

Evaluation of Green Dot for the Trades

Maura Kelly and Lindsey Wilkinson
Department of Sociology
Portland State University
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Portland State
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REPORT AUTHORS

Maura Kelly holds the position of Associate Professor of Sociology at Portland State University. She has a PhD in Sociology from the University of Connecticut. Dr. Kelly's research interests focus on gender, sexualities, race/ethnicity, and work and occupations. For more information about Dr. Kelly, including access to reports on her prior research projects on the highway construction workforce, see www.pdx.edu/sociology/maura-kelly.

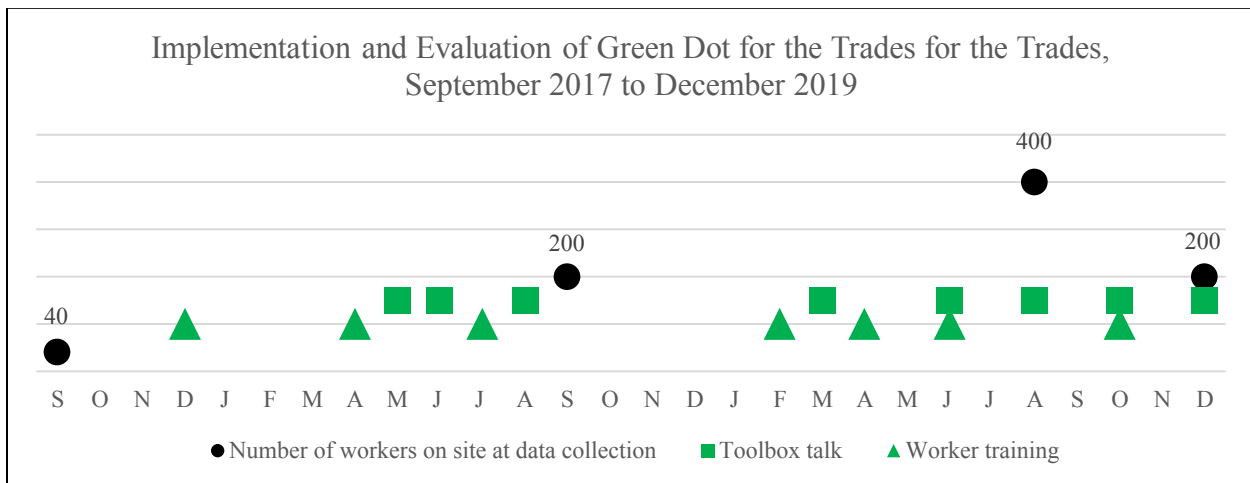
Lindsey Wilkinson is an Associate Professor of Sociology at Portland State University. He earned a PhD in Sociology from the University of Texas, Austin. Dr. Wilkinson's research interests include educational stratification, gender and sexuality, race/ethnicity, and transition to adulthood.

PROJECT FUNDERS

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Executive summary

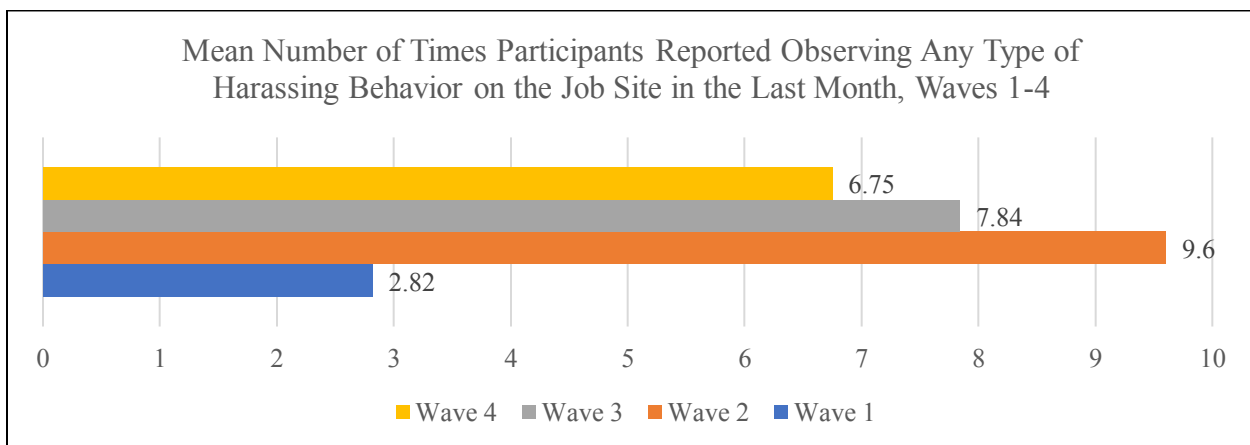
Green Dot for the Trades is a bystander intervention program intended to reduce harassment on construction job sites. This program provides tools to workers on how to intervene to address job site harassment when it happens as well as intervening with proactive strategies to prevent harassment. Green Dot for the Trades was implemented on one pilot job site in Portland, Oregon. The pilot included: train-the-trainer (three days), a manager training (60 minutes), worker trainings (60 minutes), toolbox talks (five to ten minutes), information at new worker orientations, and posters and stickers on the job site. The pilot project was a collaboration between Alteristic, Hoffman Construction, Oregon Tradeswomen, and Portland State University researchers. This evaluation is based on four waves of surveys administered on the pilot job site, which were designed to assess changes in workers' behaviors and attitudes related to harassment and bystander intervention.



Note: Two toolbox talks delivered in December 2019

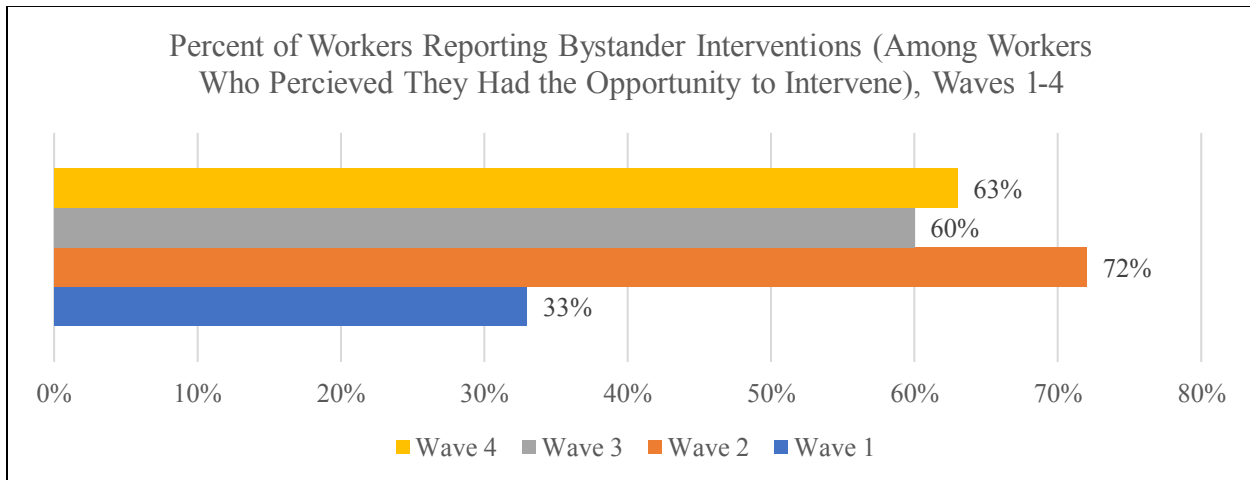
Reduced job site harassment

As shown below, the average reported number of instances of harassing behavior observed *decreased* across waves two, three, and four; at wave four, workers reported observing an average of almost seven instances of harassing behavior in the last month. At wave four, 77% of workers reported seeing any harassing behavior in the last month. These findings indicate that job site harassment decreased but harassment was prevalent on the job site throughout the pilot project.



Increased bystander intervention (among workers who perceived the opportunity to intervene)

As shown below, the percent of workers who reported reactive or proactive bystander interventions (among workers who perceived they had the opportunity to intervene) increased from wave one to subsequent waves; at wave four, 63% of workers who reported having the opportunity to intervene reported an intervention (38% of *all* workers reported an intervention).



Workers who received Green Dot for the Trades training (train-the-trainer, worker training, and/or toolbox talk) were more likely to report bystander interventions: 76% of Green Dot for the Trades trained workers versus 51% of other workers reported intervening when they were in a situation to intervene.

Conclusions and recommendations

During the pilot study, reported levels of harassing behavior slightly decreased and reported bystander interventions (when workers perceived they were in a situation to intervene) increased. Thus, Green Dot for the Trades shows promise as a tool that can support efforts to decrease harassment on construction job sites.

The findings from this pilot study suggest that before widespread adoption in the trades, the program should be refined to bring harassment levels down lower and more quickly. Providing training to all workers as well as providing additional discussion and visibility of the program on the job site may assist with these goals. Additional training may help more workers identify harassing behavior and opportunities for intervention. The effectiveness of the program could also be improved by pairing the program with ongoing communication from contractors about expectations for acceptable behavior, informal and formal reporting processes, and disciplinary processes.

More information

Alteristic's Green Dot for the Trades <https://alteristic.org/casestudy/oregon-tradeswomen/>

Oregon Tradeswomen <https://tradeswomen.net/>

Hoffman Construction <http://www.hoffmancorp.com/>

Portland State University <https://www.pdx.edu/sociology/maura-kelly>

Project overview

Research demonstrates that job site harassment is prevalent in the construction trades and that harassment can negatively impact safety, productivity, and retention of workers (e.g. Wilkinson and Kelly 2018). In 2011, the Oregon Bureau of Labor and Industries and the Oregon Department of Transportation partnered to fund the Highway Construction Workforce Development Program, which is intended to improve the stability and diversity of the highway construction workforce by promoting recruitment and retention of apprentices (see Wilkinson and Kelly 2018). This program funded the Green Dot for the Trades pilot and this evaluation.

Green Dot is a bystander intervention program intended to reduce harassment, which was adapted for implementation on construction job sites. Bystander interventions provide training to encourage people to intervene when they see harassment as well as engage in behavior to prevent harassment from occurring. Bystander approaches have been previously implemented in the construction trades, such as EVA BC's (Ending Violence Association of British Columbia) Be More than a Bystander.¹ Other bystander intervention approaches have been developed within the construction trades industry, such as: the Ironworker Union's Be That One Guy² and ANEW's (Apprenticeship and Nontraditional Employment for Women) RISE Up (Respect, Inclusion, Safety and Equity in the Construction Trades).³ This evaluation of the Green Dot for the Trades is the first empirical assessment of the effectiveness of a bystander intervention program on reducing harassment on a construction job site.

The first phase of the project, which involved adapting the Green Dot program for the construction trades, began in 2015, and was led by Oregon Tradeswomen, in partnership with Constructing Hope, Alteristic, and Portland State University researchers. This first phase involved conducting ten focus groups with industry stakeholders to evaluate the potential for adapting the Green Dot program for the construction trades in Oregon (see Kelly and Bassett 2015).

After the first phase of the project was completed, additional funding was provided by the Oregon Bureau of Labor and Industries and the Oregon Department of Transportation to pilot the Green Dot for the Trades program on a job site in Oregon. Between 2015 and 2017, project collaborators worked to prepare for the pilot. Alteristic adapted the Green Dot bystander intervention program for the construction trades. Oregon Tradeswomen staff identified a contractor willing to participate. A site was selected as the pilot job site and contractor staff were trained to implement the program on the pilot job site through a three day train-the-trainer program and follow up technical assistance via phone and site visits with Alteristic staff. Portland State University researchers developed an evaluation plan and survey instruments.

The Green Dot for the Trades program provides strategies or tools for reactive and proactive bystander intervention behaviors. Reactive behaviors are used to help stop harassment as it happens (or address it after the fact). Reactive behaviors include “the Ds”: *direct* (directly intervening by either speaking to the harassing coworker or the coworker who experienced harassment), *delegate* (delegating the intervention to another worker), and *distract* (distracting or de-escalating the harassing coworker in order to stop harassment as it is occurring). The program

¹ See <https://endingviolence.org/prevention-programs/be-more-than-a-bystander/>

² See <https://www.enr.com/articles/46555-award-of-excellence-winner-vicki-oleary-union-leader-fights-for-diversity-and-respect>

³ See <https://anewaop.org/31611-2/>

also trains workers to engage in proactive behaviors demonstrating support for stopping harassment, which are used to help set the norm that harassment is not tolerated. Proactive behaviors include: talking to coworkers, using social media, and wearing stickers or pins.

Alteristic staff provided an overview for 45 supervisors at the foreman level and higher in Fall 2017 (60 minutes). During the 24 month (December 2017 to December 2019) implementation of the pilot program, contractor staff trained 102 workers over seven worker trainings (initially 90 minutes and then shortened to 60 minutes) and nine toolbox talks (5-10 minute sessions delivered during job site meetings). Additionally, Green Dot for the Trades was integrated into the new worker orientation towards the end of the pilot project. Green Dot for the Trades was also visible through signage and stickers on the job site (for more on the project timeline, see Appendix B). While the pilot was initially planned for one year, the pilot required two years to complete as curricular materials and processes for implementation were still being developed and refined throughout most of the pilot project.

To evaluate the implementation of Green Dot for the Trades, Portland State University researchers collected survey data on the pilot job site at four points in time to assess changes in worker's attitudes and behaviors related to job site harassment (for survey questions, see Appendix A). Researchers administered paper surveys on clipboards during morning meetings to all workers on site on data collection days. The wave one survey was administered on the pilot job site in September 2017 (prior to the initial implementation of Green Dot for the Trades in December 2017). Follow up surveys were conducted in September 2018, August 2019, and December 2019. As construction job sites have fluctuating workers over the course of the project, this evaluation does not attempt to assess individual level change over time. Rather, we assess the prevalence of harassment and bystander intervention on the job site by surveying a cross section of workers at four points in time (different workers were surveyed at each time point).

Job site harassment

Prevalence of job site harassment

The survey questions asking workers about harassing behaviors they had observed was introduced with the text: *Next are a few questions about experiences you may have had on this job site in the last month.* An example item was: *How many times in the last month have you seen others unfairly assigned fewer work hours than other workers?* Importantly, we asked workers about specific behaviors conceptualized as harassment by the researchers (e.g. unwanted sexual attention) rather than asking workers to identify these behaviors as harassment. This allows for a more accurate assessment of how prevalent these harassing behaviors are on the job site.

The average number of instances of harassing behavior workers observed *decreased* across waves two, three, and four; at wave four, workers reported observing an average of almost seven instances of harassing behavior in the last month, down from a high of nearly ten instances at wave two (Figure 1). An increase in reports of observing harassing behavior between wave one (prior to implementation of Green Dot for the Trades) and subsequent waves was expected as the program focuses on identifying and addressing harassment.

As shown in Figure 2, the percent of workers who reported observing any harassing behavior in the last month increased over waves one through three of the survey but then slightly decreased between waves three and four of the survey; at wave four, 77% of workers observed harassing behavior in the last month (up from a low of 48% at wave one and down from a high of 81% in wave three).

Figure 1. Average Number of Instances of Harassing Behavior Observed per Worker on the Job Site in the Last Month, Waves 1-4

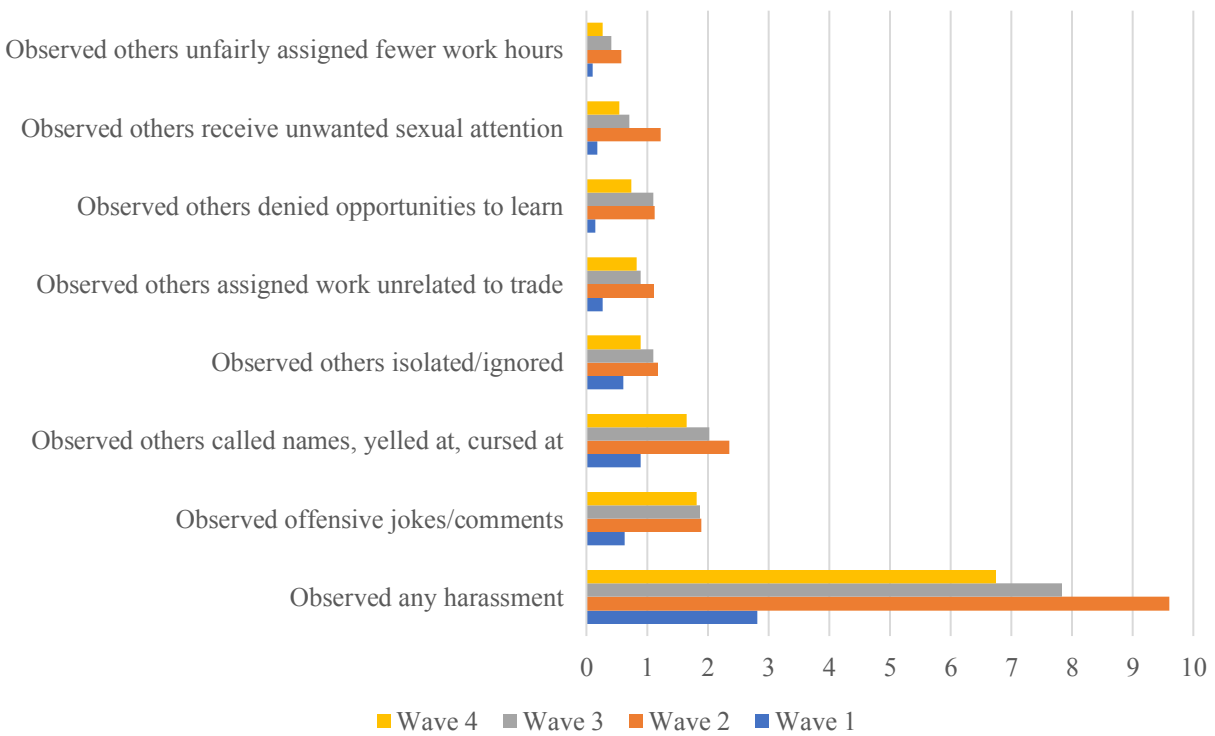
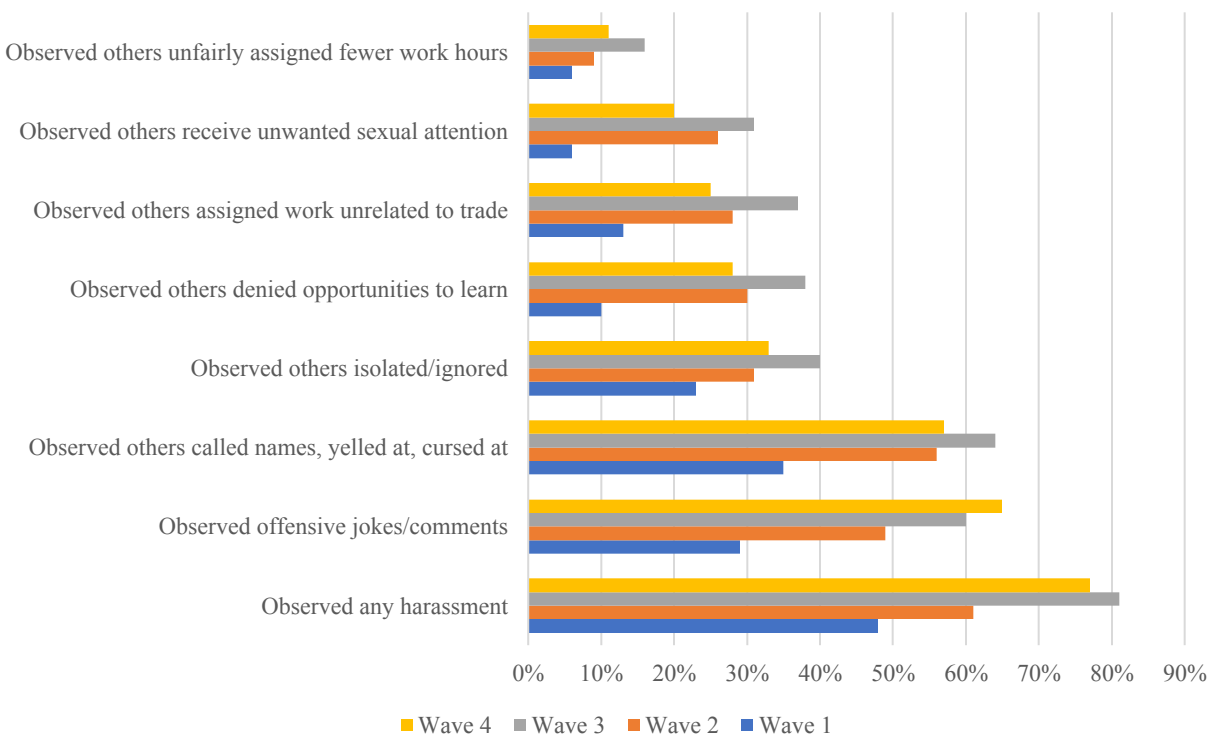
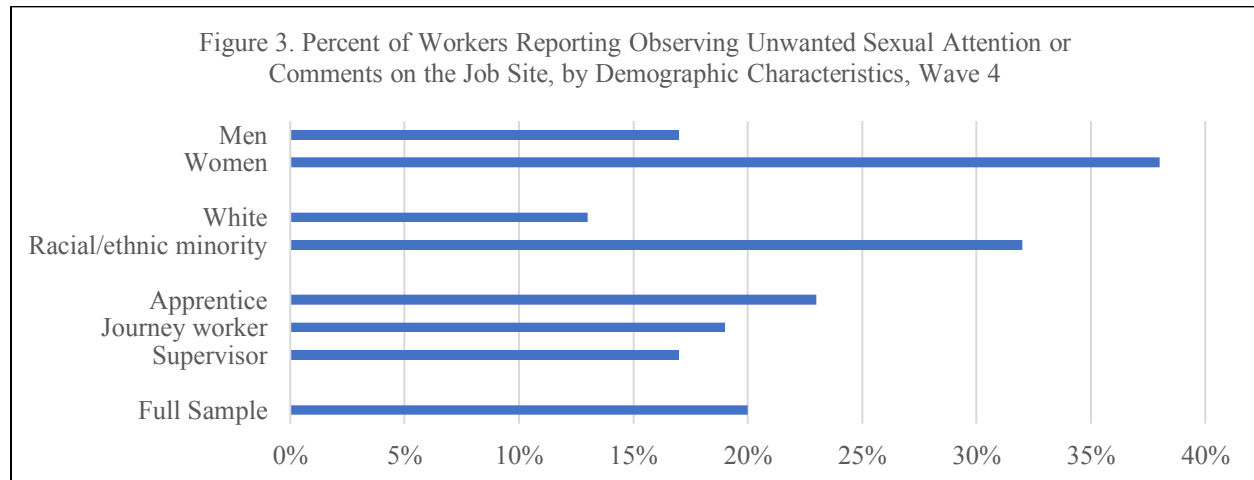


Figure 2. Percent of Workers Who Reported Observing Harassing Behavior on the Job Site in the Last Month, Waves 1-4



Overall, the findings presented in Figures 1 and 2 indicate that levels of job site harassment slightly decreased and workers’ ability to recognize harassing behaviors increased; however, harassment was prevalent on the job site throughout the pilot project.

Across all types of harassing behavior and over all four waves of surveys, women, people of color, and apprentices were more likely to report observing harassing behavior. Figure 3 shows the demographic differences for sexual harassment in wave four, asked on the survey as *“How many times in the last month have you seen others experience unwanted sexual attention or comments?”*



Workers’ descriptions of job site harassment

Across all waves of the survey, participants were asked the open ended survey question: *“Please briefly describe harassment you’ve seen on this job site in the last month.”* Participants reported harassment based on gender, race/ethnicity, and being an apprentice. Participants also reported instances of conflict between trades, between union and non-union workers, and other examples of harassment.

Across all waves, participants primarily reported instances of harassing comments and jokes. For example, one participant wrote *“Mostly off-color offensive jokes aimed at gender, sexuality, race, etc”* (wave four). Unnecessary yelling was another commonly reported type of harassment in the open-ended comments. As shown in Figures 1 and 2 above, offensive jokes and comments were the most commonly reported form of harassing behavior, followed by yelling, name-calling, and cursing at coworkers.

A few participants noted examples of unequal access to training and work opportunities as examples of job site harassment they had observed in all waves. For example, *“Certain people disregarded, ignored, looked over for work opportunities”* (wave three) and *“Apprentices not put in learning opportunities”* (wave two). As shown in Figures 1 and 2 above, these types of discriminatory behaviors were also reported in the closed-ended questions on the survey.

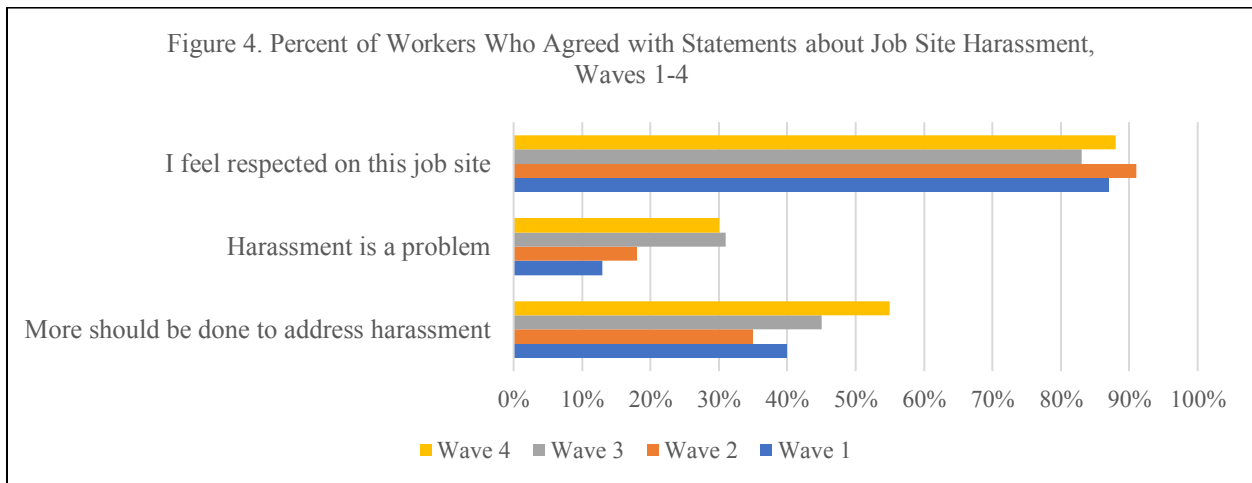
Participants consistently reported incidences of sexual harassment in open-ended questions, such as *“Unwanted/distracting attention from male workers from other trades.”* (wave three). While this was one of the less commonly occurring types of harassing behavior (see Figures 1 and 2), it remained a persistent problem.

Across all waves, some participants noted in the open-ended questions that they had *not* observed any harassment, for example: *“This job seems to be very good. Everyone gets along from what I*

see” (wave one). This illustrates that not all workers “see” the harassing behaviors (e.g. unwanted sexual attention) that many workers observe on the job site; that is, they either do not identify these behaviors as harassment or do not recall these instances when asked to report them on the survey. It is also possible that workers who reported no harassment were never present when harassment occurred (although that seems unlikely given that the percent of workers who did report seeing harassment).

Perceptions of respect and harassment

Across the four waves, a majority of workers reported they felt respected on the job site (88% at wave four). Across the four waves, there was a slight increase in the percent of workers who believed harassment is a problem and that something more should be done about it. At wave four, 30% of workers reported they believed harassment was a problem; 55% reported they believed more should be done to address harassment.



Bystander interventions

Interventions among workers who perceived they had the opportunity to intervene

Workers were asked whether and how often they intervened. The introduction to these questions was: *Next are some questions about things you may have done when you saw harassment, aggression, bullying, or hazing on this job site in the last month. Indicate how often you have done the following on this job site.* An example item for a reactive behavior was *Directly intervened by telling someone to stop harassing a co-worker?* An example item for a proactive behavior was *Talked to your co-workers about what you could all do to reduce harassment on the jobsite?* For each item, participants were asked how many times in the last month they had engaged in the behavior or indicate *I was not in that situation* (see Figure 5). In contrast to the previous questions, which asked about harassing behaviors without labeling them as harassment, these questions asked participants about behavior that the worker interpreted as “harassment, aggression, bullying, or hazing.”

Figure 5. Percent of Workers Reporting Bytander Interventions on the Job Site in the Last Month (Among Workers Who Percieved They Had the Opportunity to Intervene), Waves 1-4

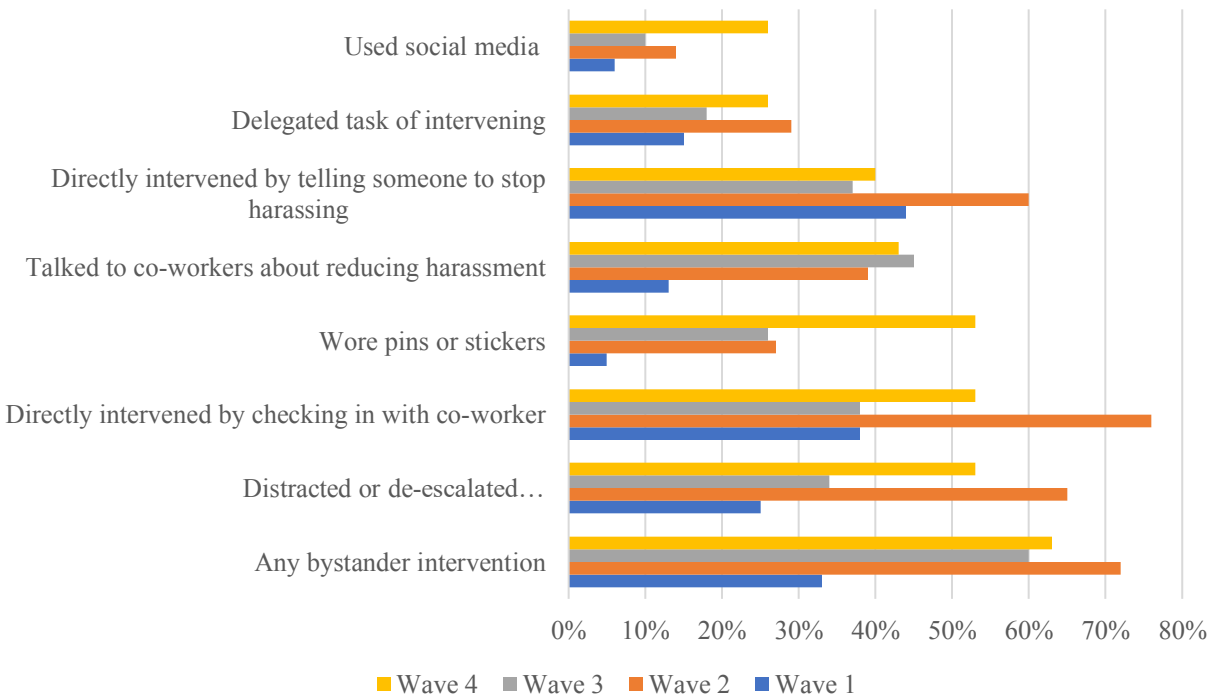
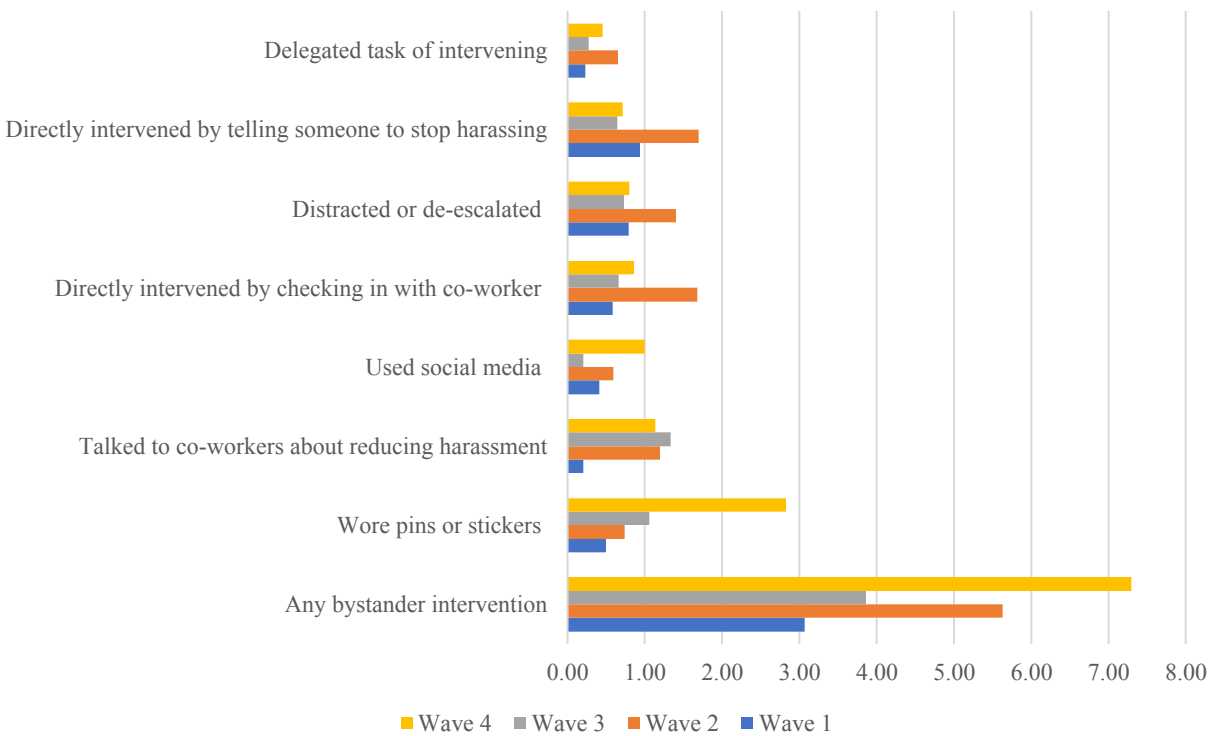
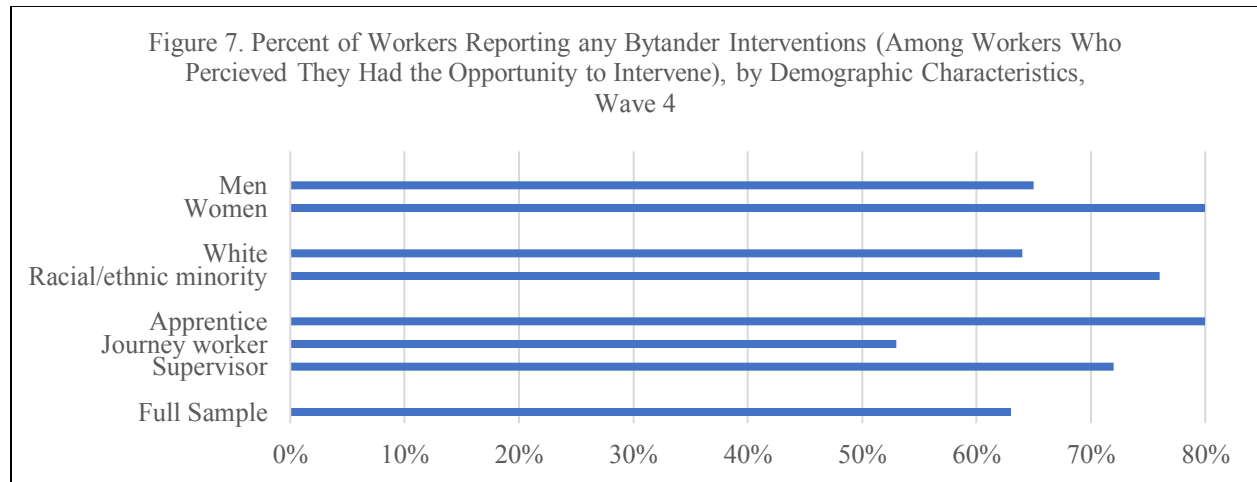


Figure 6. Mean Number of Bytander Interventions Reported (Among Workers Who Percieved They Had the Opportunity to Intervene), Waves 1-4

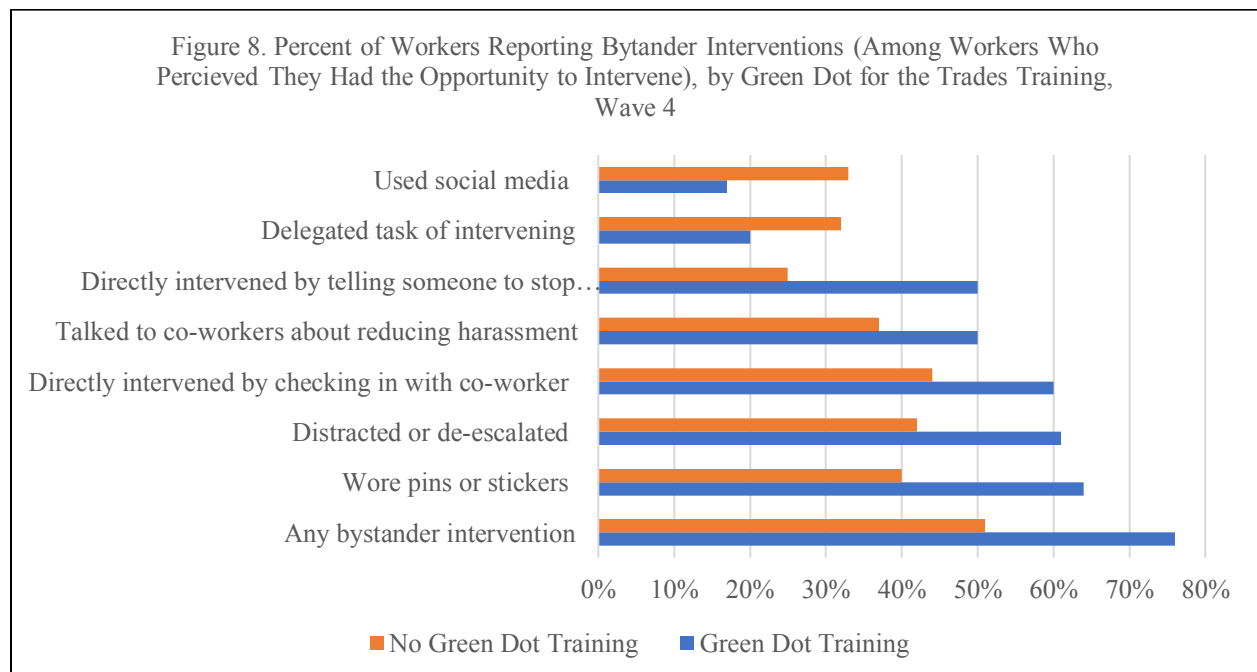


As shown in Figure 5, the percent of workers who reported intervening when they perceived they had the opportunity to intervene increased from wave one (33%) to subsequent waves. At wave four, 63% of these workers reported a time they intervened (slightly down from a high of 72% at wave two). A similar pattern (an increase between wave one and subsequent waves) was found for the number of times workers intervened when they perceived they had the opportunity to intervene (see Figure 6). At wave four, workers who intervened reported an average of seven interventions in the last month (up from a low of three interventions at wave one).

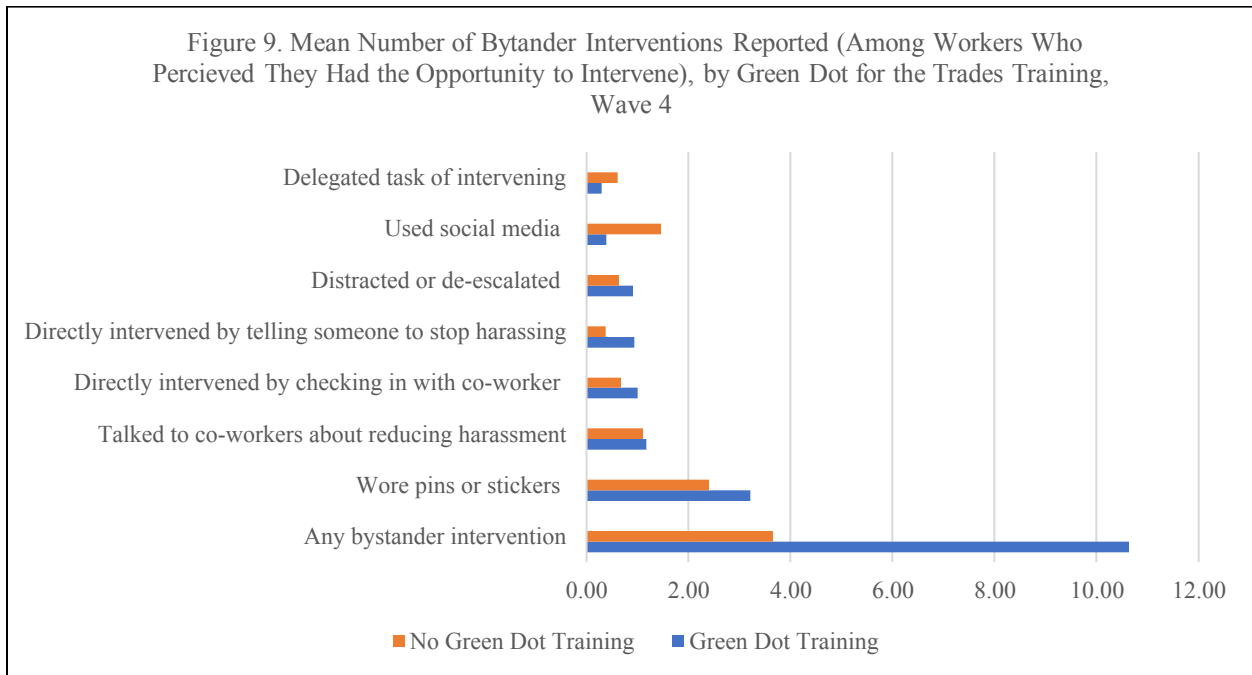
Women, people of color, and apprentices were most likely to report an intervention when they perceived they had the opportunity (see Figure 7). These types of workers were also the most likely to report harassing behaviors (see Figure 3).



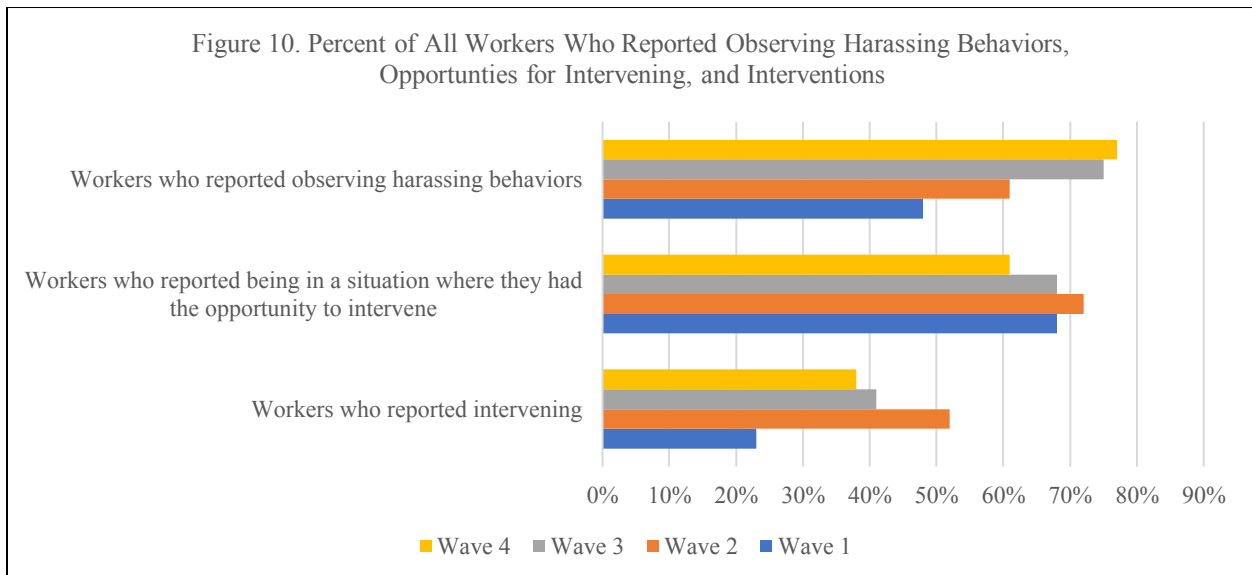
As shown in Figure 8, workers who received any Green Dot for the Trades training (train-the-trainer, worker training, and/or toolbox talk) were more likely to report bystander interventions when they perceived they had the opportunity; 76% of Green Dot for the Trades trained workers versus 52% of other workers reported intervening when they perceived they had the opportunity at wave four.



As shown in Figure 9, workers who received training also engaged in more interventions (eleven compared to four at wave four).



Overall, we find an increase in both the percent of workers reporting bystander interventions (among workers who perceived they had the opportunity to intervene) and the average number of interventions per worker who intervened. Those with Green Dot for the Trades training were even more likely to intervene than those who did not receive training. Thus, the program was effective in increasing bystander interventions in situations where workers perceived they had the opportunity to intervene.



Interventions Among All Workers

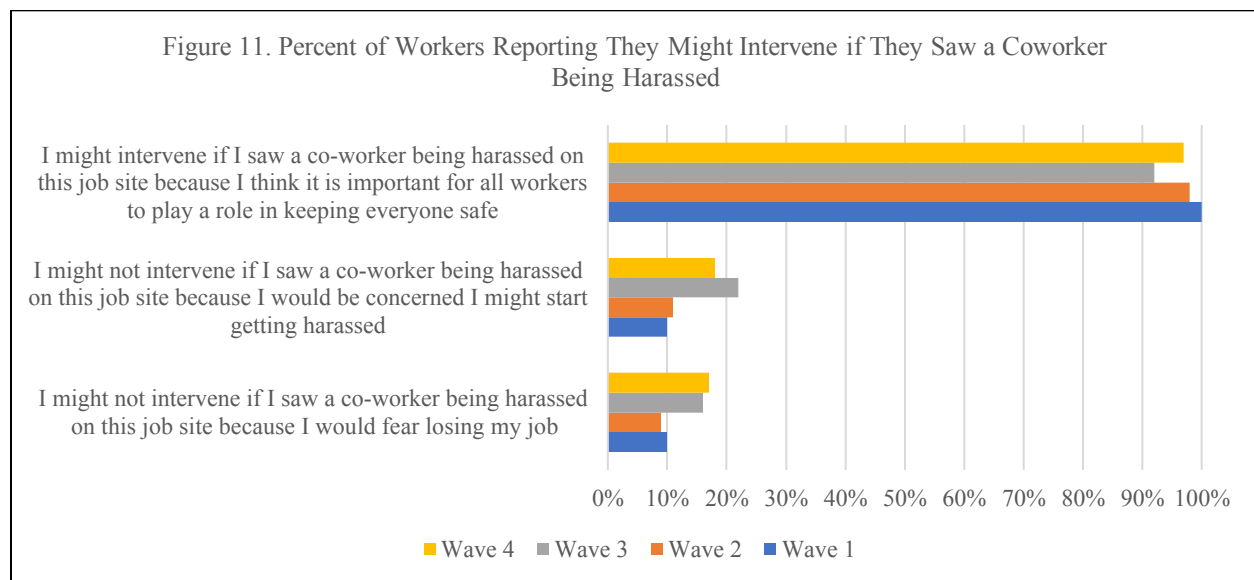
In the analyses presented in Figures 5-9, we focused on whether (and how often) workers intervened *when they perceived they had the opportunity to intervene*. We now present the data for

all workers to provide some nuance to the analysis of the overall prevalence of harassment and interventions on the pilot job site.

Figure 10 shows three findings: 1) an *increase* (across all waves) of the percent of all workers who observed harassing behaviors, that is, behaviors conceptualized as harassment by the researchers, such as unwanted sexual attention (also shown in Figure 2); 2) an increase from wave one to two and then a *decrease* (between waves two and four) in the percent of workers who reported being in a situation where they had the opportunity to intervene; and 3) an increase from wave one to two and then a *decrease* (between waves two and four) of the percent of all workers who reported intervening. For example, at wave four, 77% of workers reported harassing behaviors, 61% reported having the opportunity to intervene; and 38% of all workers reported actually intervening. In sum, more workers reported observing *harassing behaviors (described by the researchers)* than reported having the opportunity to intervene in response to *harassment (as the worker defined it)*. While there was an initial increase in the percent of all workers who intervened, the percent decreased between waves two and four.

Barriers to intervening

As shown in Figure 11, workers’ reports of their willingness to *potentially* intervene remained high across all waves (at wave four, 97% of workers said they might intervene if they saw a co-worker being harassed). Workers expressed some concern about intervening because they might start getting harassed (18% at wave four) and because they fear losing their job (17% at wave four). As expected, we see some slight increases in these barriers to intervention over the waves of the survey; this likely reflects workers becoming more aware of possible consequences of intervening as the Green Dot program explicitly discusses barriers to intervening (and realistic ways to intervene, given these barriers).



Examples of interventions

Across all waves, participants were asked the open ended question *Please briefly describe a time when you intervened and did something in response to harassment on this job site in the last month.* Across all waves (including wave one prior to implementation), participants reported many examples of bystander interventions. These responses broadly fell into categories associated with the Green Dot for the Trades strategies of directly intervening, distracting, and delegating.

Participant examples of bystander interventions

Examples of directly intervening with a co-worker harassing another co-worker:

Told person that what they said was inappropriate (wave three)

Someone was talking crap about non-union guys. I said “hey man, we are all here for the same goal.” It ended there (wave four)

Examples of directly intervening with a co-worker experiencing harassment:

I asked the person if they are ok and if I can help them (wave one)

Checked on a coworker who has been disregarded and isolated. As women, we both felt she was being treated unfairly. Talked to her about it (wave three)

Examples of distracting:

Someone was making fun of someone's accent. I switched the subject (wave two)

Split coworkers up and provided my tools (wave three)

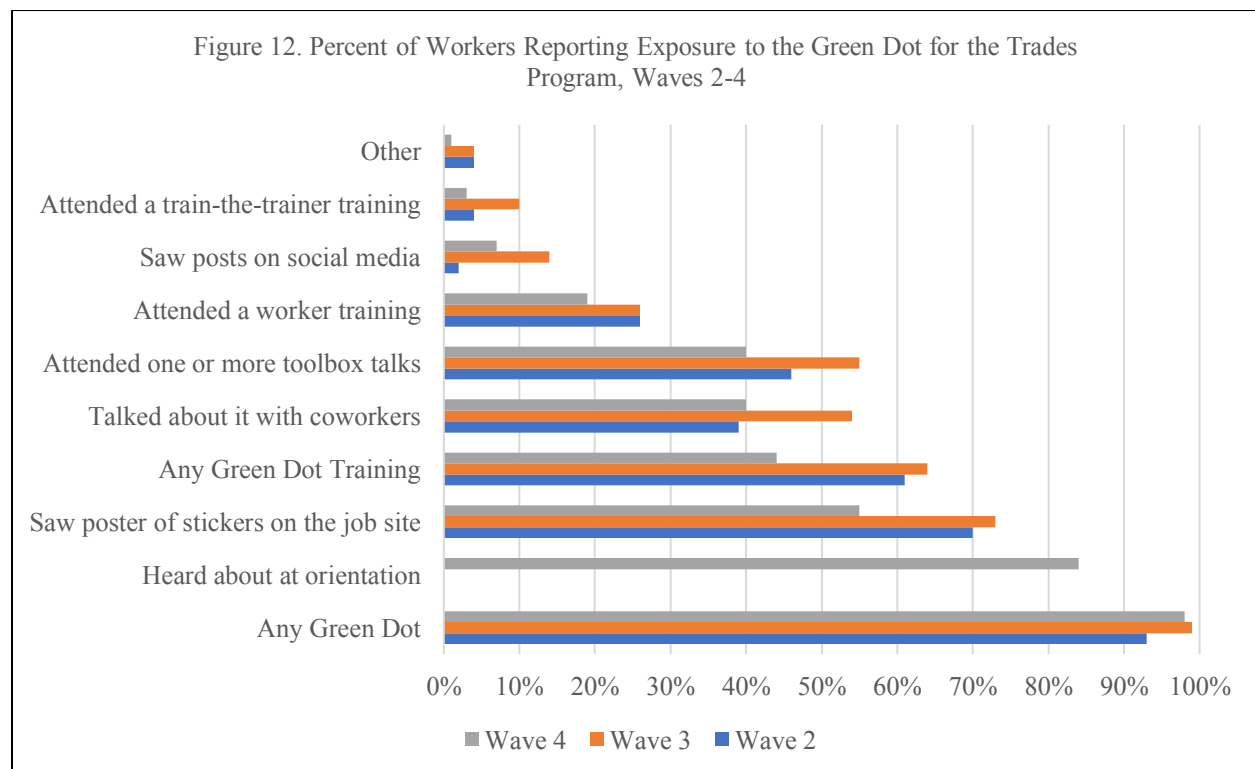
Examples of delegating:

[I] talked to my supervisor to remedy a situation between two crew members (wave two)

[I] asked [the] steward to intervene (wave four)

Exposure and Perceptions of Green Dot for the Trades

Workers were exposed to Green Dot for the Trades through train-the-trainer trainings, worker trainings, toolbox talks, orientation (toward the end of the pilot), posters and stickers on the job site, and social media, talking about it with coworkers.



As show in Figure 12, at wave four, 98% of workers reported any exposure to the program, 44% reported attending any training (train-the-trainer, worker training, and/or a toolbox talk), and 19% attended a worker training.

Worker perceptions of Green Dot for the Trades	
What is most effective about the Green Dot for the Trades program?	How could the Green Dot for the Trades program be more effective?
Bringing attention to the issue of harassment	More trainings, toolbox talks, and visibility on the job site
Specific bystander intervention strategies	Consequences for harassment

In an open-ended question at waves two, three, and four, participants were asked *“What is most effective about the Green Dot for the Trades program in addressing harassment, aggression, bullying, and hazing on this job site?”* Across all waves, the most common response was that the Green Dot for the Trades program brought attention to these issues, for example *“Bringing the issue to light, bringing it up, talking about it”* (wave two). A few participants commented on the effectiveness of specific tools provided by the Green Dot for the Trades program: *“I like it that it could be a look, distraction, or other means of stopping it informally”* (wave two).

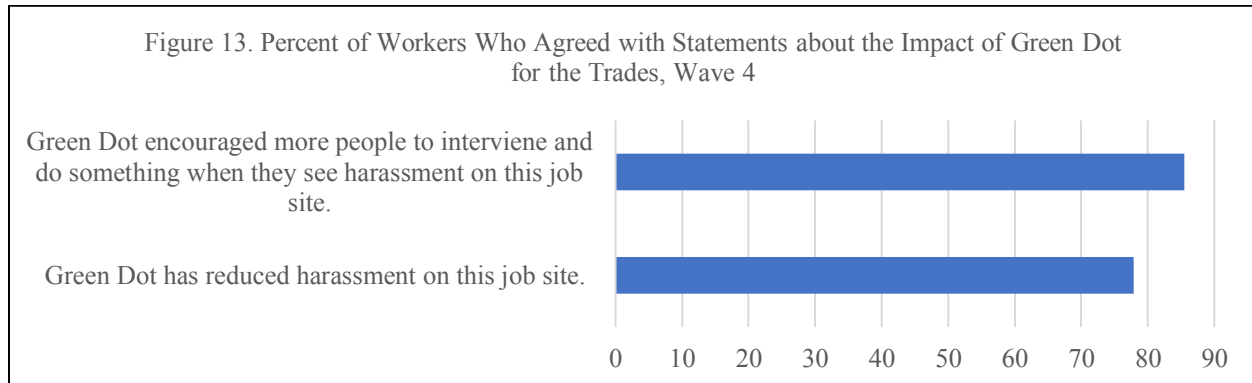
Participants were also asked *“How could the Green Dot for the Trades program be more effective in addressing harassment, aggression, bullying, and hazing on this job site?”* The most common response was that the training should be provided more broadly and that the program should be discussed more regularly. Some representative responses included: *“Everyone should have the opportunity to go to the [worker] training. I asked to go but my foreman told me I couldn’t”* (wave two), *“Start from the top and get foremen more involved”* (wave three), and *“More talking about it in toolbox talks and meetings”* (wave four). Others suggested the training should be mandatory for all workers on site. Participants also suggested other ways to make the program more visible on the job site, for example, *“Training, rewards, incentives, something identifiable that we can see.”* (wave two) and *“Catch phrases, slogans, more advertising to the job site”* (wave four).

Another common response related to processes for supervision, reporting, and discipline. Some participants thought there should be more consequences for workers who harass others on the job site, for example, *“[It could be more effective] By emphasizing the next level of response. It is good for us to address an issue, but we need to see a more legitimate contractor response to real harassment”* (wave three) and *“More enforcement within each company”* (wave four).

Finally, a minority of participants thought the program was currently working and did not need to be changed, for example: *“[It could be more effective by] continuing with program. Time equals change”* (wave four)

Across the open-ended responses on the survey, participants provided conflicting views on the role of leaders on the job site. Some viewed leaders as successfully implementing Green Dot for the Trades, for example *“The most effective part is the passion behind the leaders on site to share they stand with the program and expect it to be upheld among us all”* (wave three). Other participants believed leaders could do more: *“[The program could be more effective by] higher management setting an example other than just speaking on it.”* (wave three) and *“Nothing [about it is effective]. [Contractor] talks about it and uses it to pat themselves on the back.”* (wave four)

At Wave four, participants were asked about how they perceive the program has changed the culture of the job site. Figure 13 shows findings from the questions ***“Green Dot for the Trades has encouraged more people to intervene and do something when they see harassment on this job site”*** and ***“Green Dot for the Trades has reduced harassment on this job site.”*** At wave four, strong majorities of workers reported they believed that the program has encouraged more people to intervene (85%) and has reduced job site harassment (78%).



At wave four, participants were also asked the open ended question ***“How has Green Dot for the Trades made this job site different from other job sites you have worked on?”*** The majority of the responses indicated that participants believed the program has positively impacted the job site by reducing harassment, for example, ***“[It] has helped a lot. In other jobsites I’ve been yelled at and [experienced] name calling”*** and ***“I think there is less bullying/putting others down.”***

At wave four, a minority of participants indicated they believe the Green Program has negatively impacted the job site, through wasting time or imposing on workers’ ability to speak freely, for example: ***“People are afraid to engage in joking/normal conversation.”***

Across the open-ended questions, a minority of participants offered negative perceptions of Green Dot for the Trades, such as: ***“Your program is stupid”*** (wave two) and ***“Not an effective program, this is someone’s ‘feel good’ project.”*** (wave four). A few participants noted that the program is seen by some as a joke by some workers, for example: ***“It at least gets people talking, but sometimes it’s made a joke”*** (wave three).

A small number of participants believed that change was not needed and/or not possible, for example: ***“I love my job. There will always be bad eggs. Sometimes there in charge we have to learn to get along with all personalities, making the site soft is not the way to deal with it.”*** (wave three) and ***“It really has not [changed the job site]. Some old/grumpy fucks will never stop.”*** (wave four)

Overall, workers held largely positive views about the effectiveness of the Green Dot for the Trades program. Workers provided feedback that the program might be more effective if it was more broadly applied and if were paired with complementary contractor policies and process, such as visible consequences for workers who engaged in harassment.

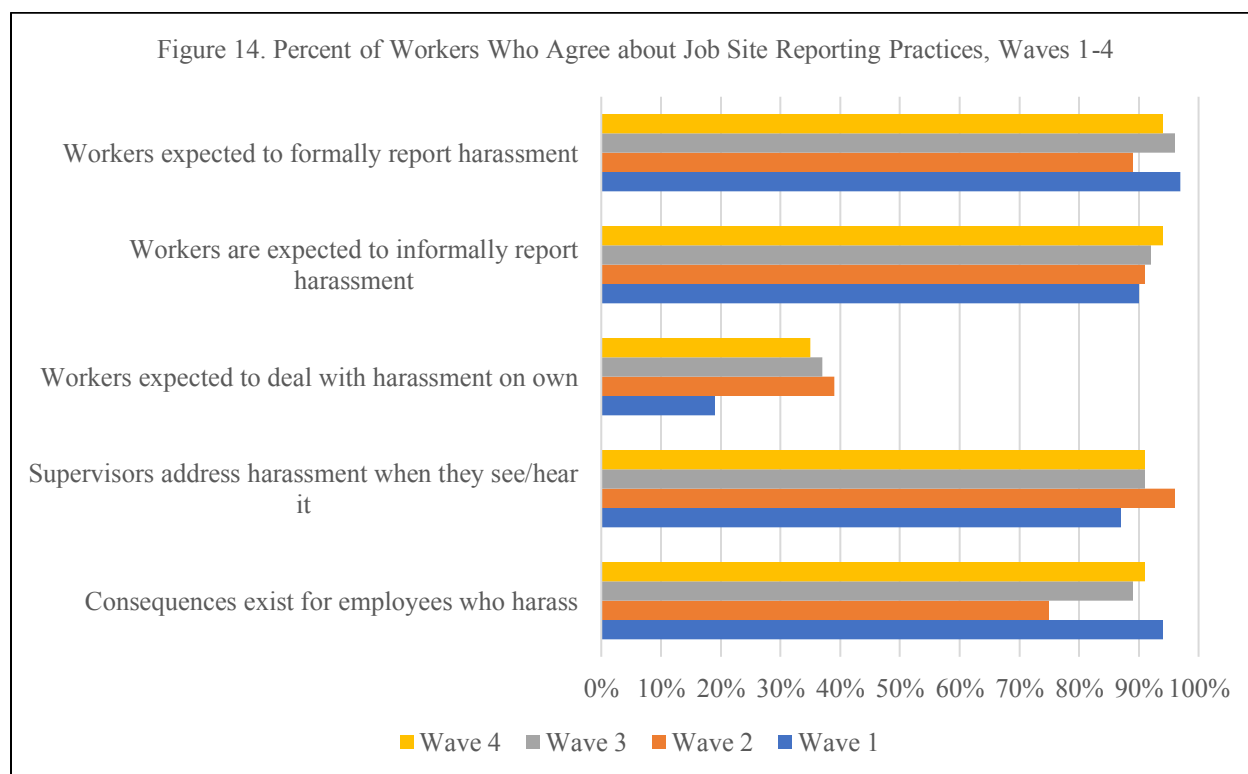
Perceptions of reporting and disciplinary practices

One key element of Green Dot for the Trades is the option to delegate issues of harassment (including delegating to a supervisor). As the focus is on worker education, the program does not address the contractors’ harassment policies and practices. However, given the interconnected nature of these issues, we examine how workers perceived the contractors’ reporting and

disciplinary policies and practices and how the implementation of the Green Dot for the Trades program may have affected these perceptions.

As shown in Figure 14, across all waves, strong majorities of workers reported that they perceived that workers are supposed to formally report harassment (94% at wave four) and that workers are supposed to informally report harassment (94% at wave four). These figures did not significantly change over the pilot study.

The percent of workers who believed that workers are supposed to deal with harassment on their own increased from wave one (19%) to subsequent waves (35% at wave four). This suggests that the focus of Green Dot for the Trades on individuals' interventions may have increased workers' perceptions that they should address harassment on their own. This is in line with the Green Dot for the Trades approach; however, it would not be desirable for workers to believe that the *only* way to deal with harassment was on their own. The issue of how harassment ought to be dealt with is a complex one; some instances of harassment (i.e. more minor instances) might best be addressed through bystander intervention, while others (i.e. more severe or ongoing harassment) might be best addressed through informal reporting, and still others (i.e. the most extreme) ought to be addressed through a formal report.



As shown in Figure 14, strong majorities of workers across all waves reported they believed that supervisors address harassment when they see or hear it (91% at wave four) and that consequences exist for workers who harass (91%). These figures did not significantly change over the pilot study. While these numbers are already high, it would be ideal for these beliefs to be more broadly held when contractor policies indicate that supervisors should address harassment and harassment has consequences.

As noted above, open-ended comments suggested that there were insufficient consequences for workers who harass others. In the open-ended comments, there were also reports of instances where participants perceived that harassment was and was not successfully dealt with, for example,

“I informed my foreman of an incident that was hearsay but concerning. Within a week they had settled the matter and harasser is officially ‘no-rehire’” (wave three) and *“Workers calling coworkers derogatory names about women, woman coworker heard it, mentioned it to me, I told foreman/super. They went to [contractor]. Nothing done”* (wave two).

Over the implementation of Green Dot for the Trades, workers reported an increase in their endorsement of the idea that workers should deal with harassment on their own. No other changes were observed in other beliefs about contractor reporting and disciplinary practices. Open-ended comments suggested that workers supported contractor policies that provide consequences for harassment as well as transparency in disciplinary processes.

Demographics

A total of 136 workers completed the wave four survey. Wave four participants were 74% male and 60% white (and non-Hispanic); 32% were apprentices, 49% journey workers, and 19% foremen/supervisors /superintendents/project managers (described as “supervisors” in this report).

140 workers completed the wave three survey. Wave three participants were 72% male and 55% white; 33% were apprentices, 39% journey workers, and 13% supervisors (1% other and 14% no response).

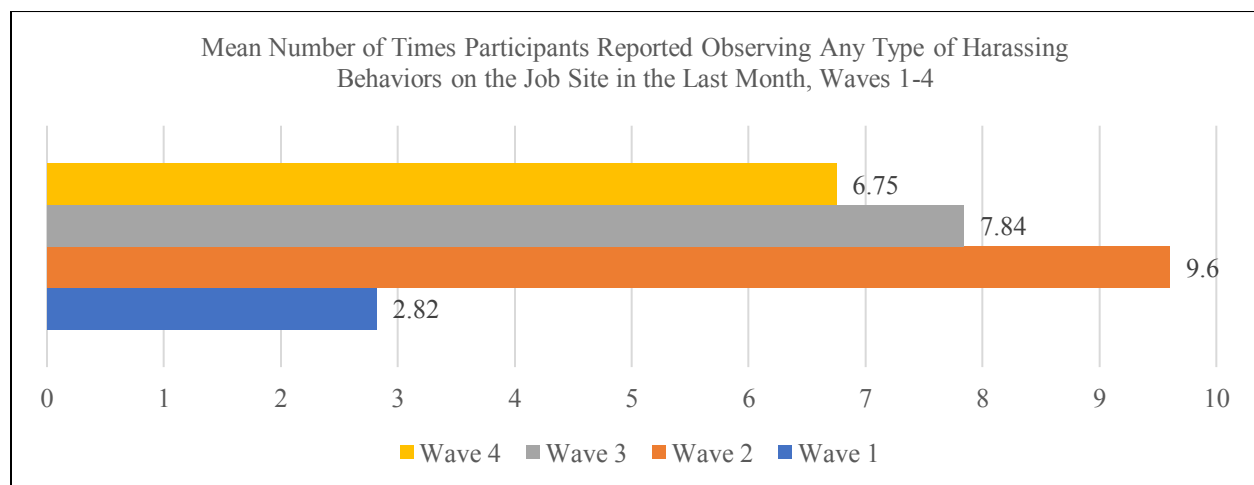
57 workers completed the wave two survey. Wave two participants were 67% male and 68% white; 35% were apprentices, 40% journey workers, and 21% supervisors (4% no response).

31 workers completed the wave one survey. Wave one participants were 87% male and 68% white; 16% were apprentices, 35% journey workers, and 39% supervisors (6% other and 3% no response).

Discussion and analysis

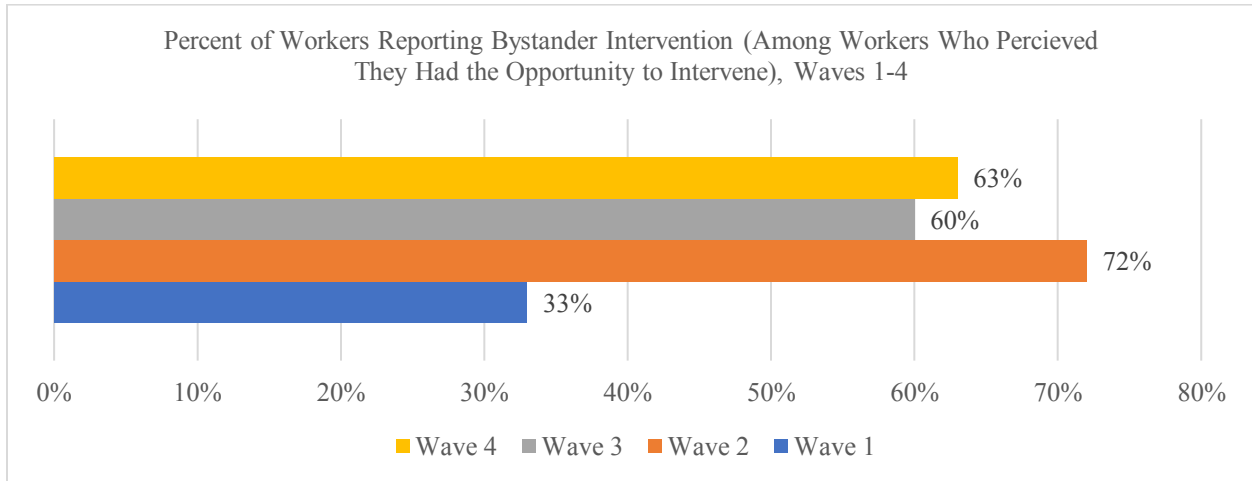
What impact did Green Dot for the Trades have on the pilot job site?

Decrease in harassment. Overall, the data demonstrated a slight decrease in the instances of behaviors conceptualized as harassment by the researchers (e.g. unwanted sexual attention) on the job site over the course of the pilot study. At wave four, workers observed an average of nearly seven instances of harassing behavior per month (down from a high of nearly ten instances at wave two).



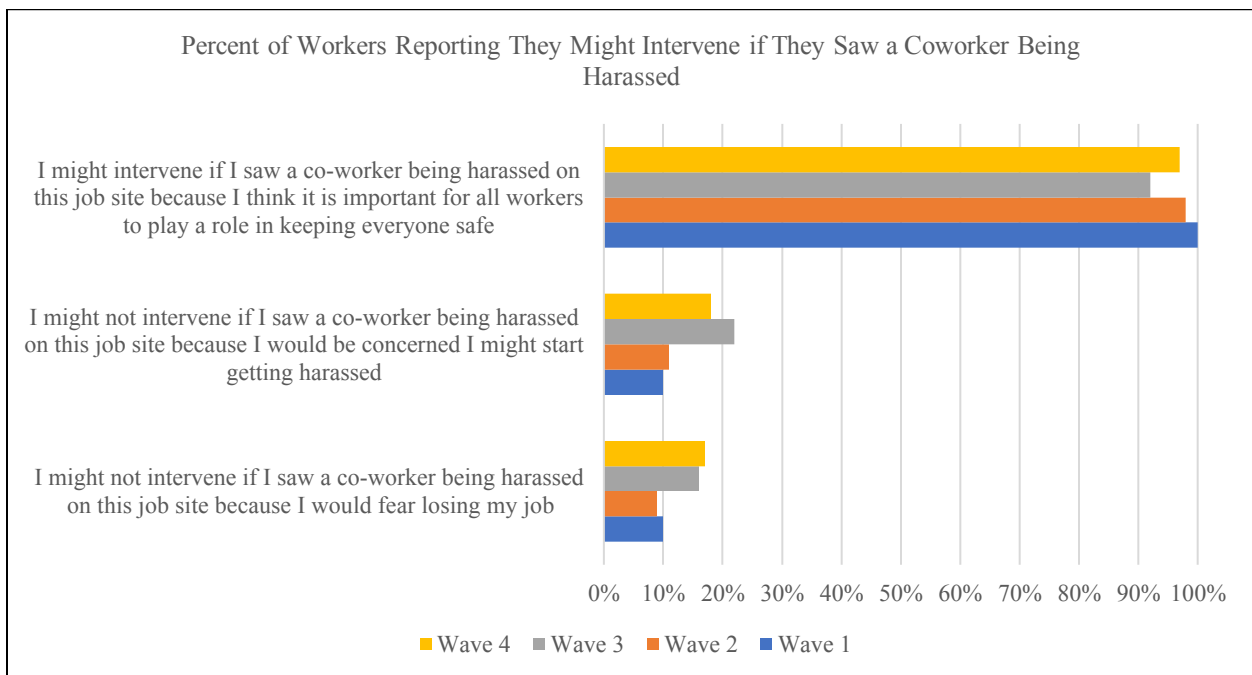
Increase in bystander interventions (among workers who perceive the opportunity to intervene). The percent of workers who reported intervening when they perceived they had the opportunity to

intervene increased from wave one (33%) to subsequent waves; at wave four, 63% of workers reported a time they intervened (slightly down from a high of 72% at wave two). The percent of all workers who reported intervening decreased from a high of 52% at wave two to a low of 38% at wave four. At wave four, workers who intervened reported an average of seven interventions in the last month (up from a low of three interventions at wave one). Workers who received Green Dot for the Trades training (train-the-trainer, worker training, and/or toolbox talk) were more likely to report a bystander intervention and engaged in more interventions.



What other aspects of the Green Dot for the Trades program worked well?

Workers reported Green Dot for the Trades raised awareness of job site harassment. Raising awareness of harassment as an issue is an important first step to addressing it. In open-ended comments, the most commonly reported aspect of the effectiveness of the program was to raise awareness about harassment on the job site.



Workers reported a willingness to potentially intervene when they saw harassment. The data indicates that the expected barriers to intervening such as workers’ concerns about losing their job

or experiencing harassment themselves, remained prevalent but at fairly low levels (under 20% of workers said they might not intervene for those reasons at wave four); workers endorsed the idea that they *would* intervene if they saw a coworker being harassed at high levels (97% at wave four).

Green Dot for the Trades builds on existing positive behaviors within the trades. Bystander intervention approaches provide training to encourage workers to engage in positive behaviors that are already (occasionally) enacted on construction job sites. In the wave one survey on the pilot job site (collected prior to the implementation of Green Dot for the Trades), some participants reported bystander interventions; for example, one participant wrote “[***I have intervened***] ***many times. Changing the subject or deflecting from the person being talked down to.***” Focus groups with stakeholders in the trades conducted prior to the implementation also found this to be true (Kelly and Bassett 2015).

Workers implemented all Green Dot for the Trades strategies. The Green Dot for the Trades strategies for reactive bystander interventions (direct, delegate, and distract) and proactive strategies were all utilized by workers on the pilot site, as indicated in both closed and open-ended responses on the survey. Workers increasingly implemented the Green Dot for the Trades strategies when they identified harassment over the course of the pilot study.

Recommendations for Improving Green Dot for the Trades

This study demonstrates the promising finding that the Green Dot for the Trades bystander intervention program can reduce job site harassment in the trades. The findings provide support for continuing to explore Green Dot for the Trades as a tool for decreasing harassment in the construction trades. However, to be an effective tool, the programs would need to decrease harassment more quickly and to lower levels.

During the pilot of Green Dot for the Trades, elements of the program were developed and refined. For example, new toolbox talks were developed, the worker training was shortened from 90 to 60 minutes, and information on Green Dot was added to new worker orientation. Based on what was learned during the pilot project, Alteristic has already implemented a variety of changes to the program, such as shifting the three day train-the-trainer to focus on hands on skills in order to minimize the additional follow up training needed, training those with formal influence (i.e. supervisors) as well as those with informal influence first, tailoring the core worker training for different audiences (e.g. leadership), and reducing the number of instructor materials so training can be done without PowerPoint (personal communication 2020).

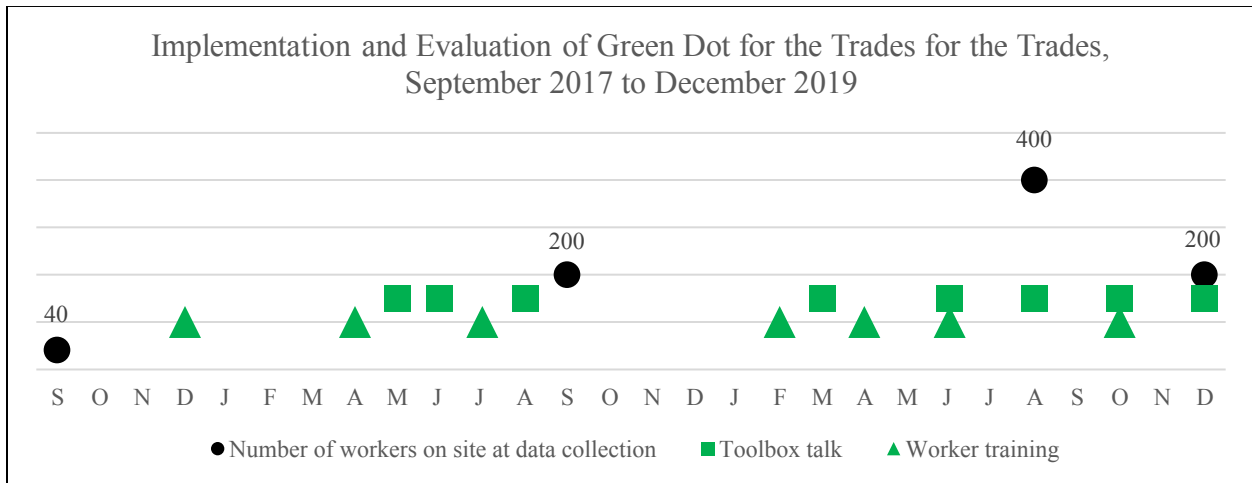
In the sections that follow, we offer some additional specific recommendations for future implementations of bystander intervention programs in the trades.

Overview of recommendations

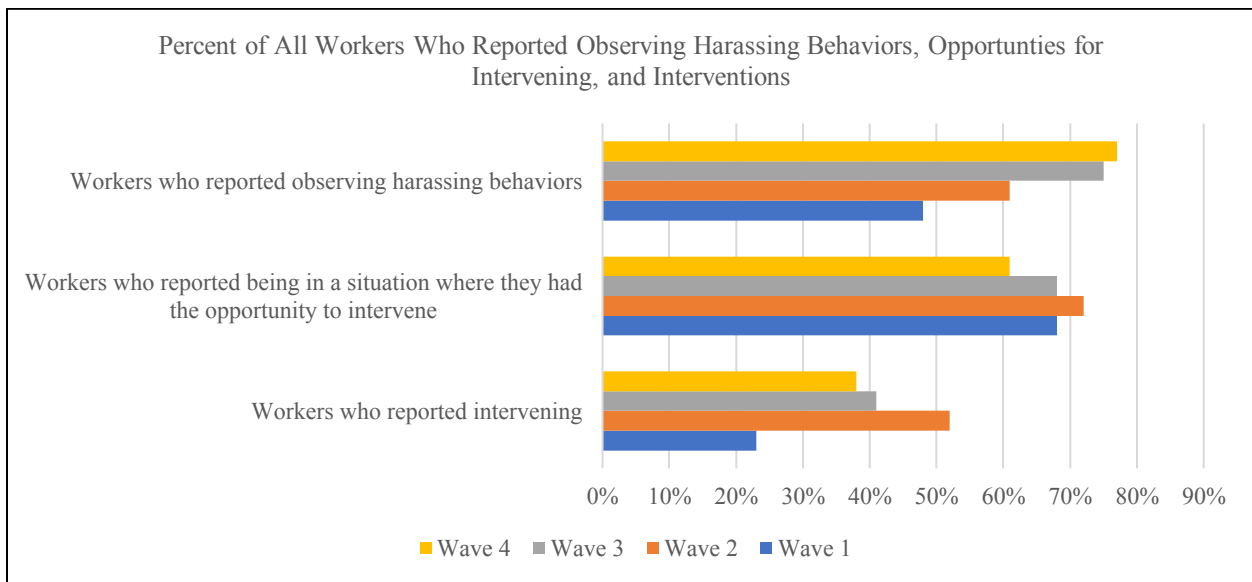
1. Provide training to all workers
2. Increase the percent of workers who identify behaviors that could be addressed through bystander intervention
3. Communicate contractor policies regarding acceptable behavior, contractor policies and processes for informal and formal reporting, and contractor disciplinary policies and processes

Provide training to all workers. In open-ended comments, one of the most common type of suggestions for making the program more effective was to train more workers, discuss the program more often, and make it more visible on the job site. Over the 24 months of the pilot study,

contractor staff conducted seven worker trainings and nine toolbox talks, which resulted in one training and one toolbox talk approximately every three months. The highest level of worker exposure to Green Dot for the Trades was found at waves three and four. At wave four, 98% of workers reported any exposure to the program, 44% reported attending any training (train-the-trainer, worker training, and/or a toolbox talk), and 19% reported attending a worker training. Exposing all workers to Green Dot for the Trades through new worker orientations and regular (e.g. monthly) toolbox talks would be a realistic goal. The pilot did exceed Alteristic’s initial suggested goal of 15% of workers on site receiving the worker training; however, it appears that a higher level of exposure to the worker training (and/or other components of the program) is needed to bring the levels of harassment down lower and more quickly.



Note: Two toolbox talks delivered in December 2019



Increase the percent of workers who identify behaviors that could be addressed through bystander intervention. The Green Dot for the Trades approach does not identify specific types of behaviors as harassment; rather, the program trains workers to recognize concerning behavior and to intervene when they see behavior that crosses the line for them. Thus, it is not surprising that a higher percent of workers reported observing behaviors conceptualized as harassment by the researchers (e.g. unwanted sexual attention) than reported being in a situation in which they

perceived they had the opportunity to intervene. As shown below, the percent of all workers who reported observing harassing behaviors increased across all waves of the survey but the percent of workers who reported being in a situation to intervene and actually intervening both declined (from waves two to four).

As noted above, the increase in the percent of workers who reported observing harassing behaviors represents workers' increased awareness of these behaviors. However, we might expect to also see a parallel increase in the percent of all workers who reported having the opportunity to intervene as well as an increase in the percent of workers who actually engaged in bystander interventions (as they became increasingly aware of these behaviors). It may be that while workers increasingly noticed behaviors conceptualized as harassment by the researchers (e.g. unwanted sexual attention) and reported them when surveyed, they did not recall these behaviors as *harassment* when asked on the survey if they have been in a situation in which they might intervene.

The Green Dot approach intentionally focuses on training workers to intervene when they see behavior that crosses their own line rather than on defining specific behaviors as harassment. The benefits to this approach are that 1) a person does not need to define a behavior as harassment in order to intervene and 2) there is a concern that labeling specific behaviors as harassment may increase workers' barriers to intervening. The drawback, as shown in the figure above, is that an increasing percent of workers identifying harassing behaviors does not translate into an increase in the percent of workers who perceive they have an opportunity to intervene (or an increase in the percent of workers actually intervening). Further, training workers to define for themselves when behavior is concerning and requires an intervention may conflict with contractors' expectations for acceptable behavior as articulated in policies and practices, especially for those in supervisory positions.

Communicate contractor policies regarding acceptable behavior, contractor policies and processes for informal and formal reporting, and contractor disciplinary policies and processes

The bystander approach is particularly well suited to responding to early warning signs of potential harassment and mild harassment that does not violate company policy. However, on construction job sites, harassment often rises to the level of being a violation of company policy. While contractor policies and practices are outside the scope of the Green Dot for the Trades program, the findings of this evaluation suggest that the effectiveness of the program could be improved by pairing the Green Dot for the Trades bystander intervention approach with increased communication about contractor policies and processes related to harassment. This may require contractors to seek an outside consultant to review their current policies and processes, suggest changes to be consistent with best practices, provide guidance on how to effectively communicate policies and practices to workers, and provide support on contractor responses to reports of harassment. As an Alteristic staff member stated: "an education program alone is generally insufficient to fully address harassment and any education program should be part of a comprehensive strategy that also includes policy and enforcement measures." (personal communication 2020).

Communicate contractor policies regarding acceptable behavior. One way to increase the percent of workers who identify harassing behaviors as opportunities for interventions could be for the contractor to communicate guidelines for acceptable behavior. At the end of the pilot study, there remained strongly diverging views among workers about what constitutes concerning behavior that warrants an intervention. As noted above, the data shows that participants under-report harassment in the question on bystander interventions, compared to the question asking about harassing behaviors. This can be explained by the fact that not all workers identify the

harassing behaviors described in the survey as harassment (or as harassment that rises to the level of requiring an intervention). This finding is entirely compatible with the Green Dot for the Trades approach, which directs workers to decide for themselves whether or not a behavior is concerning and requires intervention; however, contractors might choose to supplement the Green Dot for the Trades program with additional information about company policies related to harassment, including what kinds of behaviors are not acceptable.

Communicate contractor policies and processes for informal and formal reporting. Across all waves, strong majorities of workers reported that they perceived that workers are supposed to formally report harassment (94% at wave four) and that workers are supposed to informally report harassment (94% at wave four). These figures did not significantly change over the pilot study. However, in practice, workers rarely report harassment, as indicated by previous research on the construction trades (see Kelly et al 2015) as well as the finding that the Green Dot for the Trades “delegate” strategy was the least frequently implemented reactive bystander intervention. The Green Dot for the Trades approach is that intervening is *always* optional. However, contractors might choose to clarify when it is *not* optional to address harassment (and for whom). For example, contractors might choose to develop policies about when and how workers who are supervising others should (informally or formally) report specific types of harassment. Contractors might choose to communicate to all workers their policies for informal and formal reporting to the prime contractor, subcontractor, and/or union stewards. Given the concerns around formal (i.e. written) reporting in the construction trades, it may be productive to emphasize the option of making an informal (i.e. verbal) report to a supervisor, which may then result in either a verbal or written disciplinary action.

The percent of workers who believed that workers are supposed to deal with harassment on their own increased from wave one (19%) to subsequent waves (35% at wave four). The emphasis of the Green Dot for the Trades approach on worker to worker interactions likely explains this shift in attitudes. It can be interpreted as a positive outcome of the pilot for workers to perceive that they can deal with harassment on their own, as this is the message of the Green Dot for the Trades program. However, contractors might provide some additional guidance about what kinds of harassment situations call for direct or distract strategies (i.e. deal with on their own) versus delegating (i.e. formally or informally reported).

Communicate contractor disciplinary policies and processes. In addition to communicating contractor expectations and policies related to acceptable behavior and reporting practices, additional focus might be provided on communicating disciplinary practices, including a process for how to notify those who report harassment about what action has been taken. In open-ended comments, seeing consequences for harassment was one of the most common responses to the question about how the Green Dot for the Trades program could be improved. While the Green Dot for the Trades program does not discuss consequences of harassment, contractors might supplement the program by communicating their policies and practices. Some workers commented on open-ended questions on surveys that they never heard the outcome of their reports and concluded that nothing was done.

It is important to note that strong majorities of workers across all waves reported that they believed that supervisors address harassment when they see or hear it (91% at wave four) and that consequences exist for workers who harass (91%). Although these figures are already high, improving both the messaging and the visibility of processes may facilitate the reduction of job site harassment.

In sum, contractors implementing Green Dot for the Trades may find it more effective if they clearly articulate policies and practices related to acceptable behavior, formal and informal reporting, and discipline. A critical point is that a “zero tolerance” policy for harassment would not be compatible with the Green Dot for the Trades approach (and is not recommended as a best practice by the EEOC). However, contractors can develop policies and processes related to job site harassment that are realistic and compatible with the Green Dot for the Trades approach. For maximum effect in reducing harassment, contractors should provide ongoing communication about both the policies and how they relate to the Green Dot for the Trades approach.

Notes on interpreting evaluation findings

The findings described above may be impacted by methodological factors that are not directly related to the effectiveness of the Green Dot for the Trades program. We describe these below.

As the survey is voluntary, not all workers present at the time of data collection completed a survey. At wave one, contractor staff estimated about 40 workers on site and 31 surveys were completed (78% response rate); at wave two, contractor staff estimated about 250 workers on site and 57 surveys were completed (23% response rate); at wave three, contractor staff estimated about 400 workers on site and 140 surveys were completed (35% response rate); at Wave four, there were about 200 workers on site and 136 surveys completed (68% response rate).

Further, certain sub-groups appear more likely to have taken the survey across waves. For example, at wave four, 16% of survey participants were women or non-binary; this may be an over-representation of these groups compared to the demographics of the pilot job site.

We speculate that those who have more favorable attitudes towards the Green Dot for the Trades program might have been more likely to complete the surveys. These individuals may also be more likely than workers who did not take the survey to report that they observed harassment and engaged in bystander interventions. However, we cannot assess this with the available data.

There are also individuals working on the site who had been exposed to Green Dot for the Trades but were not present at the time of data collection (e.g. working a different shift, absent from work on the date of data collection) and therefore did not participate in the survey.

As noted above, the number of workers on site fluctuated across the waves. It may be that as increasing workers are present on site, harassment will increase. This may be because there are more opportunities for more people to interact.

References

Kelly, Maura and Sasha Bassett. 2015. "Evaluation of the Potential for Adapting the Green Dot for the Trades Bystander Intervention Program for the Construction Trades in Oregon." Final report submitted to the Oregon Bureau of Labor and Industries and Oregon Department of Transportation. Available at <https://www.pdx.edu/sociology/maura-kelly>

Kelly, Maura, Lindsey Wilkinson, Maura Pisciotta, and Larry S. Williams. 2015. “When Working Hard is not enough for Female and Racial/Ethnic Minority Apprentices in the Highway Trades.” *Sociological Forum* 30(2):415-438.

Wilkinson, Lindsey and Maura Kelly. 2018. Continuing to Build a More Diverse Workforce in the Highway Trades: 2018 Evaluation of the ODOT/BOLI Highway Construction Workforce Development Program. Final report submitted to the Oregon Bureau of Labor and Industries and Oregon Department of Transportation. Available at <https://www.pdx.edu/sociology/maura-kelly>

Appendix A: Survey instrument



Thank you for your participation in the evaluation of the Green Dot for the Trades program

Portland State University researchers are conducting an evaluation of the Green Dot for the Trades program on construction job sites, which is designed to increase bystander behavior and reduce harassment, aggression, bullying, and hazing. The objective of the study is to learn more about people's experience with and observation of aggression on the job before and after the implementation of the Green Dot for the Trades program. The study is sponsored by Oregon Tradeswomen, Inc., in collaboration with Portland State researchers and Alteristic. If you choose to participate, you will be entered into a raffle for a \$100 Fred Meyer gift card.

You will be asked to complete a short survey, which will take about 10 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. **Your answers to this survey will be kept completely confidential. Only the Portland State researchers conducting the project will have access to your survey.** The information you provide will be kept confidential and your responses will not be shared with your employer. In reports from this study, your name and identifying information will not be included. The risks to participating in the study are minimal (e.g. thinking about negative past or future experiences working in the construction trades). Benefits of the study include contributing to research that will potentially improve the experiences of future workers in the construction trades. You will receive a copy of the above information, along with contact information for the Portland State Human Subjects Research Review Committee and the Portland State researcher conducting this project.

If you have concerns or problems about your participation in this study or your rights as a research subject, please contact the PSU Office of Research Integrity at 503-725-2227. If you have questions about the study itself, contact Dr. Maura Kelly at 503-725-8302.

This page is for you to keep. Continue to the survey now.

Thank you for your participation in the evaluation of the Green Dot for the Trades program

1. The following are some statements about harassment, aggression, bullying, and hazing *on your current jobsite*. Please indicate how much you agree or disagree with the following statements:

How much do you agree or disagree?	Strongly Agree	Agree	Disagree	Strongly Disagree
Workers are expected to formally report harassment on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are expected to informally talk to a supervisor (foreman/superintendent/project manager) when we see harassment on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are expected to deal with harassment on our own on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supervisors on this jobsite address harassment when they see it or hear about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are consequences for employees who engage in harassment on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I might intervene if I saw a co-worker being harassed on this jobsite because I think it is important for all workers to play a role in keeping everyone safe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I might <i>not</i> intervene if I saw a co-worker being harassed on this jobsite because I would be concerned I might start getting harassed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I might <i>not</i> intervene if I saw a co-worker being harassed on this jobsite because I would fear losing my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel respected on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Harassment is a problem on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More should be done to address harassment on this jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Next are a few questions about experiences you may have had *on this job site in the last month*. Please indicate how often you have experienced the following on this job site.

How many times in the last month have you...	0 times	1-2 times	3-5 times	6-9 times	10+ times
Seen others be called names, be yelled at, or be cursed at.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen others experience unwanted sexual attention or comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heard offensive jokes or comments directed towards other workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen others be isolated or ignored at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen others be unfairly denied opportunities to learn new skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen others be unfairly assigned to scut work unrelated to their trade (like cleaning).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen others unfairly assigned fewer work hours than other workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seen other workers experience any harassment, aggression, bullying, or hazing by workers on this job site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Please briefly describe harassment you've seen on this job site in the last month:

4. Next are some questions about things you may have done when you saw harassment, aggression, bullying, or hazing *on this job site in the last month*. Indicate how often you have done the following on this job site.

How many times in the last month have you...	I was not in this situation	0 times in the last month	1-2 times	3-5 times	6-9 times	10 or more times
Directly intervened by telling someone to stop harassing a co-worker?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Directly intervened by checking with a co-worker who has experienced harassment to see if they are okay or need support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distracted or de-escalated a situation that involves harassment (e.g., changed the subject, asked for help with another task)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delegated the task of intervening in harassing behavior to another coworker?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talked to your co-workers about what you could all do to reduce harassment on the jobsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used social media to show that you do not agree with harassment on the jobsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worn pins or stickers on your hardhat to show you do not support harassment on the jobsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Please briefly describe a time when you intervened and did something in response to harassment on this job site in the last month:

6. How have you been involved with the Green Dot for the Trades program? (Check all that apply)

- I learned about it at orientation
- I attended a train-the-trainer training
- I attended a bystander training
- I attended one or more toolbox talks
- I saw posters or stickers on the job site
- I saw posts on social media
- I talked about it with coworkers
- Other (please specify): _____

7. Please indicate how much you agree or disagree with the following statements:

How much do you agree or disagree?	Strongly Agree	Agree	Disagree	Strongly Disagree
Green Dot for the Trades has encouraged more people to intervene and do something when they see harassment on this job site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Green Dot for the Trades has reduced harassment on this job site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How has Green Dot for the Trades made this job site different from other job sites you have worked on?

9. What is most effective about the Green Dot for the Trades program in addressing harassment, aggression, bullying, and hazing on this job site?

10. How could the Green Dot for the Trades program be more effective in addressing harassment, aggression, bullying, and hazing on this job site?

Finally, we would like to collect some demographic information

11. What is your position on this job site?

- Apprentice
- Journey worker
- Other tradesperson
- Supervisor/foreman/superintendent/project manager
- Other (please specify):

12. What trade do you work in? (Please specify)

13. How many *months* have you been working on this job site? _____

14. What is your gender?

- Male
- Female
- Non-binary

15. What is your race/ethnicity? (Please check all that apply)

- White
- Black or African American
- Asian or Asian American
- American Indian or Alaska Native
- Native Hawaiian or other Pacific Islander
- Latino/a, Hispanic, Spanish
- Another race/ethnicity, please specify:

16. What is your sexual orientation?

- Heterosexual or straight
- Sexual minority (e.g., gay, lesbian, bisexual, queer)

17. What is your age? _____

Appendix B: Project timeline

Evaluation of the potential for adapting the Green Dot for the Trades in Oregon	
February 2015	Focus groups in Portland with stakeholders in the trades
Planning for pilot	
June 2016	Planning discussions begin
December 2016	Pilot project identified
October 2016	Three day training in Portland attended by contractor staff, Oregon Tradeswomen staff, and PSU evaluator
Pilot implementation	
September 2017	PSU wave one (baseline) data collection (30 surveys, ~40 workers on site)
October 2017	Two contractor staff approved to do worker training
December 2017	Worker training (8 people)
April 2018	Worker training (20 people)
May 2018	Toolbox talk #1 by contractor staff
June 2018	Toolbox talk #1 by contractor staff
July 2018	worker training (10 people)
August 2018	Toolbox talk by contractor staff (personal story)
September 2018	PSU wave two data collection (57 surveys, ~200 workers on site)
February 2019	Worker training (11 people)
March 2019	Toolbox talk #1 by contractor staff
April 2019	Worker training (28 people)
June 2019	Worker training (15 people) Tool box talk #2 (109 people)
August 2019	Tool box talk #3 (68 people) PSU wave three data collection (160 surveys, ~400 workers on site)
October 2019	Tool box talk Worker training (10 workers)
December 2019	Tool box talk #8 Tool box talk #6 Wave four data collection (136 surveys, ~200 workers on site)
Totals	7 worker trainings (102 people) 9 toolbox talks