	6
Multiracial	2
Gender	
Men	16
Women	10
Sexual identity	
Straight	21
Gay, lesbian, bisexual, or something else	5
Refused	1
Family type	
Single with no children	2
Partnered with no children	8
Single with children (part time custody)	3
Single with children (full time custody)	2
Partnered with children (full time custody)	11
Age	
Average age	34
Pre-apprentice services	
Oregon Tradeswomen	4
Constructing Hope	2
Carpenter Trade Preparation	1
Apprenticeship services	
Ready supplies (tools, clothing, PPE)	24
Travel (gas, hotel, food)	6
Childcare (including ERDC)	6
Hardship funds	5
Non-financial support (reported by BOLI)	4
Non-financial support (reported by participants)	20
Trade	
Carpenter	12
Exterior/interior carpenter	8
Laborer	4
Cement mason	1
Painter	1

N=26

For this study, personal networks refer to the individuals or organizations who are outside of the trades that may be a source of financial and/or non-financial support for apprentices; professional networks refer to the individual or organizations inside of the trades that may offer financial and/or non-financial support to apprentices. Financial support is monetary, such as assistance with rent, utilities, and providing unpaid childcare. Non-financial support is motivation, emotional support and advice. (see Table 2). As noted above, the specific question asked to apprentices was “non-financial help, this could be information, advice, or general support.” Finally, access to support refers to whether or not apprentices reported receiving each form of support. Access to support depends on whether the apprentices are knowledgeable of support or have the types of relationships to feel comfortable asking for support. Additionally, the groups/individuals providing support may not have the means or ability to help, and may not feel comfortable providing support.

For data analysis, the interview transcripts were uploaded to ATLAS.ti for coding and data management. I analyzed the data using an inductive approach, where I developed a codebook based on the types of support apprentices received, sources of support, and reactions to that support. Then I collapsed types of support under various organizational levels for analysis (see Table 2). In addition to coding, I used the document group function of ATLAS.ti to create groups such as race, gender, family type, sexuality to analyze across intersectional identities. After coding the interviews, I referred back to Acker’s theories of gendered organizations (1990) inequality regimes (2006) and previous construction apprenticeship research (Denissen 2010; Denissen and Saguy 2014; and Kelly et al 2015) for data analysis. Additionally, I kept a research journal and

engaged in analytical memoing to further practice transparency, reflexivity, and reflect on findings.

Table 2: Types of Support Received

Type of Support	Examples	Source
HCWDP Support		
Childcare Subsidy	Paid childcare	Highway
Ready Supplies	Work tools, work clothing, personal protective equipment (PPE)	Construction
Gas Assistance	Travel to and from job sites and apprenticeship classes	Workforce
Hardship Funds	One-time financial challenges: rent, family member hospital bills	Development
Budget Class	Required in order to access childcare subsidy, basics of budgeting	Program
Penny Painter	Program coordinator who administers financial support and offers advice on tools, dealing with harassment/discrimination, etc.	
Trades Organization Support		
Financial Support	Gas money, union dues, equipment/tools	Apprenticeship staff, union staff, and/or employer
Non-Financial Support	Emotional support, work-related and/or personal advice, job referrals	
Professional Networks		
Non-Financial Support from Trades	Emotional support, work-related or personal advice, job referrals	Coworkers and/or other trades people
People		
Organizational Support Outside the Trades		
Public Assistance	Cash assistance, food stamps, and rent assistance	Government
Unemployment	Lost compensation during period of unemployment	Assistance
Personal Networks		
Family and Friends Financial Support	Rent, utility/other bills, gas, groceries	Family, friends, and/or partner
Family and Friends Non-Financial Support	Emotional support, personal advice, encouragement	
Partner Support	Emotional support, personal advice, encouragement, childcare, household management	

This study is not generalizable across all Oregon apprentices, due to the sample size and overrepresentation of carpenters. Further, Oregon may not be representative of trades populations across the United States; due to the racial demographics of Oregon (majority white). The general processes of the reproduction of inequalities within apprenticeship programs and organizations likely hold across contexts, particularly given that the construction industries remain white male dominated; thus findings are transferrable to apprentices across Oregon and other parts of the United States. Additionally, while the sample is relatively diverse regarding race and gender, the sample is primarily cisgender and heterosexual. Therefore, I am not able to provide a detailed analysis on queer/trans apprentices or a full analysis by racial/ethnic group.

CHAPTER FIVE: FINDINGS

5.1 Types of Support Received

Apprentices who had received more financial and non-financial support were more likely to complete their apprenticeship compared to those who received less support. Many apprentices reported receiving support from multiple sources within the trades and outside of the trades. However, workers who are white and men had the most access to support (see Table 3). For example, men were more likely than women to receive non-financial support from other trades people and financial support from family and friends (see Table 3). It appears on the surface that access to some types of support is relatively equal across gender, but upon further inspection where that support came from and what the support actually looked like varied by gender. Previous research has found also that increased support increases completion rates (Kelly et al 2022; Kelly and Wilkinson 2020; Johansson and Woods 2016; and Moir et al 2011); this highlights the need for apprentices to seek support and network outside of the apprenticeship program, and the need for professional networks to be more open to including women and people of color. For some apprentices, their personal networks may not be in a position to lend financial support. In addition, personal networks in this sample provided support differently across gender and race. In the following sections I will examine apprentices experiences and access to each category of support by gender and race.

Table 3: Group(s) More Likely to Receive Support

Types of Support	Group(s) More Likely to Receive
Trades Organization Support	
Financial Support	Men
Non-Financial Support	Women and white apprentices; nature of support differs across gender
Professional Networks	
Non-Financial Support from Trades People	Men
Organizational Support Outside the Trades	
Public Assistance	Women and apprentices of color
Unemployment	Men and white apprentices
Personal Networks	
Family and Friends Financial Support	Women and white apprentices
Family and Friends Non-Financial Support	Men and white apprentices
Partner Support	Men and apprentices of color

5.2 Highway Construction Workforce Development Program Support

5.2.1 Highway Construction Workforce Development Program Financial Support

The Highway Construction Workforce Development Program (HCWDP) offered financial support through a childcare subsidy, ready supplies, gas assistance, and hardship funds. In this interview sample, men and women regardless of race had nearly equal access to ready supplies. Women and white apprentices in this sample were more likely to receive gas assistance and childcare subsidy. This differs from the program evaluation that used administrative data of all Oregon apprentices utilizing this HCWDP services and shows that women and people of color received gas assistance and childcare subsidy at higher rates than white men (Kelly and Wilkinson 2020). However, white men make up the majority of HCWDP participants (Kelly and Wilkinson 2020). Although, this difference between the interview data and administrative data is likely due to the small interview sample size.

Across gender and race, many apprentices found the ready supplies to be: “Extremely helpful. Yeah, I did not have the money to purchase those items” (Sarah, African American straight woman). Similarly, Carlos (Hispanic man) “With having that help, it gave me like a jumpstart to getting to the right path, especially being able to get some boots, and just for safety reasons, and then to have some sort of tools to arrive at the job with.” Starting off on the right foot is important in any job and this support helps to offset some of the issues marginalized apprentices face.

Among women apprentices who received the childcare subsidy, white women reported that the support was helpful. However, for Jan (Hispanic/white straight woman), childcare was not straightforward:

It was helpful to an extent, but the thing is I kept bouncing from trade to trade because basically none of these trades were giving me any work... They paid for a tiny amount of childcare that the State of Oregon, because my co-pay was \$500. And then, out of pocket transportation to get my kid to school back was like \$100 dollars. And so, I mean, they paid for maybe a couple hundred and that was about it.

Note, Jan *terminated* her apprenticeship and while childcare was not the only factor, it is safe to speculate that it did not help her retention within the trades. As Jan stated above, she was struggling to maintain steady work, so the small subsidy allotted was only marginally helpful. The childcare subsidy is not a solution to all the problems she experienced. This support is particularly important for women, since they are not guaranteed to have a partner who is able to step in and help take care of children so she can prioritize work. Additionally, this could help explain why women in this interview sample were more likely to utilize this support, women may be pushed into utilizing

those resources in order to continue working. However, the scope of challenges those marginalized apprentices face is much broader than this support can address.

5.2.2. Highway Construction Workforce Development Program Non-Financial Support

The HCWDP non-financial support came in the form of a budget class and the program coordinator Penny Painter. Penny Painter administered financial support to the apprentices—primarily by helping the apprentices purchase ready supplies. Apprentices across gender and race had relatively equal access to non-financial services. Note, the budget class served as a source of minor support for some apprentices like Terry (white gay transman), as a requirement to access the childcare subsidy (see Table 2). This differs from the evaluation that found white women and women of color received non-financial support services at higher rates than men (Kelly and Wilkinson 2020).

Overwhelmingly, apprentices love Penny Painter, beyond the financial support she provides. Many apprentices described gratitude for support from Penny Painter because of how much she cares about apprentices and their success. Additionally, apprentices know that Penny Painter is a source of information. For example, Sarah, an African American straight woman, noted the importance of having another woman to provide insight for working with other people in the trades. Other apprentices found that this support was vital to staying and completing their apprenticeship. Josh (African American, straight man) described this support helped while dealing with racism in the trades:

Penny was the most amazing person, that if it wasn't for her, I wouldn't have stayed in the construction industry, to be a hundred percent honest... she was explaining to me, and talking to me about stuff, and how we don't have a lot of

minority leaders in leading positions, and how that sometimes we have to go through hard stuff. And at the end of it, it all is worth it, and sometimes it's not.

Black/African American men in Oregon construction trades in particular have historically lower rates of apprenticeship completion (Kelly and Wilkinson 2020), and Josh is one of the few African American men who have completed their apprenticeship. This shows that having Penny Painter as a resource is crucial for many marginalized apprentices.

Painter's support is especially impactful given her identities as a woman and person of color who has first-hand experience in the trades. This type of program can and has helped increase retention rates, the evaluation found that apprentices receiving non-financial support were 20 percent more likely to complete their apprenticeship (Kelly and Wilkinson 2020).

5.3 Trades Organization Support

5.3.1 Financial Support

Financial support within the trades came from apprenticeship staff, union staff, and/or employers; this support helped with a broad range of occupational expenses such as: travel expenses, union dues, drug test cost, class materials, gas, and equipment. For example, Josh (African American straight man) said this support helped him get caught up with his union dues while he was out of work. Men were more likely to receive financial support from organizations within the trades (see Table 3); apprentices of color were equally as white apprentices likely to receive it.

A few men in this group reported that this help was infrequent, "I mean, one time, one of these dudes, he wanted me to go to a different job and I didn't have gas money. He gave me money for gas to get to the job, but there's that one time" (Dave, white straight

man). Here there is an overlap between financial and non-financial support from the organization, not only is Dave receiving money for gas, but allows Dave to access the new job site. This support can happen for women; however, women have a harder time accessing this time of support. The one woman who had reported receiving additional organizational financial support said, “My boss will buy me a couple tanks of gas. But that was few and far between.” (Donna, white straight woman). Note that both apprentices downplayed the amount of support they received. However, note that Dave is one of many men who received additional financial support, whereas Donna was the only (white) woman to receive this type of financial support. This likely indicates to women apprentices, particularly women of color, that they are not as valued and prioritized as their white male counterparts; as Acker (2006) and Ray (2019) indicate, organizations reproduce inequalities in how resources are distributed and who is prioritized.

5.3.2 Non-Financial Support

Non-financial support from staff of trades organizations (such as apprenticeship staff, union staff, and/or employers) included job advancement support (e.g., job referrals and advice on the job site), motivation/encouragement (e.g., pep talks), referrals to public service, and emotional support (listening to apprentices vent or discuss issues experienced during apprenticeship). Notably, apprentices who received this type of support were more likely to complete apprenticeship. The majority of apprentices across race and gender utilized this type of support. Women appear to be more likely to receive non-financial support from apprenticeship staff, union staff, and/or employer men, and white apprentices and apprentices of color had similar access amounts to non-financial support (see Table 3). However, the nature of non-financial support varied significantly

by gender. Men (across race) specifically reported that non-financial support received was overwhelmingly job advancement support. Whereas women (across race) overwhelmingly reported receiving emotional support, some motivation, public service referrals, and only a few women received job advancement support.

The job advancement support for men (across race) mostly entailed advice, recommendations, and additional training opportunities. For example, Mario (Hispanic straight man) discussed the support from apprenticeship staff, “Well, I got a lot of advice from them, but they would tell me, or tell the apprentices what companies were hiring, or what we needed to do to be successful.” Similarly, Brian found job advancement support through his pre-apprenticeship program, “They had a different list of jobs and whatever whatnot that I could take or essentially they give you contacts for different jobs for starting out.” This follows the previous literature, that men are referred to jobs through industry connections (Galea et al 2020; Mickey 2022).

In addition to providing support regarding job referrals, many of the men discussed receiving support on how to navigate the job site or general encouragement. For example, Brian (Native American/white/Salvadorian straight man) said the apprenticeship staff supported him by offering advice:

Well, I guess advice... while I was a little budding flower, again what was really important for me was job site culture, how to interact with people and whatever and whatnot and a lot of instructors would give advice and tips on how to interact with people. On top of that, too, they'd share experiences of their own when they were in the trades and through those stories you kind of just soak it in and take mental notes.

Acker (2006) suggests that informal interactions between coworkers are based on underlying gendered assumptions. Particularly since this is a male-dominated field, it is

unsurprising that most men reported receiving job referrals and advice for success in the workplace. Men in this sample are gaining access to career opportunities which could serve as a motivation to continue in the program.

Overwhelmingly, women reported receiving emotional support. The emotional support looked like: keeping the apprentice in the trades, hearing stories from other women who have been in the trades for a while as a role model and listening to the tradeswomen venting about experiences on the job. Many women (across race) discussed hearing stories and perspectives from women who have gone through what they are going through right now. For example, Mia (Native American/Spanish Lesbian woman) discussed the importance of seeing a woman be successful from her apprenticeship program, despite the challenges she faced. Similarly, Susan (white straight woman), and Hailey (white queer woman), described going to tradeswomen social meetups where women from all points of their career are welcome, and it allows for women to network and encourage each other. For apprentices like Hailey (white queer woman), who nearly quit her apprenticeship program (referenced at the opening of the article), described these meetups as life changing support: “I went to every single social hour I could manage in the first several years of my apprenticeship because I needed their help.” This highlights how vital support is for apprentices who are already at a disadvantage. Further, this social hour serves women and non-binary folks, which shows the need for women’s spaces within the trades. This follows the findings of Bridges and colleagues (2021), that women are able to increase their personal networks by supporting one another. They are filling a need of emotional support that is otherwise not being met, particularly given the harassment and discrimination women and apprentices of color often experience

(Denissen and Saguy 2014; Hunte 2016; Ibanez 2017; Kelly et al 2015; Kelly and Wilkinson 2020; Kelly et al 2022).

Contrary to the men of the sample, only a couple women received job advancement support. April said her union representative helped her find a new job after dealing with the harassment from her current job site. Although for the other woman, job advancement support was not always constructive, “I got some job recommendations here and there, but it wasn't always super helpful. So, I would say minor [help].” (Donna, white bisexual/pansexual woman). Donna’s comment of this support being of limited help could indicate an unmet need. Again, men who received this non-financial support from organizational staff overwhelmingly received support for job advancement. This follows organizational research that has found women’s lack of social networks limits their career progression (Moore 1990; Drentea 1998; Kay and Hagan 1998; Dryburgh 1999; Peterson 2007; McDonald 2011; Sommerlad, 2012; O'Connor 2013; Seron, Silbey, Cech, and Rubineau 2016; Gorman and Mosseri 2019). Further, Acker (1990; 2006) points out that inequality is reproduced through workplace decisions on opportunities for promotion.

Other women who received organizational non-financial support, reported receiving referrals to public services, assistance with paperwork. For example, Susan (white straight woman) discussed being referred to Metropolitan Family Services who helped her credit score, “They did a lot of work with me. I think I met every couple of weeks or every three weeks or something for like five or six, probably six different times and it was all free services. It really helped me a lot.” On the extreme end, for apprentices like April (white gay woman), who deal with harassment on the job, dealing with

paperwork can be challenging but with help from the apprenticeship coordinator, “she helped me kind of get that dealt with and got him, it was way down the line he got I think in trouble for it and got some sanctions put on him.” It is important to point out that the resources women are requesting are for services to meet basic needs or to address harassment and discrimination, if that was not necessary that could change the support that women and people of color seek.

On the surface, women were more likely to receive this non-financial support, but upon further inspection we see that the actual support received was different. While both men and women reported receiving emotional support, for men that support was encouragement pep talks related to job advancement and advice specific to the job or the job site, whereas emotional support for women was venting and issues of harassment and/or discrimination. For the most part, women’s non-financial support was unrelated to job advancement. Whereas the men in this sample reported receiving almost exclusive support related to job advancement. Acker (2006) finds that inequality is reproduced through gendered and racialized hierarchies, keeping women and people of color at lower levels of the organizational structure.

5.4 Professional Networks

5.4.1 Non-Financial Support from Trades People

This type of non-financial support comes from coworkers and other trades people on the job (not apprenticeship staff, union staff, or employer). Apprentices across race and gender were relatively equally likely to access this type of support. However, similar to organizational non-financial support, the kind of support received varied: men received job oriented advice or motivation (e.g., pep talks), while women received emotional

support, specifically from bullying or harassment. For Andrew (white straight man), this support was informational, to answer questions or borrow tools. Other men, like Carlos (Hispanic man), reported support from other trades people came in the form of motivation.

Among the women in this sample, support from other trades people often revolved around dealing with harassment and/or discrimination. For example, Susan found support through mentors and coworkers and said, “Oh yeah. I’ve definitely had some awesome mentors along my path for emotional support and even kind of like that bullying situation, I’ve had coworkers stick up for me, have my back when people are trying to harass me or whatever, talk crap behind my back.” (white straight woman). Other apprentices like Mia (Native American/Spanish lesbian woman) describe that some people in the trades have “the old school mentality”, but other journeymen supported her when she thought about giving up the trades altogether. While there are both “good” and “bad” individuals that apprentices interact with, this finding could suggest that there is a shift in the trade’s mentality in that women are finding support from fellow trades people; however, this occurred *after* harassment. This does show that with access to professional networks within the trades, women may be able to increase their networks and rely on other trades people for emotional support (Bridges et al 2021). However, as Acker (2006) points out, interactions between men and women at the workplace reflects dominance and submission. In this case, men stepping in to help their coworker could be a way to assert dominance. To explore the expansion of organizational theories, the following sections address support that occurs outside of the trades.

5.5 Organizational Support Outside the Trades

5.5.1 Public Assistance and Unemployment

Organization support outside of the trades comes from public assistance (e.g., SNAP, housing subsidies) and unemployment. Women and apprentices of color were more likely to utilize public assistance, and only a few white men reported utilizing this support (see Table 3).

In addition to the difference in access, the way apprentices discussed getting public assistance varied by gender. Men (across race) in this group had complicated feelings, a few went as far as admitting shame for accepting public assistance. This could be because public assistance is viewed as a handout and not “earned” the same way unemployment is. Regardless of those feelings of shame, men still utilized this form of support. For example, Mike, a white straight man said, “I think for a short while my wife... was getting food stamps... I’m ashamed to say that, but we definitely don’t anymore.” Shame associated with needing public assistance highlights one way tradesmen reinforce masculinity, expecting to provide for his family, as the “man of the house”. Other studies have found that work status, particularly loss of work, impacts men’s gender ideology and threatens their masculinity (Zuo 2004; Kim and Luke 2020).

A couple of the men reported that they only received public assistance because it was only temporary or absolutely necessary. One man said, “I applied for food stamps a few years back. It was just temporary and that was helpful” (Juan, Hispanic straight man). It is unsurprising that some of the men would have these complicated feelings, because it follows the findings from previous literature that loss of work among tradesmen was associated with incompetence (Duke et al 2013).

Men and white apprentices were the most likely to use unemployment (see Table 3). Given that unemployment is widely used in the construction industry during periods of layoffs and seasonal employment, is surprising to see differences in access across gender and race (see Table 3). This could be because this particular group of women and apprentices of color lack construction industry knowledge of frequent periods of unemployment. When discussing utilizing unemployment (unlike the reactions to public assistance), men in this sample did *not* report feelings of shame. For example, Will (white straight man) said, “I was technically off for the week so I definitely took advantage of the unemployment.” Similarly, women (across race) in this sample did not report complicated feelings and responded in a neutral manner. The men may be viewing unemployment as “earned”, and that could explain why they were more likely to use this support.

5.6 Personal Networks

5.6.1 Family and Friends Financial Support

This type of support included rent/utility assistance, gas money, unpaid childcare, etc. Notably, there is an association between access to this type of support and gender (analysis not shown); highlighting the need to expand organizational theories of inequality to incorporate personal networks. Women and white apprentices were more likely to receive financial support from family and friends than men and apprentices of color (see Table 3). One reason why women were more likely to receive this support could be because men are more likely to receive organizational financial support and therefore may not need to rely on family or friends. Additionally, white apprentices in this group could have family and friends who are in a position to give financial support,

there is likely a difference in privilege and access to resources. Previous research has found that race and ethnicity play a role in likelihood of receiving financial support from family networks (Hofferth 1984; Hogan et al. 1990, 1993; Jayakody 1998; Parish et al. 1991; Roschelle 1997); where Black individuals are regularly less likely to receive financial support from families compared to white individuals (Hofferth 1984; Hogan et al. 1990, 1993; Jayakody 1998; Parish et al. 1991) and Hispanic individuals fall in-between Black and white folks (Hogan et al. 1993; Lee and Aytac 1998).

Like the men feeling ashamed of receiving public assistance, when discussing receiving support from family, a few of the men used qualifiers to downplay the amount of support or expressed paying back what was given and there were no men who expressed gratitude about receiving support. One participant said, “Occasionally we might have to ask [my partner’s] mom sometimes. We’d have to get a little help because things were a little tight at the time, but nothing major... nothing we didn’t pay back.” (Paul, white straight man). The other men used neutral language and said who gave the support and/or what it was for, “my dad, my mom, stepdad, father-in-law.” (Josh, African American straight man).

The women who had received support from family tended to express gratitude or recognition of being in a privileged position. For example, in regard to transportation one woman said (emphasis added): I was *fortunate* enough to be given a car from my family (Susan, white straight woman). Women in this group seem to acknowledge that there are other individuals whose friends and family may not be in a position to offer this type of support and that could be why we see multiple women using similar language to express

gratitude. There were no comments of embarrassment or shame regarding accepting financial support from family or friends from the women in this group.

In addition to monetary support, men who have children noted unpaid childcare as a form of support from family members. For example, Luis (Hispanic straight man) stated, “It was my wife and then my mom. When my wife started working, it was my mom [who cared for our child].” It is important to highlight that only one woman, Louisa (white straight) who has kids noted receiving unpaid childcare from her significant other’s mother. This highlights the importance of personal networks outside of the trades, men who have a partner or family member to take care of the children allows him to better fulfill the role of the “ideal worker” (Acker 2006). Additionally, we see these gendered expectations extended to apprentices personal networks: the grandmothers being asked to help with childcare instead of the grandfathers. Finally, apprentices who need this financial support the most may not have family members or friends who are able to provide that type of support.

5.6.2 Family and Friends Non-Financial Support

Non-financial support from friends and family was primarily encouragement and that their friends and family are proud of their work. Apprentices who received financial and/or non-financial support from family and friends were more likely to complete the apprenticeship program. Men and white apprentices were more likely to receive non-financial support from family and friends compared to women and apprentices of color (see Table 3), only half of the women reported receiving this type of support.

This support looked similar across gender. For example, Louisa (white straight woman) said, “Yeah. Communicating with friends and family. And my family was

always really supportive and proud of my choice to join the union. And I've always had good support from my mother for that. She believes the unions are everything... So very encouraging and yeah definitely.” Similarly, Paul (white straight man) noted receiving plenty of support from family and friends, of them “just being there if you need them to help with something or somebody to talk to”. However, one apprentice noted difficulty discussing challenges of the trades, particularly to those that might not understand her job:

Some. Mostly like encouragement, but just a little. I wasn't necessarily always open with what the struggles were because it's difficult to be vulnerable and ask for help. But also it's difficult to ask for job site specific help from somebody who doesn't understand how the trades kind of operate. (Donna, white bisexual/pansexual woman).

Apprentices are assumed to get additional support elsewhere when the program is not able to provide it, but personal networks are not neutral parties. For some apprentices their networks are not in a position or willing to provide help when they need it like Donna.

5.6.3 Partner Support

Overwhelmingly, men were more likely to receive support from their partners than women (see Table 3). All apprentices of color received support from their partner, A few men expressed their feelings in more depth, and almost verbatim described their partner using the same language (emphasis added):

I wouldn't be here today without [her]. *She's my rock*, you know? She's what keeps me going even when I don't think I have any more to go with... She's my better half for sure. You know, always been supportive. She was actually the one that told me to move forward with the apprenticeship program... She's one of a kind. (Paul, straight white man)

My fiancée? Oh my God, that woman, *she is my rock*. Not to sound all cheesy and sappy but no, without her honestly I would not be where I am today... I just straight up wasn't working when I went through the Bridgework Bootcamp and so for a long time she was my financial support and on top of that, too, she was also my emotional support and because like I told you, I suffer self-confidence and especially between jobs looking for work and whatever whatnot. If I went too long without working I would actually kind of fall into a depression and she was always there to pick me right up so she, financial rock, emotional rock, mental rock. (Brian, Native American/white/Salvadorian straight man)

Childcare, moral support. All of the things, I credit her with everything. *She is my rock*. (Terry, white gay trans man)

Paul, Brian, and Terry are subscribing to traditional norms of the husband relying on his spouse for support in a myriad of areas. For these men, not only did their partners play an important role in their apprenticeship, but they are also crediting their partners with making them better as a person and keeping them going. It is important to point out that the partners seem to be filling the role that is expected in a gendered organization, to support the breadwinner so the “ideal worker” can fully embrace work (Acker 1990; 2006). Further, this is in part how the trades have been set up to be male dominated, male workers are prioritized and viewed as more likely to be successful because they are assumed to have partner support.

Women were less likely to receive partner support, see Table 3. One queer woman noted her partner as a form of support and said, “I had a lot of emotional support and encouragement from my partners. And that was also very invaluable.” (Donna, bisexual/pansexual white woman). This more closely matched the support expressed by the men, that a partner gives support regardless of understanding the field. On the other hand, for straight women, only one participant expressed receiving support from her spouse/partner stating, “Yeah. Yeah we support each other.” (Louisa, white straight

woman). While the other white straight women did not receive partner support at all, Susan said, “At that time, no, he wasn't in the trades and he just didn't relate to any of that.” This is a stark contrast to the men’s perception of partner support, where the men highly praised their partner, indicating some form of expected support. Susan indicates that there is no expectation of support because her partner did not relate to what she was doing, unlike the men who received partner support regardless of whether or not they relate.

A study in rural India found that women reported support from their husband was a defining factor in their success (Coley et al 2023). Similarly, a study of women engineers in Germany found that women reported their male partners as a positive impact on their career and a source of emotional support (Schmitt 2021). Lack of partner support for some apprentices could be in part what prevents some women from completing the apprenticeship program. Personal networks are not without biases, in this instance, partners of women apprentices are not expected to provide support; unlike male apprentices where nearly all partners provided support.

CHAPTER 6: DISCUSSION

Programs like the Highway Construction Workforce Development Program (HCWDP) attempt to reconcile the lack of diversity in the trades by increasing support for apprentices, specifically for women and people of color. However, despite these efforts, women and people of color still do not have the same access to support within the trades and to personal networks outside of the trades. Men were more likely than women to receive financial support from trades organizations. White apprentices were more likely to receive financial support from family and friends. Women and apprentices of color were disadvantaged in their access to personal networks outside of the trades. Specifically, men were more likely to receive non-financial support from family and friends. Both men and white apprentices were more likely to receive support from their partners and financial support from unemployment insurance. There were a few areas where white and male apprentices were less likely to receive support: apprentices of color and women were more likely than white apprentices to use public assistance; women were more likely than men receive financial support from family and friends. Note, while there were differences in access to support by race, racial differences did not come through the narrative unless the apprentices discussed specific incidents of harassment and/or discrimination.

The types of support that were most associated with completing (rather than terminating) an apprenticeship were: non-financial support from trades organizations, financial support from family and friends, and non-financial support from family and friends. In those areas of support, women and apprentices of color appear to have similar access to support. However, the *nature* of support received varied: men were more likely

to get work-related advice and job referrals from trades organization staff whereas women got mostly emotional support. Additionally, men were more likely to receive non-financial support from family and friends, and this form of support is not guaranteed for all apprentices. Professional networks, such as organizational staff should prioritize career-related support for women and apprentices of color, as they do for men. That change is within the scope of programs like the Highway Construction Workforce Development Program. However, personal networks like family and friends need to be examined further, particularly through a larger sample size, since there appears to be an association with completion or termination.

Additional findings of theoretical interest are partner support and unemployment/public assistance. Men were more likely than women to receive partner support, as scholars outside of the trades have found (Coley et al 2023; Schmitt 2021). Many of the men credited their partner with keeping them in the trades and indicated an expectation of support from their partner. Whereas only a couple of women noted their partner as support, and one woman said her partner was not a form of support at all. Regarding public assistance, despite reporting feeling of shame, some men still utilized this form of support. Interestingly, unemployment did not garner the same complicated feelings for men. Future research should explore the role of partner support as a personal network and unemployment/public assistance and their roles in apprenticeship success.

When the HCWDP does attempt to target support to marginalized groups, apprentices of color are still less likely to receive support (Kelly and Wilkinson 2020; see Table 3), indicating the racialized nature of the trades and the unequal distribution of resources (Ray 2019). This highlights how despite efforts of the HCWDP to increase

support for women and people of color, the support still does not match the support men received. Additionally, personal networks of support outside of the trades appear to be related to completion of apprenticeship program and that is an area where men and white apprentices were more likely to receive this support (see Table 3). Programs like Highway Construction Workforce Development Program are useful in meeting financial needs and some non-financial needs; however, there are unmet needs that simply cannot be addressed by this program alone. Policies focused on increasing financial support are not going to account for the lack of support outside of the trades and may not alleviate all the issues marginalized apprentices face.

Acker's theories of gendered organization (1990) and inequality regimes (2006) address some of the issues for women and people of color, but do not address personal networks that occur outside of the trades. I propose that theories of organizational inequality to be expanded to incorporate personal networks that occur outside of the trades to fully understand the experiences of women and people of color in the trades. Personal networks outside of work organizations, in this case the construction industry, are not neutral parties; they are impacted by a myriad of factors including gender, race, ability, age, class, and other intersectional identities. For example, in regard to unpaid childcare, gendered expectations extended beyond the apprentices to their personal networks, mothers and mothers-in-law were asked instead of fathers and fathers-in-law. This is not to say that apprentice's personal networks are not capable or not supportive, but there is a difference in privilege, access to resources, among other things. These networks need to be considered when examining marginalized apprentices and access to support, particularly when assessing the gaps in support. Future research on the trades

should continue to explore personal networks and how that impacts success across intersectional identities.

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APPENDIX A: CONSENT SCRIPT AND INTERVIEW GUIDE

“Hello, my name is [name] and I’m a researcher at Portland State. I’m calling today because I’m doing an evaluation of BOLI/ODOT supportive services, and I would like to invite you to participate in one interview which will take about 30 minutes, and you will receive a \$50 gift card for your time. Your participation is voluntary, confidential, and won’t affect your employment. Is now a good time or would you like to schedule another time to do the interview over the phone?”

[If yes] Great. I have some additional information to share with you before we begin. This will take just one minute for me to read through.

We are doing an evaluation of the Oregon Bureau of Labor and Industries and Oregon Department of Transportation, that’s BOLI and ODOT, supportive services program, which is intended to improve retention of apprentices. This project is funded by BOLI and ODOT and is conducted by Portland State University researchers, that’s me.

You will be asked to complete this telephone interview, which will take about 30 minutes. Your participation is voluntary, you don’t have to answer any questions you don’t want to answer, and you can stop at any time. By continuing with the interview, you give your consent to participate in the study and you will receive a \$50 gift card.

Benefits of the study include contributing to research that will potentially improve the experiences of workers in the construction trades. Risks to participating in the study are minimal, for example, thinking about negative past or future experiences at work.

Portland State researchers will keep your answers to this interview confidential to the fullest extent possible. Only the researchers conducting the project will have access to your answers.

Any identifying information will not be shared with BOLI, ODOT, or your employer or included in reports from this study.

If you have concerns or problems about your participation in this study or your rights as a research subject, I can provide you with phone numbers to call [if requested: Portland State Office of Research Integrity: 503-725-2227, PI Kelly: 503-725-8302].

Would you like an Amazon or a Fred Meyer gift card?

What is your email (Amazon) or mail (Fred Meyer) address?

Do you have any questions for me before we begin?

Great, I'm going to turn on the audio recorder now.

1. How did you get into the trades?
 - a. [If pre-apprenticeship] Which one? How helpful was that program in preparing you for your apprenticeship?

- b. Did you work in the trades prior to your apprenticeship?
 - c. When did you start your apprenticeship?
- 2. What is/was your trade?
- 3. [If left apprenticeship] Ask:
 - a. Why did you leave the apprenticeship? [clarify if needed] did you choose to leave or were you asked to leave
 - b. Are you currently working? [If no] Were you working before the quarantine?
 - c. [If yes] what is/was your job? [clarify if working in the trades or not]
- 4. [If completed apprenticeship] Ask:
 - a. Are you working now? [If no] Were you working before the quarantine?
 - b. What is/was your job? [Clarify if working in the trades or not]
- 5. What is your age? (now)
- 6. What is your race or ethnicity?
- 7. What is your sexual identity: straight, gay, or something else?

Great, now I have some questions about your experiences during your apprenticeship.

- 8. During your apprenticeship, were you living with a spouse or partner? [clarify if this changed over the apprenticeship]
 - a. [If yes] Were they working?
 - b. What kind of work did they do?
 - c. What kind of schedule did they work: 9-5, nights, something else?
- 9. During your apprenticeship, did you have children under 18 living with you? [include only kids they are responsible for; clarify if this changed over the apprenticeship]
 - a. How many and ages (now)
 - b. Was your child(ren) living with you full time or part time?

- c. Who cared for you children while you were at work? Paid/unpaid? [Probe for all: school, after school programs, spouse/partner, unpaid family or friends, paid childcare providers]
10. What were the best parts of your apprenticeship?
11. What were the most challenging parts of your apprenticeship?
12. Now I'm going to ask about challenges that apprentices sometimes face. What about [read each item below] was that a challenge at any point in your apprenticeship? Please tell me if it was a major problem, a minor problem, or not a problem.
- a. Buying tools, clothing, and PPE
 - b. Paying for travel to work out of town (hotel, food)
 - c. Paying for gas to get to and from work or classes
 - d. Having reliable transportation
 - e. Having a drivers' license
 - f. Earning low hourly wages
 - g. Being out of work too long between jobs
 - h. Being unfairly among the first to be laid off
 - i. Being unfairly assigned fewer work hours
 - j. Difficult coworkers
 - k. Job site harassment or discrimination [If yes probe for experiences] Can you tell me a little about what you experienced?
 - l. Not learning the skills of the trade or a lack of mentorship on the job site [If yes probe for experiences] Can you tell me a little about what you experienced?
 - m. Affordable housing
 - n. Trouble in family relationships [clarify if asked: such as a divorce, breakup, domestic violence, child custody, or anything like that]
 - o. [If kids] Finding affordable and reliable childcare [clarify if needed: was the problem cost, availability, and/or hours]
13. Was there anything else that was a challenge during your apprenticeship?

14. The next questions are about support you received during your apprenticeship from the BOLI Supportive Services Program. You probably talked to Penny Painter from Akana. According to our records you received [name first type of support] does that sound right? [If yes] 1) How helpful was that? 2) How much of a problem would it have been if you didn't receive this help?
- a. Child care subsidy as a pre-apprentice [prearcc2]
 - b. Child care subsidy as an apprentice [arcc2, backup, employer]
 - c. Tools, clothing, or PPE [ready2]
 - d. Help with paying for a hotel for out of town work [lodging2]
 - e. Help with paying for meals for out of town work [per diem]
 - f. Gas assistance [fuel2]
 - g. Hardship funds
 - h. [Ask everyone] Calls, texts, or meetings with Penny Painter from Akana? [Probe for what help Penny provided]
 - i. [A budget class with Penny Painter? [Probe for what kind of support this provided and how it helped]
 - j. Support from Oregon Tradeswomen? [Probe for what kind of support this provided and how it helped]
 - k. Support from Constructing Hope [Probe for what kind of support this provided and how it helped]
15. Would you recommend any changes to the BOLI Supportive Services Program?
16. We would like to know if you received any (other) financial help during your apprenticeship. How about from your [read each item below], did you receive any financial help from them? [If yes] 1) what kind of help did you receive? 2) How did it help?
- a. Apprenticeship program
 - b. Union
 - c. Employer
 - d. Family or friends
 - e. Unemployment

- f. Public assistance, such as food stamps, cash assistance, housing subsidies
17. We would also like to know about non-financial help, this could be information, advice, or general support. How about from your [read each item below], have you received any non-financial support from them? [If yes] what kind of help did you receive?
- a. Apprenticeship staff
 - b. Union staff
 - c. Employer
 - d. Other tradespeople or coworkers
 - e. Spouse/partner
 - f. Family or friends outside the trades
18. Was there anything else that helped you during your apprenticeship?
19. Do you have anything else you would like to say about the BOLI Supportive Services Program or working in the trades?
20. Do you have any questions for me about the study?

That is all my questions, thank you so much! And I will send your gift card to you shortly.