

ORIGINAL RESEARCH

Do adolescent employees perceive the risks of workplace violence? A mixed methods study

Carolyn R. Smith *, Gordon L. Gillespie

College of Nursing, University of Cincinnati, Cincinnati, OH, USA

Received: December 31, 2015

Accepted: February 15, 2016

Online Published: March 16, 2016

DOI: 10.5430/jnep.v6n7p116

URL: <http://dx.doi.org/10.5430/jnep.v6n7p116>

ABSTRACT

Objective: Adolescents are at risk for workplace violence (WPV) exposure but may not perceive it as a risk. The purpose of this study was to explore adolescent employees' perceptions of safety from WPV.

Methods: Using a qualitative dominant mixed methods design, thirty adolescent employees were recruited to complete a 36-item survey and individual interviews. Analyses included descriptive statistical techniques for survey responses, conventional content analysis for qualitative interview data, and mixed data analyses to explore differences in qualitative themes based on WPV exposure and gender.

Results: Participants expressed mostly positive perceptions of safety despite 50% (n = 15) reporting WPV exposure. WPV exposure and gender did not appear to be indicative of overall perceptions of safety but may be linked to safety in numbers. Most males had positive perceptions of safety.

Conclusion: Adolescent employees want and deserve WPV training. Recommendations for nurses and other health professionals to assist adolescents with addressing health and safety issues in the workplace are provided.

Key Words: Workplace violence, Adolescents, Occupational health, Safety, Workplace aggression

1. INTRODUCTION

Adolescents may be exposed to various forms of violence whether at home, school, or in the community. Violence exposure can have negative effects on adolescent health^[1-3] and development.^[1,4] One setting where violence exposure among adolescents may occur and has received little attention from researchers is in the workplace. With nearly 4.5 million U.S. adolescents age 16-19 working in the private sector in 2013,^[5] nurses focused in primary and population focused care need to understand adolescents' risk for workplace violence (WPV) exposure so interventions to mitigate said risks can be developed. However, before a nursing intervention can be developed it is imperative to understand

the adolescent employee point of view, whether they perceive any safety risks from violence while in the workplace. Therefore the purpose of this study was to explore adolescent employees' perceptions of safety relating to WPV.

1.1 Background

Employees face numerous safety hazards including violence while on the job. In 2014, the incidence rate of nonfatal occupational injuries and illnesses among U.S. employees was 107.1 per 10,000 full-time workers. Of these, adolescents (16-19 years) recorded the third highest rate of nonfatal injuries and illnesses (106.6), trailing behind the 45-54 and 55-64 years age groups.^[6] Most employed U.S. adoles-

* **Correspondence:** Carolyn R. Smith; Email: Carolyn.Smith@uc.edu; Address: University of Cincinnati, College of Nursing, P.O. Box 210038, Cincinnati, OH, USA.

cents work at jobs in the retail and service sector.^[7] Jobs in these sectors often involve high levels of interaction with customers, cash handling, working early and/or late night hours, and having little or no supervision – known risk factors for WPV.^[7,8] Despite the presence of known risk factors, adolescent employees report receiving limited occupational safety training and education from their employers.^[7–10] Moreover researchers previously determined adolescents do experience WPV^[9,11] and express concerns about how to handle future WPV incidents such as anger from customers, co-worker conflict, and robbery.^[8,12]

Perceptions of safety relating to WPV may be influenced by individual, organizational, and/or environmental factors. WPV victimization is one individual factor that may influence one's perceived risk of WPV and fear of future WPV.^[13,14] An organizational factor found to influence perceptions of safety is the psychological violence prevention climate of their workplace.^[15–17] An individual's perception of the climate and organizational efforts to control and eliminate WPV consists of the presence of WPV-specific policies and procedures, organization-level practices and responses to WPV, and pressure for unsafe practice.^[16,17] Organizations with positive psychological violence prevention climates have been associated with lower rates of WPV,^[15–17] and increased motivation to perform behaviors to prevent or reduce WPV,^[15] and they can moderate the negative psychological effects of WPV.^[18] Conversely organizations with poor psychological violence prevention climates have been associated with previous WPV victimization, increased levels of employee physical and psychological health complaints,^[15–18] and reduced compliance with violence prevention policies and procedures.^[15] Environmental factors have been found to influence rates of criminally-related WPV. Therefore, the presence of environmental design features meant to deter WPV (*e.g.*, cash-control, measures, good lighting/visibility, safety, and surveillance equipment)^[18] can influence individuals' perceptions of safety.

While it is known that adolescent employees experience WPV, receive little WPV-specific training, and express concerns about future WPV, no previous studies were found depicting perceived safety risk of WPV from the adolescent employees' point of view. Studies regarding perceptions of safety from violence that enrolled only adults may not reflect adolescents' perspectives. Therefore, there is a need to address this important issue with novel research designs. To address this gap, our study used both qualitative and quantitative methods to develop new knowledge regarding perceptions of safety from the adolescent employees' perspective. By employing a mixed methods approach, we were able to explore the qualitative data for nuances and patterns

based on experiences of WPV and gender. Therefore, the two research questions that guided the study were: What are adolescent employees' perceptions of safety from workplace violence? In what ways do adolescent employees' perceptions of safety relating to WPV differ based on exposure to WPV and gender?

2. METHODS

This study used a qualitative dominant mixed methods design. Mixed methods research (MMR) is an approach where knowledge is developed through combining quantitative and qualitative techniques, methods, or approaches in a single study.^[20] As shown in Figure 1, qualitative interviews constituted the core component (primary source of data) and surveys served as a supplementary component (supportive data) to enhance the analysis and interpretation of the qualitative data. The Institutional Review Board at the authors' institution approved the study.

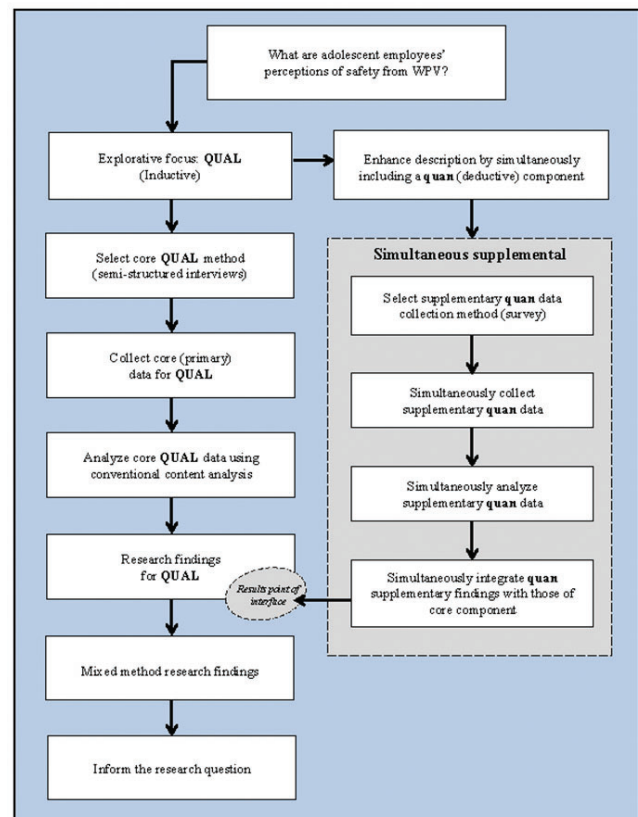


Figure 1. Process used to complete this qualitative dominant mixed methods study

2.1 Setting and sample

The setting for this study was a chain of retail stores operated by a family-owned food manufacturer. These stores

sell ice cream, confectionaries, and baked goods at 14 locations across one Midwestern metropolitan area and employ approximately 250 part- and full-time workers. They employ 125 adolescents aged 15-18 years old who were eligible for study participation. Participants had to be between the ages of 15-18 years, work at least 8 hours per week, and be proficient in English. Employees of both genders and any ethnic and racial background meeting the inclusion criteria were deemed eligible to participate. Thirty participants or one-quarter (25%) of the total number of eligible employees comprised the study sample. Participation was voluntary and participants were informed of their right to refuse to answer any questions and withdraw at any time. No participants withdrew.

2.2 Study procedures

2.2.1 Recruitment

After permission was obtained from corporate and store-level management, 30 adolescent employees were recruited from April 2010 to April 2011. Direct recruitment activities included a three-minute study presentation and distribution of recruitment flyers to potential participants by the first author. Interested employees were instructed to contact the first author to confirm eligibility and enroll in the study. Parental permission was obtained for participants under 18 through in-person meetings or over the telephone. Written assent for participants under age 18 and written consent for participants age 18 was obtained prior to any data collection activities. The data for one participant was excluded from analysis due to lack of written parental permission. Data collection sessions were conducted with individual participants at a mutually agreeable time at a neutral location (*i.e.* public library) or over the telephone to ensure confidentiality. Participants received a \$25 Visa gift card as compensation for time and travel to the interview location. The gift card amount was equivalent to 3 hours of work time using the state minimum wage rate^[21] at the time of the study.

2.2.2 Data collection

A survey created by the study team was used to assess the participants' direct exposure to WPV at their current workplace. Survey questions were developed from previous WPV research^[7,8,11] as described elsewhere.^[9] The survey was purposefully administered immediately before the interview for three reasons. First, it was our hope that the definitions imbedded in the survey would promote consistency among participants' interview responses. Second, survey responses guided the first author to ask in-depth questions about direct WPV exposure(s). Third, completing the survey prior to the interview was thought to assist participants in recalling personal exposures to WPV. On average participants spent

five minutes completing the survey.

Semi-structured interviews were conducted with participants after survey completion and review of survey responses by the first author. An interview guide was used to ensure consistency of questions between interviews though additional probing questions were asked to explore participants' unique responses. Interview questions explored participants' overall perceptions of safety (*e.g.*, Do you have any concerns about your personal safety while at work? Why or why not?) as well as the effect of WPV exposure upon perceptions of safety (*e.g.*, Do you have any concerns that an incident of WPV will happen again? Why or why not?). Interviews were audio-recorded with the permission of the participant and transcribed verbatim by a professional transcription service. To ensure accuracy, all typed transcripts were checked against the audio-files by the first author prior to analysis. Interviews ranged in length from 8-62 minutes (mean = 25.9 minutes; median = 22.9 minutes; SD = 12.1 minutes).

2.3 Data analysis

Separate analyses were performed for the survey and interview data. Descriptive statistics were used to examine the sample's demographics and self-reports of direct exposure to WPV. All descriptive statistics were performed using Microsoft® Excel 2010 (Redmond, WA). Conventional content analysis was used to analyze the semi-structured interview data. Conventional content analysis is used to describe a phenomenon and derives codes and themes directly from the data.^[22] A systematic approach for conducting the analysis, as described by Miles and Huberman,^[23] was used to structure the steps of analysis. Data were reduced through line-by-line reading and coding by the first author and one other member of the study team. Initial coding led to development of themes and sub-themes which were distributed to all study team members to review for credibility and consistency. NVivo 8® (Burlington, MA) qualitative management software was used to organize the coding and theme-building process. Qualitative findings are reported as themes and include quotes that best exemplify the theme.

After independent qualitative and quantitative analyses were completed, the data were analyzed together. Qualitative themes were explored for patterns based on quantitative categories of past WPV exposure and gender. To organize and analyze the combined data, data displays were used to assemble qualitative data to answer the mixed methods questions. Similar to the approach described in the qualitative analysis section, conclusions about the mixed data were made through noting patterns and themes, seeing plausibility, making contrasts/comparisons, and counting.^[23]

2.4 Legitimation strategies

Strategies were incorporated into the study design to address legitimation for quality in MMR. Legitimation refers to the processes researchers incorporate to obtain and report findings that are credible, trustworthy, dependable, transferable, and confirmable.^[24,25] In our study, we addressed the following types of legitimation described by Onwuegbuzie and Johnson:^[24] sampling integration, inside-outside, weakness minimization, sequential legitimation, and multiple validities. Sample integration, or the “extent to which the relationship between the quantitative and qualitative sampling designs yield quality meta-inferences,”^[24](p57) was met by using the same sample of participants to gather both sets of data and the use of qualitative data saturation to guide the need for further sampling. Therefore meta-inferences generated through mixed analysis were more likely to yield credible findings. Inside-outside legitimation was accomplished by presenting our results as a mixture of participants’ own words (inside perspective) as well as our team’s analysis of the data (outside perspective). Weakness minimization was accomplished by using the survey data to further explore nuances in qualitative findings and using qualitative themes to further explain the quantitative results, thereby allowing the strengths of each approach to compensate for the limitation of the other. Sequential legitimation refers to how the sequence of data collection affects meta-inferences. In our study, we intentionally gathered the survey data first so all participants would be exposed to consistent definitions of WPV, which in turn would provide a shared understanding of WPV during the interview phase. Finally, multiple strategies to produce valid results were incorporated into the study design, data collection, and analysis. In addition to the aforementioned strategies of legitimation, our study used qualitative and quantitative strategies to increase the validity of findings. Content validity was established for the survey, and strategies of investigator debriefings, investigator triangulation, and audit trail were used throughout the qualitative data collection and analysis to produce trustworthy qualitative findings.

3. RESULTS

Thirty adolescent employees participated in this study. All participants identified themselves as non-Hispanic Caucasian. The majority of participants were female and eighteen years old. The median number of hours worked per week was 13.3 (range = 8 to 28 hours per week). The median length of employment was 11 months (range = 1 to 40 months). Sample characteristics are presented in Table 1.

3.1 Survey results

Half the participants (n = 15; 6 males, 9 females) reported direct exposure to at least one form of WPV including verbal

harassment, sexual harassment, and robbery with one-third of those (n = 5; 1 male, 4 females) reporting direct exposure to more than one form of WPV. No participants reported direct exposure to a physical threat or physical assault.

Table 1. Characteristics of study participants (n = 30)

Characteristics	N (%)
Caucasian	30 (100)
Female	20 (67)
Age (years)	
16	6 (20)
17	8 (26.7)
18	16 (53.3)
Primary work shift	
Days (7:00am - 3:00pm)	0 (0)
Evenings (3:00pm - 11:00pm)	23 (76.70)
Combination of days/evenings	7 (23.3)
Number of current jobs (including study employer)	
One	26 (86.7)
Two	3 (10)
More than two	1 (3.3)

Survey results then were analyzed using the California Occupational Safety and Health Administration WPV typology.^[26] Six participants (20%; 2 males, 4 females) reported exposure to incidents perpetrated by people who had criminal intentions (Type I WPV). Nine participants (30%; 3 males, 6 females) reported exposure to incidents perpetrated by customers (Type II WPV). Seven participants (23.3%; 2 males, 5 females) reported exposure to WPV perpetrated by a coworker or supervisor (Type III WPV). Of the seven participants reporting WPV from coworkers/supervisors, two reported WPV by coworkers only, three reported WPV by supervisors only, and two reported WPV perpetrated by both coworkers and supervisors. No participants (0%) reported exposure to WPV incidents perpetrated by a family member, friend, or acquaintance (Type IV WPV). Table 2 shows reported perpetrators by form of WPV exposure.

Table 2. Workplace violence exposures reported by type and perpetrator (n = 15)

Perpetrator*	Verbal harassment	Sexual harassment	Criminal activity
Criminal	0 (0%)	0 (0%)	6 (20%)
Customer	7 (46.7%)	3 (20%)	0 (0%)
Coworker	1 (6.7%)	2 (13.3%)	0 (0%)
Supervisor	4 (26.7%)	1 (6.7%)	0 (0%)
Family member/friend	0 (0%)	0 (0%)	0 (0%)

* Categories are not mutually exclusive as respondents were asked to identify all persons who had ever perpetrated each form of WPV against them.

3.2 Qualitative results

The qualitative analysis yielded two major themes related to adolescent employees’ perceptions relating to WPV: (a) per-

ceptions of safety and (b) desired WPV prevention strategies. Each theme contained subthemes which represented the various aspects of the theme found from participant responses. The following sections present the themes and subthemes along with participant quotes to help describe how they inform respondents' perceptions of safety from WPV.

3.2.1 Perceptions of safety

Participants were asked directly about their overall *perception of safety* from WPV. The theme, Perceptions of safety, captured participants' beliefs and thoughts about safety from WPV as categorized by subthemes of "Overall safety of the work environment" and "Safety in numbers".

"Overall safety of the work environment" included a positive safety perception and mixed feelings about perception of safety. Perceptions of safety relating to WPV were influenced by the store's environment (*e.g.*, lighting, placement of doors, presence of security equipment, hours of operation) or the environment where the store was located (*e.g.*, adjacent stores, criminal activity of the neighborhood). Positive safety perceptions were exemplified by statements such as "I feel pretty safe all the time" or "I don't feel like I'm being threatened at all ever." However some participants expressed mixed feelings about their safety perception. A 16 year-old female commented on how the store's late closing time influenced her perception of safety: "Our doors are unlocked until it hits 11:00pm on Friday and Saturday nights but I don't know, I don't like it – it's just kind of scary." A different 16-year-old female reflected this sentiment best in her response: "I wouldn't be shocked if [WPV] did happen, but I wouldn't say I'm afraid of it, because I don't think it's really a huge deal."

Participants described how perceptions of safety relating to WPV were influenced by "Safety in numbers" or the presence of additional people in the workplace as either a source of knowledge or as protection from harm. A 17-year-old female expressed how her perception of safety from WPV was positively influenced by the presence of coworkers as a source of knowledge: "I'm happy to have my coworkers there just in case, like, something is out of control, um, and I feel like since I'm new then, like, they would know more what to do than I do because I haven't, like, learned anything about, like, safety at work." Additional perceptions of safety relating to WPV were positively influenced by the presence of others as protection from harm. An 18 year-old male stated: "Some of the employees are worried about taking the trash out at night alone. They usually have a guy go do it or sent two people, and then my boss usually likes to keep a guy or two at night there working."

3.2.2 Desired WPV prevention strategies

The second major theme, Desired WPV prevention strategies, encompasses three distinct subthemes of participant responses about what they believed could foster a safer work environment. Subthemes were "Safety measures", "Education and training", and "Everything is fine."

Participants desired their employer to implement safety measures to promote a safer workplace. Ideas suggested were increasing the number of staff present, addressing environmental concerns (*e.g.*, "more lights in the parking lot" [17-year-old female]), installing safety equipment (*e.g.*, "Every store should have one of those buttons that the banks have to call the police... a panic button" [18-year-old male]), and establishing a violence reporting hotline.

In the subtheme "Education and training", participants desired more education and training on their current employer's WPV policies and procedures and how to properly handle WPV. Participants also expressed a desire for clear definitions regarding what should be considered WPV and reportable. A 16-year-old female said: "Like what is workplace violence?... Just kinda have a policy and like what you are supposed to do if it happens." Participants also wanted more guidance on how to handle WPV incidents. An 18 year-old female expressed this view: "I think probably just having more options of things to do, like other than just telling your manager... there has to be some type of written rule where there's like a step by step direction on how to deal with [WPV]... like a general thing of what you should do, what you should not do."

Lastly, a few participants expressed "Everything is fine" and there was no need for additional WPV prevention strategies to increase safety in their workplace. An 18-year-old male stated: "I think we're pretty good as it is right now."

3.3 Mixed data analysis results

3.3.1 Reported direct exposure to WPV

Qualitative responses related to Perceptions of safety were comprised of two subthemes – "Overall safety of the work environment" and "Safety in numbers". When reanalyzed, no trends were observed among participants' perceptions of safety related to the overall work environment based upon reported direct exposure to WPV. At least two-thirds of participants in both the direct-exposure and no direct-exposure to WPV groups (73.3% and 66.7% respectively) reported "feeling safe" in their work environment and one-third of both groups reported having some concerns. Unlike perceptions of safety related to the work environment, a trend was noted in the "Safety in numbers" subtheme. Nearly all participants in the no direct exposure group ($n = 14$; 93%)

expressed the perception that safety increased when more people were present. Conversely, only one-third of participants in the direct exposure group ($n = 5$; 33%) expressed this same perspective. No trends were observed between the groups among all three subthemes of desired WPV prevention strategies. Less than half of participants in the direct- and no direct-exposure to WPV groups (33% and 46.7% respectively) expressed a desire for safety measures. A majority of both groups (86.7% and 80%) expressed a desire for additional WPV-specific education and training. Finally equal percentages from both groups ($n = 2$; 13.3%) expressed a view that everything was fine.

3.3.2 Gender

Trends based on gender were noted in the responses to “Overall safety of the work environment”. Whereas the 20 female participants were relatively split between feeling safe ($n = 12$; 60%) and having some concerns ($n = 8$; 40%), 9 of the 10 male participants (90%) expressed feeling safe. Differing trends in female and male responses also were observed in the subtheme “Safety in numbers”. Seventy percent ($n = 14$) of female participants expressed this perspective while only 50% of the male participants ($n = 5$) thought any increased number of people present increased their overall perception of safety from WPV. Trends also were observed between male and female participants’ responses in the theme of Desired WPV prevention strategies. Though a small variation existed among the percentage of female versus male participants discussing safety measures (35% vs. 50% respectively), larger variations in responses were observed in the subthemes of additional WPV specific “Education and training” and “Everything is fine.” All female participants (100%; $n = 20$) expressed a desire for additional WPV specific training and education as compared to 60% ($n = 6$) of male participants. In addition, 40% ($n = 4$) of male participants expressed the perspective of everything is fine compared with no female participants.

4. DISCUSSION

The results of this study demonstrate that adolescent employees’ express positive and mixed perceptions of safety relating to WPV. Despite the current positive and mixed perceptions of safety relating to WPV, most adolescent participants expressed an overall desire for their employer to prevent future WPV through increasing safety measures and/or providing targeted education and training on how to handle WPV incidents. Different trends in perceptions of safety were identified based on direct exposure to WPV and gender. Exposure to WPV appeared to influence perceptions of safety related to the subtheme of “Safety in numbers” but not overall safety of the work environment. Differing trends by gender were

observed among perceptions of safety related to the work environment and the desire for WPV education and training. Nurses in population focused care settings such as school health or occupational health are well situated to develop and implement WPV education and training with adolescents.

Table 3. Workplace violence exposures reported, by type and perpetrator ($n = 15$)

Theme	Direct exposure to WPV		Gender	
	Yes (%) ($n = 15$)	No (%) ($n = 15$)	Female (%) ($n = 20$)	Male (%) ($n = 10$)
Perception of safety from WPV				
Environment				
“Feels safe”	11 (73.3)	10 (66.7)	12 (60)	9 (90)
“Has concerns”	4 (26.7)	5 (33.3)	8 (40)	1 (10)
Safety in numbers	5 (33.3)	14 (93.3)	14 (70)	5 (50)
Desired WPV prevention strategies*				
Safety measures	5 (33.3)	7 (46.7)	7 (35)	5 (50)
Education and training	13 (86.7)	12 (80)	20 (100)	6 (60)
None needed – “everything is fine”	2 (13.3)	2 (13.3)	0 (0)	4 (40)

* Categories are not mutually exclusive as respondents were asked to identify all persons who had ever perpetrated each form of WPV against them.

Quantitative results revealed half of the adolescent employee participants had direct exposure to WPV and that customers were the primary perpetrators. These findings are consistent with previous findings by Rauscher^[11] who found one-third of adolescent employees reported WPV exposure and that customers were commonly the perpetrator. In addition, one-fifth of our participants reported direct exposure to criminally related activities (*e.g.*, quick change scams, attempted robberies) – a form of WPV previously unexplored by researchers. Despite participants reporting exposure to WPV, only 40% reported participating in any form of WPV education and training. These findings are similar to previous studies which found adolescents working in the retail sector receive limited WPV-specific education and training from their employers.^[7,8]

Despite exposure to WPV and lack of WPV-specific education and training, adolescent employees expressed positive and mixed perceptions of safety from violence. The primary factors reported to influence perceptions of safety included the overall safety of the work environment and the presence of other people. Crime prevention through environmental design (CPTED) interventions such as cash control, maintaining good lighting and visibility inside and outside of the store,^[27] training employees in violence prevention, and the presence of safety and security equipment^[28] have been as-

sociated with lower rates of criminally-related WPV among retail and service establishments.^[19] These findings may explain why our study participants felt the presence or absence of environmental design interventions influenced their perception of safety from WPV.

The other factor contributing to participants' perceptions of safety was the presence of others (*e.g.*, customers, coworkers) in the workplace. Our findings indicated only one-third of participants with direct WPV exposure as compared to nearly all participants with no direct WPV exposure expressed the subtheme of "Safety in numbers." As working alone is a known risk factor for WPV among adolescent employees,^[8] it was surprising that so few participants with direct WPV exposure expressed "Safety in numbers." There are several explanations for this observed difference. First an employee's perception of safety can be negatively influenced by a history of WPV. In a study of customer-perpetrated WPV, Mueller and Tschan found that employees' exposure to WPV increased their perceived likelihood of future violence and indirectly increased fear of future violence.^[14] Therefore our study participants may believe that because WPV happened once, it will likely happen again regardless of safety measures in place. Another potential explanation may be that our study participants experienced direct exposure to WPV despite the presence of others. Therefore it could be that the presence of other people may not be viewed as an asset or deterrence from future WPV. As the presence of others during direct exposure to WPV was not the focus of this study, this finding warrants further investigation.

Gender differences were revealed among themes of Perceptions of safety and Desired WPV prevention strategies. Male participants expressed positive perceptions of safety and the subtheme "Everything is fine" more than female participants. Gender differences may have been influenced by several factors. Females are more often the recipients of WPV as compared to males.^[11,29] Rauscher discovered statistically significant differences by gender with 34% of female adolescent workers reporting experiences of WPV as compared to 27.9% of males ($p < .05$) and 11.5% of females reporting sexual harassment as compared to 7.2% of males ($p < .05$).^[11] However in this same study the percentage of workers reporting physical attacks, though not statistically significant, was higher among male adolescents (11.2% vs. 7.8%).^[11] In our study no participants reported exposure to physical threats or assaults, so it may be that our male participants did not perceive safety risks because the forms of WPV reported at our study sites involved verbal and sexual harassment which usually target female workers. Another explanation for the gender differences may be that women report fear of violence or crime more often than men. Previous research among ado-

lescent workers found twice as many females (8%) as males (4%) reported fear of assault at work.^[30] In addition, research with adults found that women were more likely to express concerns or fears about future crime than males.^[31] A final explanation as to why females and males differed in perception of safety and the desire for WPV prevention may be due to the social pressure for males to appear masculine and not express fear of violence. Labeled as gender socially desirable assertions, Sutton and Farrall found male participants may actually experience similar levels of fear of crime as females but may purposely underreport these fears due to a desire to minimize any shame or embarrassment by admitting to this fear.^[32] Therefore masculine gender roles and a social desire to appear unafraid of potential WPV may have contributed to the higher proportion of male participants reporting feeling safe and the all-male subtheme of "Everything is fine."

4.1 Clinical implications

Nurses practicing in population-focused care areas (*e.g.*, school health, occupational health) and nurse educators are well positioned to address the issue of employment among adolescents through education, consultation, and advocacy. First and foremost, adolescents and their parents need to be made aware of WPV as a legitimate occupational safety concern. To promote awareness, these nurses can partner with health care providers (*e.g.*, registered nurses, certified nurse practitioners, physicians) in community, primary care, and episodic care settings to educate adolescents about occupational safety. Occupational health nurses can train providers how to educate about and screen for work-related safety risks including WPV exposure. In turn, providers need to implement screening of adolescent patients for occupational risks and educate adolescents and their parents about occupational safety concerns including, but not limited to, WPV. Moreover, adolescents and their parents should be urged to demand that current and potential employers provide clear and prescriptive WPV policies and procedures, education and training specific to WPV, and reporting mechanisms for WPV exposure.

In addition to providing guidance regarding education and screening, nurses working with adolescents should advocate for the development and implementation of work-readiness training for adolescents prior to entering the workforce. Work-readiness programs can provide adolescents with education and training in finding job opportunities, interviewing skills, professional behavior, state and federal rules and regulations, and how to maintain personal safety in the workplace.^[33,34] Such programs can provide adolescents with safety education and training not otherwise provided by employers and will foster a healthy view of occupational safety

issues including what should not be considered “just part of the job.”

Nurse educators should consider creating community health clinical experiences for baccalaureate nursing students at primary care practice, school, and community settings. Clinical experiences that take place in community settings assist students with gaining experience and confidence in conducting assessment skills, population-specific health promotion activities, and client counseling to adopt healthy behaviors.^[35,36] To promote safety in the workplace, nursing students could conduct risk assessments of and provide education to working-age adolescent clients using engaging and interactive approaches^[10] as part of their community health clinical experience. Furthermore, prevention of WPV for all workers can be addressed through service-learning, a teaching strategy that helps students connect theory to practice and addresses a community need.^[37] Employers can partner with community health nurse educators to provide students with a service-learning opportunity in population focused care. Using the CPTED model,^[27,28] the service-learning opportunity can integrate concepts of assessment, redesign, and evaluation of the work environment to identify and implement worker health and safety improvements.

4.2 Limitations

Limitations of our study included obtaining participants from one type of workplace setting, recruitment from one employer, convenience sampling, and small sample size. To mitigate these limitations, we recruited from multiple store locations and continued recruitment until the qualitative data reached saturation. Due to the size and homogeneity of the sample, results are not generalizable but may be transferable to similar retail workplace settings and other adolescent employee populations.

5. CONCLUSIONS

A majority of adolescent employee participants from a retail chain expressed positive perceptions of safety relating to WPV despite half of the respondents reporting WPV exposure and only 40% reporting participation in WPV-specific education and training at their current workplace. Positive perceptions of safety relating to WPV suggest that adolescents may not consider WPV exposure while at work a major concern. Even though our participants may not consider WPV a major concern, a majority of participants expressed the desire for their employer to implement prevention strategies to keep them and their co-workers safe from future WPV.

Future research needs to be conducted to further explore adolescent employees' perceptions of safety from WPV and how these perceptions influence their ability to recognize risks for WPV, handle incidents of WPV, and cope with exposure to WPV. Furthermore, the effects of future interventions integrating nursing students to address WPV must be evaluated. As adolescents are at the beginning of their work-life, it is essential to provide them with safety training that will serve as a foundation for the remainder of their lives as productive and healthy employees.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the following individuals for their contributions to this manuscript: Theresa A. Beery, Bonnie S. Fisher, and Donna M. Gates. This research was supported by the National Institute for Occupational Safety and Health Pilot Research Training Program of the University of Cincinnati Education and Research Center Grant #T42/OH008432-05.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare that they have no competing interests.

REFERENCES

- [1] Lambert SF, Ialongo NS, Boyd RC, *et al.* Risk factors for community violence exposure in adolescence. *Am J Community Psychol.* 2005; 36(1/2): 29-48. <http://dx.doi.org/10.1007/s10464-005-6231-8>
- [2] Vermeiren R, Schwab-Stone M, Deboutte D, *et al.* Violence exposure and substance use in adolescents: Findings from three countries. *J Pediatr.* 2003; 111(3): 535-540.
- [3] Zinzow HM, Ruggiero KJ, Resnick H, *et al.* Prevalence and mental health correlates of witnessed parental and community violence in a national sample of adolescents. *J Child Psychol Psychiatry.* 2009; 50(4): 441-450. <http://dx.doi.org/10.1111/j.1469-7610.2008.02004.x>
- [4] Schiavone DB. The effects of exposure to community violence on aspects of adolescent identity development. *J Child Adolesc Psychiatry* Nurs. 2009; 22(2): 99-105. <http://dx.doi.org/10.1111/j.1744-6171.2009.00178.x>
- [5] United States Bureau of Labor Statistics. Table 3- Employment Status of the Civilian Non-institutional Population by Age, Sex, and Race. <http://www.bls.gov/cps/cpsaat03.htm>. Updated February 24, 2014. Accessed March 10, 2014.
- [6] United States Bureau of Labor Statistics. Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work. http://www.bls.gov/news.release/archives/osh2_11192015.pdf. Published November 19, 2005. Accessed on February 8, 2016.
- [7] Runyan CW, Schulman M, Dal Santo J, *et al.* Work-related hazards and workplace safety of US adolescents employed in the retail and service sectors. *J Pediatr.* 2007; 119(3): 526-534. <http://dx.doi.org/10.1542/peds.2006-2009>

- [8] Runyan CW, Bowling JM, Schulman M, *et al.* Potential for violence against teenage retail workers in the United States. *J Adolesc Health.* 2005; 36(3): 267.e1-5. <http://dx.doi.org/10.1016/j.jadohealth.2004.07.006>
- [9] Smith CR, Gillespie GL, Beery TA, *et al.* Adolescent workers' experiences of and training for workplace violence. *Workplace Health Saf.* 2015; 63(7): 297-307. <http://dx.doi.org/10.1177/2165079915580786>
- [10] Zierold, KM, Welsh, EC, McGeeney TJ. Attitudes of teenagers towards workplace safety training. *J Community Health.* 2012; 37(6): 1289-1295. <http://dx.doi.org/10.1007/s10900-012-9570-z>
- [11] Rauscher KJ. Workplace violence against adolescent workers in the US. *Am J Ind Med.* 2008; 51(7): 539-544. <http://dx.doi.org/10.1002/ajim.20590>
- [12] Smith CR, Beery TA, Gillespie GL, *et al.* Adolescents' experience with workplace aggression: School health implications. *J Sch Nurs.* 2013; 29(6): 464-474. <http://dx.doi.org/10.1177/1059840513479036>
- [13] LeBlanc MM, Kelloway EK. Predictors and outcomes of workplace violence and aggression. *J Appl Psychol.* 2002; 87(3): 444-453. <http://dx.doi.org/10.1037/0021-9010.87.3.444>
- [14] Mueller S, Tschan F. Consequences of client-initiated workplace violence: The role of fear and perceived prevention. *J Occup Health Psychol.* 2011; 16(2): 217-229. <http://dx.doi.org/10.1037/a0021723>
- [15] Chang C, Eatough EM, Spector PE, *et al.* Violence-prevention climate, exposure to violence and aggression, and prevention behavior: A mediation model. *J Organ Behav.* 2012; 33(5): 657-677. <http://dx.doi.org/10.1002/job.776>
- [16] Kessler SR, Spector PE, Chang C, *et al.* Organizational violence and aggression: Development of the three-factor violence climate survey. *Work Stress.* 2008; 22(2): 108-124. <http://dx.doi.org/10.1080/02678370802187926>
- [17] Spector PE, Coulter ML, Stockwell HG, *et al.* Perceived violence climate: A new construct and its relationship to workplace physical violence and verbal aggression, and their potential consequences. *Work Stress.* 2007; 21(2): 117-130. <http://dx.doi.org/10.1080/02678370701410007>
- [18] Law R, Dollard MF, Tuckey MR, *et al.* Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accid Anal Prev.* 2011; 43(5): 1782-1793. <http://dx.doi.org/10.1016/j.aap.2011.04.010>
- [19] Casteel C, Peek-Asa C, Greenland S, *et al.* A study of the effectiveness of a workplace violence intervention for small retail and service establishments. *J Occup Environ Med.* 2008; 50(12): 1365-1370. <http://dx.doi.org/10.1097/JOM.0b013e3181845fcf>
- [20] Johnson RB, Onwuegbuzie AJ. Mixed methods research: A research paradigm whose time has come. *Educ Res.* 2004; 33(7): 14-26. <http://dx.doi.org/10.3102/0013189X033007014>
- [21] The Ohio Department of Commerce. State of Ohio minimum wage. http://com.ohio.gov/laws/docs/laws_MinimumWagePoster2010.pdf. Published September 2009. Accessed February 18, 2010.
- [22] Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res.* 2005; 15(9): 1277-1288. <http://dx.doi.org/10.1177/1049732305276687>
- [23] Miles MB, Huberman AM. *Qualitative Data Analysis.* Thousand Oaks, CA: Sage Publications; 1994.
- [24] Onwuegbuzie AJ, Johnson RB. The validity issue in mixed research. *Res Sch.* 2006; 13(1): 48-63.
- [25] Onwuegbuzie AJ, Collins KMT. A typology of mixed methods sampling designs in social science research. *Qual Rep.* 2007; 12(2): 281-316.
- [26] California Occupational Safety and Health Administration. Cal/OSHA guidelines for workplace security. http://www.dir.ca.gov/DOSH/dosh_publications/worksecurity.html. Updated 1995. Accessed December 28, 2015.
- [27] Zahm DL. Brighter is better, or is it? the devil is in the details. *Criminol Public Policy.* 2004; 3(3): 535-546. <http://dx.doi.org/10.1111/j.1745-9133.2004.tb00060.x>
- [28] Casteel C, Peek-Asa C. Effectiveness of crime prevention through environmental design (CPTED) in reducing robberies. *Am J Prev Med.* 2000; 18(4): 99-115. [http://dx.doi.org/10.1016/S0749-3797\(00\)00146-X](http://dx.doi.org/10.1016/S0749-3797(00)00146-X)
- [29] Mayhew C, Chappell D. Workplace violence: An overview of patterns of risk and the emotional/stress consequences on targets. *Int J Law Psychiatry.* 2007; 30(4-5): 327-339. <http://dx.doi.org/10.1016/j.ijlp.2007.06.006>
- [30] Dunn KA, Runyan CW, Cohen LR, *et al.* Teens at work: A statewide study of jobs, hazards, and injuries. *J Adolesc Health.* 1998; 22(1): 19-25. [http://dx.doi.org/10.1016/S1054-139X\(97\)00071-2](http://dx.doi.org/10.1016/S1054-139X(97)00071-2)
- [31] Jackson J. A psychological perspective on vulnerability in the fear of crime. *Psychol Crime Law.* 2009; 15(4): 365-390. <http://dx.doi.org/10.1080/10683160802275797>
- [32] Sutton RM, Farrall S. Gender, socially desirable responding and the fear of crime. *Br J Criminol.* 2005; 45(2): 212-224. <http://dx.doi.org/10.1093/bjc/azh084>
- [33] National Institute for Occupational Safety and Health. Youth@Work: Talking safety – Ohio edition. NIOSH Publication No. 2015-152. <http://www.cdc.gov/niosh/talkingsafety/states/oh/2015-152/default.html>. Published March 2015. Accessed December 28, 2015.
- [34] Linker D, Miller ME, Freeman KS, *et al.* Health and safety awareness for working teens: Developing a successful, statewide program for educating teen workers. *Fam Community Health.* 2005; 28(3): 225-238.
- [35] Rossman CL, Dood FV, Squires DA. Student nurses as school nurse extenders. *J Pediatr Nurs.* 2012; 27(6): 734-741. <http://dx.doi.org/10.1016/j.pedn.2012.02.005>
- [36] Samawai Z, Haras MS, Miller TL. Age-appropriate health promotion education: Roots firmly established in baccalaureate nursing pediatric rotation. *J Pediatr Nurs.* 2012; 27(1): 44-49. <http://dx.doi.org/10.1016/j.pedn.2010.09.003>
- [37] Murray BS. Service-learning in baccalaureate nursing education: A literature review. *J Nurs Educ.* 2013. 52(11): 621-628. <http://dx.doi.org/10.3928/01484834-20131014-08>