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Exploring Adolescent Employees’ Perceptions of Safety from Workplace Violence

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Abstract

One setting where violence exposure among adolescents may occur, yet has received little attention, is the workplace. With nearly six million U.S. adolescents age 16-19 employed, researchers need to understand from the adolescent employee viewpoint any perceived safety risks from violence so appropriate interventions can be developed.

Purpose: The specific aims of the study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety affect stress, anxiety, and productivity while at work.

Methods: A qualitative dominant mixed methods design was used to analyze data from a convenience sample of adolescents employed by a retail chain of ice cream stores in one Midwestern city. Surveys and individual interviews were conducted to study adolescent employees’ perceptions of safety as it relates to WPV. Analysis consisted of simple descriptive statistics (survey data), conventional content analysis (interview data), and mixed analysis using data displays to reanalyze qualitative themes for differences based on variables of WPV exposure and gender.

Results: Thirty non-Hispanic Caucasian adolescents (20 females, 10 males) ages 16-18 comprised the sample. Fifty percent (n = 15) reported WPV exposure and 40% (n = 12) received WPV training in their current job. Participants expressed positive and mixed perceptions of safety as it relates to WPV. Most participants recalled experiencing negative stress responses after exposure to WPV and half felt their ability to work was impacted. Environmental factors and presence of others in the workplace informed perceptions of safety. Nearly all male participants (90%; n = 9) reported positive perceptions of safety compared with 60% (n = 12) of females. Nearly all participants desired further WPV education and training though a few males
expressed “everything is fine.” Proposed responses to future WPV varied based on the relationship with the perpetrator and type of violence and were associated with adolescent employees’ perceptions of safety.

**Conclusion:** Adolescent employees’ perceptions of safety as it relates to WPV are informed by overall safety of the work environment and presence of others and associated with proposed responses to future WPV. Health care professionals, employers, schools, and parents should collaborate to foster a healthy view of occupational safety issues among adolescents including what should not be considered “just part of the job.”
Dedication

This dissertation is dedicated to the following individuals who have inspired me to reach my highest potential and without whose support, and encouragement completion of this dissertation would not have been possible. Heartfelt gratitude goes out to my husband Scott Smith for his love and support during this adventure. You were with me every step of the way and I look forward to many more adventures with you in the future. To my two handsome sons, Angus and Maxwell Smith, whose laughter, endless supply of hugs, and unconditional love reminded me every day of the important things in life. To my parents, Lyle and Anne Kelly, whose belief that I would do something special with my life gave me the inspiration to do just that. To my siblings, Jennifer, Alison, and Thom, whose encouragement kept me motivated to finish. I love each and every one of you.
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Abstract .............................................................................................................................. ii
Dedication .......................................................................................................................... v
Acknowledgements .......................................................................................................... vi
List of Tables ...................................................................................................................... xv
List of Figures .................................................................................................................. xvi
List of Appendices .......................................................................................................... xvii
List of Abbreviations ...................................................................................................... xviii

CHAPTER 1 ......................................................................................................................... 1
  Statement of the Problem ............................................................................................... 2
  Purpose of the Study ...................................................................................................... 3
    Why this Study Needed to be Done? ......................................................................... 3
    Why this Target Population? ................................................................................. 4
    Why a Mixed Methods Study? .............................................................................. 5
  Summary ....................................................................................................................... 6
  Significance ................................................................................................................... 7
    Significance to Occupational Safety and Health .................................................... 7
    Significance to Nursing ........................................................................................... 7
    Significance to Employers of Adolescents ............................................................. 8
    Significance to Adolescent Workers and their Parents ........................................ 8
  Summary ....................................................................................................................... 9
  Specific Aims ............................................................................................................... 9

viii
Assumptions and Limitations .......................................................................................... 10
Chapter Summary ........................................................................................................ 10

CHAPTER 2 – REVIEW OF LITERATURE ........................................................................ 12
What is Workplace Violence? ...................................................................................... 13
Epidemiology of WPV .................................................................................................. 14
Risk Factors for WPV .................................................................................................. 15
Consequences of WPV ................................................................................................ 17
Adolescents, Work, and WPV ...................................................................................... 18
Consequences of Work during Adolescence ................................................................. 19
Vulnerability of Adolescent Employees ..................................................................... 20
Adolescent Employees and WPV ................................................................................ 22
Conceptual Model ....................................................................................................... 28
Chapter Summary ....................................................................................................... 33

CHAPTER 3 – METHODS ............................................................................................... 35
Design ......................................................................................................................... 35
Mixed Methods Research ............................................................................................ 35
Mixed methods research designs ............................................................................... 38
Qualitative dominant mixed methods design ............................................................. 39
Summary .................................................................................................................... 41
Research Questions .................................................................................................... 42
Setting ......................................................................................................................... 42
Population .................................................................................................................. 42
Inclusion and exclusion criteria .................................................................................. 43
Procedures........................................................................................................43
Recruitment.....................................................................................................44
Informed Consent.............................................................................................45
Data Collection................................................................................................45
Survey..............................................................................................................45
Semi-structured interviews............................................................................47
Participant Payments.....................................................................................48
Data Management...........................................................................................48
Protection of Human Participants.................................................................49
Risks and Benefits..........................................................................................49
Privacy and Confidentiality..........................................................................50
Data Storage Plan..........................................................................................50
Permissions....................................................................................................51
Data Analysis..................................................................................................52
Quantitative Data Analysis..............................................................................52
Qualitative Data Analysis.............................................................................53
Mixed Data Analysis......................................................................................55
Emergence of a New Area – Proposed Responses to WPV.........................57
  Qualitative data analysis.............................................................................58
Legitimation.....................................................................................................58
  Content validity..........................................................................................59
  Trustworthiness..........................................................................................59
Funding and Budget.......................................................................................61
CHAPTER 4 – ADOLESCENT WORKERS’ DIRECT EXPOSURES TO WORKPLACE VIOLENCE (MANUSCRIPT 1) ………………….. 63

Methods……………………………………………………………………………………. 63

Results……………………………………………………………………………………… 64

Discussion………………………………………………………………………………….. 66

CHAPTER 5 – DO ADOLESCENT EMPLOYEES PERCEIVE THE RISKS OF WORKPLACE VIOLENCE? A MIXED METHODS STUDY (MANUSCRIPT 2) ……………………………………… 68

Methods……………………………………………………………………………………. 70

Setting and Sample…………………………………………………………………...... 68

Procedures……………………………………………………………………………… 72

Survey……………………………………………………………………………… 73

Semi-structured interviews………………………………………………………… 73

Data Analysis…………………………………………………………………………... 74

Quantitative data analysis………………………………………………………….. 74

Qualitative data analysis……………………………………………….…………... 74

Mixed data analysis…………………………………………………………………75

Legitimation…………………………………………………………………………..... 75

Results…………………………………………………………………………………….... 76

Sample Characteristics…………………………………………………………………. 76

Survey Results…………………………………………………………………………….. 77
CHAPTER 6 – WHEN FACED WITH WORKPLACE VIOLENCE,
HOW WOULD ADOLESCENTS RESPOND? (MANUSCRIPT 3)
List of Tables

Table 4.1 – Worker Demographics................................................................. 65

Table 4.2 – Reports of WPV Exposure, Participation in WPV Training, and Awareness of WPV Policies and Procedures........................................ 65

Table 5.1 – Sample Demographics............................................................... 77

Table 5.2 – Perpetrators of WPV, by Form of Violence Exposure.................. 78

Table 5.3 – Employee Participation in Training/Education and Awareness of Policies/Procedures, by Potential WPV Exposure.............................. 79

Table 5.4 – Perceptions of Safety, by Direct WPV Exposure and Gender........ 85

Table 6.1 – Sample Hypothetical Vignettes Presented to Participants............. 98

Table 6.2 – Qualitative Themes by Category of Response Strategy.................. 108

Table 6.3 – Recommended Activities for School Nurses to Address WPV........ 114
List of Figures

Figure 2.1 – Perception of safety as it relates to WPV conceptual model………………… 30

Figure 3.1 – An overview of the study’s qualitative
dominant mixed methods design…………………………………………………. 40

Figure 5.1 – Qualitative dominant mixed methods study design…………………………… 71

Figure 7.1 – Modified perception of safety as it relates to WPV conceptual model………… 122
List of Appendices

Appendix A - Library Locations with Meeting Rooms ........................................ 141
Appendix B - Adolescent Employee WPV Survey .................................................. 142
Appendix C - Interview Guide ........................................................................... 148
Appendix D - Teen Employee Rights & Responsibilities Handout .......................... 152
Appendix E - Qualitative Data Display ................................................................ 155
Appendix F - Mixed Method Data Display ......................................................... 156
Appendix G - Hypothetical Scenarios of WPV .................................................... 157
Appendix H - Adolescents and Workplace Violence:

Is There Cause for Concern? (Manuscript 4) ...................................................... 160
List of Abbreviations

(Alphabetical order)

BLS    Bureau of Labor Statistics
CDC    Centers for Disease Control and Prevention
CVI    Content validity index
MMR    Mixed methods research
NIOSH  National Institute for Occupational Safety and Health
NRC    National Research Council
OSHA   Occupational Safety and Health Administration
PI     Principal investigator
U.S.   United States
WPV    Workplace violence
CHAPTER 1

Tragic events like the August 24, 2012 shootings outside the Empire State Building by a disgruntled former employee (CNN.com, 2012) and the October 21, 2012 shootings at the Azana Salon & Spa by the estranged husband of one of the spa’s employees (ABCnews.com, 2012) are extreme examples of workplace violence (WPV) with fatal outcomes reported in the news media. However, most occurrences of WPV involve verbal, sexual, and physical threats or non-fatal assaults and remain underreported to legal authorities and unknown to the public. Victims of WPV often suffer from physical and psychological injuries and report detrimental effects on physical health (Hogh & Viitasara, 2005; Lanza, 2006), psychological health (Lanza, 2006; Wieclaw et al., 2006), job satisfaction (Driscoll, Worthington, & Hurrell, 1995), productivity level (Hough & Viitasara, 2005), and organizational commitment (Bureau of Labor Statistics [BLS], 2006). Until recently most WPV research focused only on experiences of adult workers (e.g. Gates, Ross, & McQueen, 2006; Mayhew, 2000; Perrott & Kelloway, 2006), thus findings may not reflect the experiences and perceptions of safety among one of the most vulnerable worker populations - adolescents.

Because adolescence is a time of growth and independence, many adolescents in the United States (U.S.) choose to work to develop job skills and financial independence from parents. Due to lack of job experience and inability to work full-time hours, adolescents often work in settings that offer little pay, low status, and limited resources to safety training and adequate supervision (Sudhinaraset & Blum, 2010). Lack of safety training by employers coupled with adolescent employees’ lack of awareness of personal safety issues in the workplace may contribute to adolescent employees’ vulnerability to WPV. As stated above, there is a lack of published research on adolescents and WPV; therefore, the focus of this qualitative dominant
mixed method study was to explore adolescent employees’ perceptions regarding their personal safety from WPV.

**Statement of the Problem**

Adolescents age 16-19 comprise 4% of the U.S. civilian labor force (BLS, 2011a). Of the approximately 5.9 million adolescents age 16-19 who work at a formal job (BLS, 2011a; U.S. Census Bureau, 2008), the majority work in retail and service sectors (Runyan, Schulman, & Hoffman, 2003). Research indicates retail and service sectors are particularly susceptible to certain types of WPV due to working with cash and the high volume of interaction with customers (Runyan et al., 2003). Adolescent workers in these sectors may be as or more vulnerable to WPV as their adult coworkers; yet, a review of the published research determined that studies focused upon adolescent employees are scarce.

Section 5 (a) 1 of the Occupational Safety and Health Act (known as the General Duty clause) requires employers to maintain a working environment free from hazards likely to cause death or serious physical harm including incidents of WPV (Occupational Health and Safety Administration [OSHA], 2004). However, the Bureau of Labor Statistics (BLS) indicates assaults and violent incidents were the second leading cause of all fatal occupational injuries in 2010 (BLS, 2011b). The National Institute for Occupational Safety and Health (NIOSH) recognizes WPV as a significant problem for all workers and describes four forms of WPV: Type I - acts committed with a criminal intent, Type II - acts perpetrated by customers/clients, Type III - acts committed by a co-worker and/or supervisor, and Type IV - acts perpetrated by personal acquaintances such as family or friends (U.S. Department of Health and Human Services, 2006).
Research suggests nearly one-third of adolescent employees have experienced at least one form of WPV (Rauscher, 2008). Adolescents may be at risk for certain forms of WPV due to lack of violence safety training (Runyan, Bowling, Schulman, & Gallagher, 2005; Runyan, Schulman, Dal Santo, Bowling, Agans, & Ta, 2007) and lack of life experiences and judgment to develop effective strategies to deal with potentially violent situations (Runyan et al., 2007). Because little is known about adolescent employees’ perceptions of safety and exposure to WPV, the goal of this study was to address this knowledge gap and explore how concerns about WPV affect adolescent employees’ stress and anxiety levels at work and their ability to be productive employees.

Workplace violence is an issue facing all employees; yet, upon review little is known about adolescent employees’ exposure to and perceptions of WPV. Most existing WPV research was conducted with adult worker samples and it was not determined if adolescent employees have different exposures to or concerns about WPV compared to adults. It was unknown if adolescent employees’ concerns about WPV affect stress, anxiety, and their ability to be productive at work.

**Purpose of the Study**

The purpose of this study was to explore adolescent employees’ perceptions of safety as it relates to WPV and describe how adolescents’ perceptions of safety affect stress, anxiety, and productivity in the workplace. The following section discusses the reasons why I selected the study, the population, and the mixed method design.

**Why This Study Needed to be Done?**

This study needed to be done for several reasons. The first reason was a literature review indicated that research about WPV among adolescent employees was limited to a handful of
studies (Rauscher, 2008; Runyan et al., 2005; Runyan et al., 2007). Of the studies conducted among adolescent employees, most focused on generating information about the lifetime prevalence of WPV exposure (Rauscher, 2008), exposure to WPV risk factors (Runyan et al., 2005; Runyan et al., 2007), and WPV training (Runyan et al., 2005; Runyan et al., 2007). Therefore, it was important that the unique experiences of adolescents be captured so future research and interventions on this topic be grounded in and relatable to the experiences faced by this vulnerable population. The second reason was no researchers had focused on adolescent employees’ perceptions of personal safety as it relates to WPV. This knowledge is critical to understanding employees’ perceptions or beliefs about WPV in order to develop an instrument to measure the impact of WPV with this population. Results will guide future research endeavors to further understand how employees’ perception of safety from WPV affect several factors: ability to recognize, prevent, and manage future incidents of WPV; psychological health; and productivity. The third reason this study needed to be conducted was because incidents of WPV may impact the growth and development of adolescent victims and have potential lifetime consequences. If fatalities were to occur, years of productive life would be lost. If non-fatal WPV incidents were to occur, years of productivity could be lost due to physical or psychological injuries. Therefore, development of knowledge about how perceptions of safety as it relates to WPV influence adolescent employees’ levels of stress, anxiety, and productivity may provide a foundation for future research endeavors to explore short-and longterm consequences of WPV exposure during adolescence.

Why This Target Population?

Adolescents between the ages of 15-18 whom currently work in the retail or service sector were the target population for the study. There were two reasons why adolescent
employees were selected as the target population of this study. The first reason was little research in the area of WPV involved adolescent employees. As previously stated, most studies about WPV are based on adult worker samples age 18 years or older. Though adults comprise the overwhelming majority of employed individuals in the U.S. (BLS, 2011a), it was my belief that an adolescent’s knowledge of WPV and perception of safety may be influenced by recent work experiences. Considering that many adult workers in the U.S. held their first job during adolescence, it seemed logical to explore perceptions and effects of WPV among adolescents who are just starting their work life which may later influence their perceptions as adults.

The second reason was adolescents’ developmental vulnerability to WPV. Adolescents are not adults. I think adolescents may feel invincible – believing bad things will not happen to them and therefore may be less aware of potential dangers to personal safety in the workplace. Adolescents are still developing cognitively, emotionally, and socially (National Research Council [NRC], 1998; Runyan et al., 2003; Rauscher, 2008; Sudhinaraset & Blum, 2010) potentially making adolescents less likely to pick up on non-verbal cues or changes in a person’s tone of voice which could warn them of an eminent threat or assault. Another area of vulnerability was adolescents’ lack of previous work experience from which to draw to assess and anticipate potential for WPV. Other aspects of vulnerability unique to this target population include lack of voice to raise issues of concern, low level status, and feeling expendable to the employer (Sudhinaraset & Blum, 2010). Therefore, the developmental vulnerabilities of the adolescent population heightened the need to study how WPV affects this unique population.

**Why a Mixed Methods Study?**

A qualitative dominant mixed method approach was used for this study for three reasons. The first reason was previous WPV studies with adolescents used questions based on findings
from adult populations (Runyan et al., 2005; Runyan et al., 2007; Rauscher, 2008) making the assumption that adolescents’ experiences of WPV were the same as adults. However the lack of previous research made it difficult to determine whether this assumption was valid. Therefore a mixed methods approach would overcome the need to make this assumption and facilitate the exploration of adolescents’ personal experiences of WPV using qualitative methods as the primary focus. The second reason was that studies among adolescents were limited in design and methods. Previous studies had only used quantitative designs using telephone surveys (Rauscher, 2008; Runyan et al., 2005; Runyan et al., 2007). This uniformity in research design provided an opportunity to develop and expand current knowledge through using a mixed methods design. The third reason was this design would generate both qualitative and quantitative data and yield a more comprehensive view of the topic than a quantitative or qualitative design could produce alone. Collection of qualitative data was essential to explore adolescent employees’ perceptions of safety as it relates to WPV using their own words. In addition, collection of quantitative data was important as it allowed me to further analyze the qualitative data for nuances based on quantitative responses. Furthermore, once the qualitative and quantitative data were combined, the quantitative data would complement the qualitative data to explore adolescent employees’ perceptions of safety as it relates to WPV. Due to these reasons, a mixed methods design was deemed to be the best approach to add to existing quantitative findings and fill the qualitative knowledge gap about adolescent employees and WPV.

Summary

The aims of the study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety as it relates to WPV affect stress, anxiety, and productivity while at work. The adolescent employee
population was selected due to developmental characteristics and job-related factors that may
increase their overall vulnerability to WPV. A qualitative dominant mixed method approach was
selected for the study as this design was believed to yield both qualitative and quantitative data to
better understand WPV with adolescents. In addition, the lack of diversity in previous study
designs and dearth of qualitative WPV data among adolescent employees influenced the
selection of design.

**Significance**

This study has significance to occupational safety and health, nursing, employers, and
adolescent employees and their parents.

**Significance to Occupational Safety and Health**

WPV exposure can have profound effects upon the health of employees. The prevention
of WPV has been identified as a research priority among occupational safety and health
professionals in the retail (NIOSH, 2009b) and service sectors (NIOSH, 2009a). This study
addressed how adolescent employees’ perceptions and exposure to WPV affected self-reported
feelings of stress and anxiety in the workplace. In addition this specific population had not been
previously studied to determine the potential physical and psychological health effects of WPV
exposure. It remains plausible that exposure to WPV during adolescence may have long-lasting
effects during adult employment that can impact an individual’s productivity level or feelings of
stress or anxiety while at work leading to years of productive life lost.

**Significance to Nursing**

This study offers significance to nursing. Nurses encounter adolescent patients in a
variety of settings such as primary care provider offices, schools, and episodic care settings (e.g.,
emergency department, urgent care). Due to frequent contact with adolescents, nurses need to be
aware of the various forms of violence including WPV to which adolescents may be exposed so they can screen and intervene for violence exposure as required by The Joint Commission (1996). Early identification of WPV exposure by nurses may assist health care providers to address potential negative health effects and perhaps lead to a healthier and productive adolescent employee.

**Significance to Employers of Adolescents**

This study offers significance to employers of adolescents. As previously discussed, employers have an obligation to create a safe working environment per OSHA standards. Though employers provide limited workplace training focused on safe equipment handling and preventing work injuries (e.g., burns, cuts, sprains), safety issues directly related to WPV may not be consistently addressed (Runyan et al., 2007). Results of this study provide additional information as to whether such training occurs and emphasizes the value and importance in addressing WPV during new and current employee education and training. Similarly, results of the study explored how adolescent employees’ perceptions of safety as it relates to WPV affected their ability to be productive employees. Employers who recognize how employee concerns about future WPV may negatively affect productivity and thus profitability may be more willing to invest time and resources in addressing WPV safety issues.

**Significance to Adolescent Workers and Their Parents**

This study offers significance to current and future adolescent employees and their parents. Adolescent employees may encounter WPV and adolescents’ perceptions of safety and exposure to WPV may be different than those of adults. Adolescents need to receive work readiness education and training prior to entering the workforce. Such work readiness programs could be developed as a partnership between schools, business owners, public health, and other
community organizations to teach about issues of safety in the workplace (including WPV). Similarly, parents need to receive education about WPV and taught how to encourage their children to protect themselves at work and report incidents of WPV. Furthermore, this study developed new knowledge to serve as a foundation for future interventional studies to prevent WPV among adolescent employees.

Summary

Results of the study have significance for occupational health, nursing, employers of adolescents, and current and future adolescent employees and parents of adolescents. Results indicate adolescent employees’ perceptions of safety as it relates to WPV and how perceptions of safety affected their health and productivity. Consequently, results of the study have significant implications for future research and interventions targeted to increase awareness of personal safety as it relates to WPV for adolescents, their parents, and employers alike.

Specific Aims

The specific aims of the study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety as it relates to WPV affect stress, anxiety, and productivity while at work. The following research questions guided the study.

1) What are adolescent employees’ perceptions of safety as it relates to WPV?

2) In what ways do adolescent employees’ perceptions of safety as it relates to WPV affect stress, anxiety, and productivity at work?

Additional research questions generated to guide the qualitative, quantitative, and mixed data analyses will be presented in the methods chapter.
Assumptions and Limitations

Several assumptions were present at the start of this study. The first assumption was that adolescents could be exposed to WPV. The second assumption was participants would provide honest and accurate responses to all study questions. The third assumption was participants would be willing volunteers in the study and would not feel coerced or forced to participate in the study by their employer or principal investigator. The last assumption was adolescent employees could clearly articulate their perceptions of safety as it relates to WPV.

There were several limitations in this study. The first limitation was the use of convenience sampling. Convenience sampling is a non-probability sampling strategy that produced results based on participants that self-selected to be in the study. Because participants were not selected at random, we cannot conclude that participants (and thus our findings) accurately represent all adolescent workers at our study site. The second limitation was only one employer represented in the study. Thus it was possible the experiences of the adolescent employees at this employer may not reflect the experiences and perceptions of adolescent employees in general. The last limitation was that the participants in this work setting may not experience similar levels of or risks for certain types of WPV as employees in the retail and service industries as a whole.

Chapter Summary

Whereas WPV is a known problem in the U.S., previous research has been based on working adult samples. Adolescents may be unaware of the risk to personal safety from WPV due to limited workplace safety education and training and lack of previous work experience. Though research indicated adolescents experience WPV, previous studies were limited in design, based their questions on the adult WPV literature, and may not have accurately portrayed
adolescents’ experiences of WPV. This study used a qualitative dominant mixed methods design to explore perceptions of safety as it relates to WPV among adolescents and describe how adolescents’ feel WPV affected their level of stress and anxiety and ability to be productive at work. Findings from the study have significance for occupational health professionals, nursing, current and future employers of adolescents, current and future adolescent employees, and parents of adolescent workers.
CHAPTER 2 – LITERATURE REVIEW

Workplace violence (WPV) is a critical problem facing workers across the U.S. According to the U.S. Department of Labor (DOL), approximately 17% of 4,609 fatal occupational injuries recorded in 2011 were due to assaults or incidents of WPV (BLS, 2012). Assaults and violent incident are the 2nd leading form of occupational-related fatalities trailing only behind transportation-related fatalities.

WPV is not limited to incidents resulting in the death of a worker; rather most forms of WPV involve verbal, sexual, and physical threats or assaults that inflict emotional or non-fatal physical harm to the target. In addition to physical (Hogh & Viitasara, 2005; Lanza, 2006) and psychological health effects (Driscoll et al., 1995; Lanza, 2006; Wieclaw et al., 2006), victims of WPV often fear future incidents of violence (LeBlanc & Kelloway, 2002; Mueller & Tschan, 2011) and report lower job satisfaction (Driscoll et al., 1995), productivity level and commitment to the organization (BLS, 2006). In the research literature, most studies focus on experiences of adult workers (Gates et al., 2006; Grandey, Kern, & Frone, 2007; Mayhew, 2000; Perrott & Kelloway, 2006). Although previous studies produce valuable information, the results may not reflect the experiences of WPV among adolescents.

In a review of the literature, information about WPV among adolescents was limited (Runyan et al., 2005; Runyan et al., 2007; Rauscher, 2008). Past studies focused primarily on the identification of the incidence rates of WPV, and the risk factors unique to this population. With approximately 5.9 million adolescents age 16-19 in the U.S. employed in a formal job in 2010 (BLS, 2011), it was essential to explore the effect of WPV upon our youngest workers. Adolescents are not adults. They are still developing skills of communication and lack experience in the workplace to recognize and manage potentially violent incidents as well as
their more experienced adult counterparts. Exposure to WPV may have short and long term effects on the psychological health, productivity, perceptions of safety, and career ambitions of adolescent workers. Results of this study will contribute to WPV research literature specific to the adolescent population by providing a description of the following: perceptions of safety as it relates to WPV, beliefs about how WPV exposure affects health and productivity, and how past exposure to WPV affects adolescents’ view of future incidents of WPV. Knowledge generated from this study can be used to in the future to develop a quantitative instrument measuring adolescent employees’ perceptions of safety as it relates to WPV. Data generated from future studies using such a quantitative instrument may guide future interventional studies addressing WPV among this population. In this chapter, I present a review of the literature related to WPV; more specifically WPV as it relates to adolescents employed in the U.S. Developmental issues that may contribute to adolescents’ susceptibility to WPV and its negative effects will be discussed. Gaps in the research literature and how this study will address the gaps will be identified. Last, I will present the conceptual model developed to guide the study.

**What is Workplace Violence?**

There is not a definitive definition of WPV in the literature. Studies use various definitions and instruments to measure WPV (Gates et al., 2006; Schat, Frone, & Kelloway, 2006). The lack of consistency in defining and measuring WPV in research studies has contributed to the difficulty in producing directly comparable results. Whereas operational definitions of WPV used by some researchers only assess incidents of physical violence, others include incidents of verbal or psychological violence (e.g., bullying, yelling or cursing at victim). Researchers have shown that a wide range of aggressive and violent incidents can have negative consequences for the victim, this study will use Schat and Kelloway’s (2005) definition of WPV
as “behavior by an individual or individuals within or outside an organization that is intended to physically or psychologically harm a worker or workers and occurs in a work-related context” (p.191).

Workplace violence includes a wide range of aggressive incidents perpetrated by a variety of people. To distinguish between the forms of WPV, the NIOSH uses the following classification system developed by the California Occupational Health and Safety Administration (Cal/OSHA, 1995). The first form includes violence committed against the worker by criminals who have no legitimate reason for being in the workplace. It may include psychological or physical violence (e.g., homicide) that is directly related to a criminal incident such as a robbery in the workplace. The second form includes violence committed against the worker by the recipient of the goods or service. This form of WPV includes verbal and sexual harassment as well as physical threats and assaults from customers, clients, or patients. The third form includes violence committed against the worker by a coworker or supervisor. Similar to the 2nd form, this form includes sexual and verbal harassment, physical threats of violence, or physical assaults. The fourth form includes violence committed against the worker by a personal acquaintance including family, friends, and current or former romantic partners. This form of WPV includes work-related stalking or activities that disrupt the employee’s ability to get to work on time or at all (Swanberg, Logan, & Macke, 2006). Given that adolescent workers may be exposed to any of the above forms of WPV, the current study will focus on adolescent employees’ perceptions of safety as it relates to all forms of WPV.

**Epidemiology of WPV**

Workplace violence is found in various settings including but not limited to healthcare (e.g., Gates et al, 2006), law enforcement (e.g., Perrott & Kelloway, 2006), retail, service, and
transportation industries such as taxi cab drivers (e.g., Mayhew, 2000). Results from a national probability sample suggest that approximately 47 million U.S. employees (41.4%) are exposed to psychological violence, and 15 million (13%) are exposed to physical violence in the workplace (Schat et al., 2006). A paper survey distributed among a stratified sample of private industry and local and state governments (BLS, 2006) estimated WPV incidents including physical assaults, threats of assault, harassment, intimidation, or bullying occurred in less than 5% of private industries over a 12 month period. Reported estimated rates of WPV were higher among local (15%) and state (32%) governments. The perpetrators of WPV were criminals, customers, or fellow employees but a few incidents by domestic partners were reported (BLS, 2006). Yet published estimates by the BLS survey may underestimate the true rate of WPV as participation in the BLS survey was voluntary and reported a 61% response rate. Whatever the rate of WPV, researchers have indicated that there are several predictors and risk factors for WPV.

**Risk Factors for WPV**

Predictors and risk factors for WPV among adult workers consist of individual, environmental, and organizational factors. Individual factors include gender, age, number of hours worked, and workload. Males are more likely to report experiences of psychological violence (Schat et al., 2006); whereas, females are more likely to report experiences of sexual harassment and physical violence (Bates, Bowes-Sperry, O’Leary-Kelly, & 2006). Age may be a risk factor for exposure to psychological and physical violence. According to Schat et al. (2006), there are significant differences (p < .001) between the prevalence rates of psychological and physical violence reported by younger (ages 18-30) and older workers (ages 31 and up). For example, prevalence rates of psychological violence among workers ages 18-25 were 40% and rose to 49.3% among workers age 26-30. After age 31, prevalence rates steadily decreased
However little is known about age-related risk for violence among our adolescents. A meta-analysis evaluating the relationship between sexual harassment and various job factors found significant differences between workers less than 40 years compared to those older than forty. Workplace sexual harassment among younger versus older workers yielded higher levels of negative correlations among job factors of job satisfaction \((\rho = -.35 \text{ vs. } \rho = .21; \ p < .05)\), organizational commitment \((\rho = -.28 \text{ vs. } \rho = -.13; \ p < 0.05)\), and psychological well-being \((\rho = -.32 \text{ vs. } \rho = -.16; \ p < 0.05)\) (Chan, Lam, Chow, & Cheung, 2008). Other individual factors associated with increased risk for WPV include employee workload and number of hours worked (Hogh & Viitasara, 2005). Individuals with high workloads report feeling overworked, stressed, and may be unable to defend or remove themselves from situations of WPV (Hogh & Viitasara, 2005).

Organizational risk factors that are associated with increased risk for WPV include job characteristics and the organization’s work climate, particularly in the area of safety. Certain job characteristics have been associated with increased risk for WPV. These include jobs that involve cash handling, working directly with customers, and working early in the morning or late at night (Schat et al., 2006). In addition to job characteristics, organizational factors such as the psychological violence prevention climate can influence the risk for WPV (Spector, Coulter, Stockwell & Matz, 2007; Kessler, Spector, Chang, & Parr, 2008). The psychological violence prevention climate of a workplace consists of the organizational efforts to control and eliminate WPV and is comprised of WPV specific policies and procedures, work practices that encourage control or elimination of WPV, and pressure for unsafe practice (Spector et al., 2007; Kessler et al., 2008; Chang, Eatough, Spector, & Kessler, 2012). In 2005, 70% of U.S. workplaces reported having no formal program or policy to address WPV and over 78% had no training for
employees on WPV (BLS, 2006). Even when an incident of WPV occurred, most businesses (80%) made no effort to develop new or change existing WPV programs or policies in response to the incident (BLS, 2006). Organizational expectations and behavioral norms promoting a safe climate in general and specific to WPV may help deter violent incidents in the future. Other factors that inform the general safety climate include policies and procedures, work practices, modeling of behavior by management and pressure for unsafe practices (Spector et al., 2007; Kessler et al., 2008). Thus, employees may be at risk for WPV if they lack awareness of organizational WPV policies and procedures. Furthermore, employees face greater risk of WPV when daily work practices do not conform to WPV policy standards (Kessler et al., 2008). As a result, lack of consistency among workplace policies, procedures, and practices addressing WPV may place employees at greater risk of experiencing WPV (Kessler et al., 2008).

Consequences of WPV

Workplace violence has been associated with numerous consequences to the adult worker and the workplace. Adult victims of WPV may experience negative effects on their health and work. Physical health problems include headaches, muscle tension, chest pain, and stomachaches (Hogh & Viitasara, 2006; Lanza, 2006) and psychological health problems include anxiety (Lanza, 2006), depression (Wieclaw et al., 2006), anxiety and depression combined (Driscoll et al., 1995; Hogh & Viitasara, 2005), and fear of future violence (BLS, 2006; Lanza, 2006; LeBlanc & Kelloway, 2002; Mueller & Tschan, 2011). WPV also negatively affects an individual’s stress level (Elklit, 2002) and overall perception of well-being (LeBlanc & Kelloway, 2002).

In addition to the health consequences, WPV can affect an individual’s work. Affected adult employees may have difficulty concentrating while performing job activities (Hogh &
Viitasara, 2005) and thus increasing concerns about employee safety. Experiences of WPV have been associated with lower levels of job satisfaction (Driscoll et al., 1995), increased intention to leave, and avoidance of work as evidenced in absenteeism (BLS, 2006). At organizational levels, incidents of WPV negatively affect overall productivity and morale of employees contributing to increased rates of employee turnover (BLS, 2006).

In summary, WPV occurs in various work sectors and has negative consequences for individuals and organizations. Risk factors include age, gender, job characteristics, and inconsistency between workplace policies and practice. Employee victims experience physical and psychological health consequences along with a decrease in organizational commitment. What is known about WPV, however, has been generated by studies conducted among adult employees only; therefore, it remains to be seen whether adolescent employees ages 14-18 experience similar effects from exposure to WPV.

**Adolescents, Work, and WPV**

Adolescence is defined as the developmental period between childhood (ages 0-18) and adulthood (19 and older). It is during this period when individuals strive to be less dependent upon their parents and develop their own identity as a human being (Erikson, 1968). Formal employment is one way that adolescents can achieve financial and physical independence from parents and develop one aspect of identity as an employee.

Historically, adolescents have been present in the workforce in formal and informal ways. Up until the industrial revolution, children as young as 10 years old worked in formal settings such as mines, factories, and on family farms (DOL, 2008). A shift in childhood employment occurred in 1936 when the U.S. passed the Fair Labor Standards Act (FLSA) placing restrictions on type of job, number of hours, and time of day persons under 18 could work (DOL, 2008). The
overall purpose of the FLSA was to protect young workers from potential injury and prevent work activities from interfering with school attendance. Today, the FLSA coupled with state and local laws regarding adolescent employment dictate what types of jobs workers under age 18 can hold.

In 2010, approximately 5.9 million adolescents age 16-19 were employed in the U.S. civilian labor force (BLS, 2011). Unfortunately the BLS does not report employment statistics for workers under age 16, so the total number of adolescents age 14-18 who have a formal job cannot be readily determined. What it is known is that most working adolescents (90%) age 14-18 hold part-time and full-time jobs in the retail or service sector (Runyan et al., 2007).

Consequences of Work during Adolescence

Since the early 1980’s, working during adolescence has been linked to positive and negative consequences for an adolescent’s physical and psychological health and relationships with others (Steinberg, Greenberger, Garduque, Ruggiero, & Vaux, 1982). Having a formal job gives adolescents the opportunity to apply knowledge learned at school, increases their sense of personal responsibility, and fosters self-management (Steinberg et al., 1982); steady employment may also foster self-efficacy and bolster adolescents’ confidence level (Cunnien, MartinRogers, & Mortimer, 2009).

Other researchers have found working during adolescence may have negative consequences. Factors such as increases in work intensity and total number of hours worked per week may negatively impact other aspects of an adolescent’s life. Increased work intensity was negatively correlated with sports participation among high school females (r = -.058 and r = -.113 for 10th & 12th grade, p < .01) and high school males (r = -.058 and r = -.165 for 10th & 12th grade, p < .01) (Safron, Schulenberg, & Bachman, 2001). Further Safron et al. (2001) described a
negative linear relationship between increases in job intensity and adolescents’ engagement in healthy behaviors such as eating breakfast, getting enough sleep, and exercising (Safron et al., 2001). High levels of job stressors and job dissatisfaction among working adolescents have been correlated with higher levels of depression (Spearman rho = .23, p < .05) and higher rates of smoking (Spearman rho = .27, p < .01) (Largie, Field, Hernandez-Reif, Sanders, & Diego, 2001). Job stressors and demands during adolescence have negative effects on self-efficacy ($b = .173$, $p < .001$) and self-esteem ($b = -.05$, $p < .01$) (Mortimer & Staff, 2004). Due to the increased demand on one’s time, working can negatively affect an adolescent’s relationship with parents and friends (Spearman rho = -.42, $p < .001$) (Largie et al., 2001) and grade-point average (Spearman rho = -.20, $p < .05$) (Largie et al., 2001; Ruscoe, Morgan, & Peebles, 1996; Weller, Kelder, Cooper, Basen-Engquist, & Tortolero, 2003).

**Vulnerability of Adolescent Employees**

Though the positive and negative effects of work during adolescence remain under debate, it is clear adolescent workers are unique and differ from adult workers in several important ways. One difference is that adolescents are still developing cognitively, emotionally, and socially (National Research Council [NRC], 1998; Runyan et al., 2003; Rauscher, 2008; Sudhinaraset & Blum, 2010); therefore, they may have limited capacity to make necessary decisions to maximize personal safety and health in the workplace. Lack of cognitive maturity can interfere with an adolescent’s ability to clearly assess the situation to generate solutions, evaluate the credibility of information sources, and anticipate consequences of actions when faced with workplace hazards. Emotional immaturity may interfere with an adolescent’s ability to recognize, control, and channel emotional responses to achieve desired outcomes and goals (Dahl, 2004) and consequently lead to problems in responding appropriately to stressful
situations in the workplace (Dahl, 2004; NRC, 1998). Finally, social immaturity may interfere with an adolescent’s ability to connect and communicate with fellow coworkers and supervisors. This lack of connection could contribute to adolescent workers’ hesitation in speaking up to address concerns encountered in the workplace.

In addition to developmental differences, adolescents vary from adults in that they have different motivations for seeking employment, are new to the work environment, and often work in settings that pay minimum wage, provide limited safety training, and offer little supervision (Sudhinaraset & Blum, 2010). Adolescents often seek employment to earn money for ancillary expenses such as clothing, car insurance, or college savings whereas adult workers’ motivation for working is often focused on earning a living wage. One’s motivations for seeking and maintaining employment can influence the level of engagement and value on keeping that job. As adolescents often do not rely on maintaining a steady source of income, adolescents may be less engaged and committed to keeping a job than adult workers when they encounter challenges or concerns in the workplace. Unlike adults who have an established history of work, lack of work experience may contribute to an adolescent’s ability to handle potential safety issues (NRC, 1998). Schat et al. (2006) found that younger adult workers (ages 18-30) in the U.S. reported the higher levels of WPV than older adult workers and attributed the age-related risk among younger adults to lack of previous work experience and low job status. Whereas adult workers may have experienced and learned from past encounters with safety issues, adolescents do not have occupationally rooted experiences from which to draw. Thus adolescent workers may be left trying to figure out and safely manage occupational concerns as they occur. Finally, work settings in which adolescents often are employed may not differ from those employing adults; however, they can exacerbate vulnerability issues among this population. For example,
adolescents often work in low-status positions that pay minimum-wage and offer limited safety training and supervision. So if an adolescent worker faced a workplace safety concern, their lack of status and authority combined with little or no safety training would most certainly hamper their ability to properly handle the issue.

**Adolescent Employees and WPV**

Occupational research among adolescents focuses primarily on issues of workplace safety, injury, and exposure to hazardous working conditions (Dunn, Runyan, Cohen, & Schulman, 1998; Mujuru & Mutambudzi, 2007; Runyan et al., 2007). This research has added valuable knowledge about occupational health issues faced by adolescent employees; yet, it has not specifically addressed the issue of WPV as a potential occupational hazard.

Several factors may contribute to the lack of knowledge about WPV among adolescents including lack of age-specific data, injury versus incident tracking, and ambiguous definitions of WPV. National data sets are reported by age group (e.g., less than 20 years old) and data specific to adolescents is lumped into one category. The lack of age specific data makes it difficult for researchers to identify age-specific risks for WPV among adolescents (Runyan et al., 2003). Another confounding issue is the use of injury tracking to develop incidence data about WPV. Tracking of occupational injuries is typically done only for those injuries requiring medical treatment. Thus incidents of WPV resulting in physical or psychological injuries deemed too minor to warrant medical attention could be considered beyond the scope of a work-related injury and may be missed. In addition there is no surveillance of occupational injuries at jobs that are not recorded in the official financial records of a business or “off the books.” Last, there are various definitions used for adolescent worker, forms of WPV, and what qualifies as an injury,
which adds to the confusion and lack of cohesion in developing accurate data about this phenomenon.

With nearly 90% of working adolescents employed in retail or service work settings (Runyan et al., 2007), the potential for exposure to WPV may be similar to adult workers in comparable jobs. Increased incidents in the retail sector can be attributed to the following factors. Workers in retail environments are often exposed to known risk factors for criminally associated WPV (Runyan et al., 2007) such as working early or late hours (Runyan et al., 2005; Runyan et al., 2007), working alone or with limited supervision (Runyan et al., 2005), having limited or no training specific to WPV (Runyan et al., 2005; Runyan et al., 2007), and handling cash (Runyan et al., 2007). In addition to the above risk factors, adolescents often work in retail and service settings where the primary focus is on providing excellent customer service. Previous research has indicated that customer-oriented businesses often encourage worker behaviors and attitudes that promote the comfort of customers to yield high customer satisfaction levels with the service encounter (Lloyd & Luk, 2011). Thus adolescent employees holding low-status retail and service jobs may not know how to respond when dependence on customer satisfaction leads to power imbalances that enable aggressive behavior by customers (Yagil, 2008) and subsequent exposure to customer-perpetrated WPV.

Even though most adolescents work at jobs that place them at risk for exposure to certain forms of WPV, not all adolescents identify concern about the potential for violence exposure. A cross-sectional survey among adolescents (n = 396) at five study sites conducted by Runyan et al. (2005) found adolescent workers were mainly concerned about dealing with angry customers (57%), experiencing conflict with co-workers (27%), and being robbed while at work (26.4%). Adolescents expressed the least amount of concern with being physically attacked (15.2%). In a
similar cross-sectional telephone survey, parents of employed adolescents (n = 1,059) responded very differently when asked to identify their own attitudes and beliefs about adolescent work and workplace safety (Runyan, Schulman, Dal Santo, Bowling, & Agans, 2009). Half the parents of employed adolescents (50.5%; 95% CI: 45.1-56.0) expressed concern about their children being present during a robbery, while more than one third (36.8%; 95% CI: 31.5-42.1) were concerned about their child being physically or sexually assaulted at work (Runyan et al., 2009). Despite the aforementioned concerns, most of the parents (97%; 95% CI: 95.7-99.7) reported feeling confident their own child knew how to keep safe while at work (Runyan et al., 2009).

The above findings of adolescent concerns about WPV (Runyan et al., 2005) and parent concerns about their working adolescent (Runyan et al., 2009) demonstrated unique differences between these two perspectives. Whereas adolescents expressed the most concern with encountering angry customers and some concern related to coworker violence and being present during a robbery, parents expressed the highest concerns for scenarios where their child might encounter extreme violence such as robbery and severe injuries such as physical or sexual assault. Perhaps adolescent participants expressed the highest concerns with scenarios of customer WPV because it is the most frequently encountered and because they often struggle with handling it due to their cognitive and emotional immaturity. Conversely, parents’ concerns were likely motivated by the magnitude of harm their child might encounter if faced with robbery or physical assault. Parents did report that they thought their own child knew how to keep safe at work; but, no information was provided to support how parents knew their own child could keep safe at work.

Research regarding safety in the workplace extends beyond concern for WPV to adolescent workers’ reports of experiences of WPV. Building on the research completed by
Runyan, Bowling, et al. (2005) and Runyan, Schulman, et al. (2007), Rauscher (2008) examined adolescent workers’ reports of lifetime exposure to WPV. Out of 1,171 U.S. students 14-17 years old who reported ever being employed, one-third of respondents (n = 368) reported experiencing at least one incident of WPV during their lifetime. Forms of violent behaviors reported by the 368 participants included verbal threats (25%; n = 294), sexual harassment (10%; n = 115), and physical attacks (10%; n = 117). In addition to asking about the form of violence experienced, Rauscher asked respondents to identify by whom the violence was perpetrated. Out of the 368 responding, customers were the most frequent perpetrators of verbal threats (55%; n = 157) and physical attacks (31%; n = 34), whereas coworkers were the most frequent perpetrators of sexual harassment (45%; n = 50). Of note, this study did not ask participants about experiences of WPV committed by criminals – a leading source of fatal and non-fatal WPV among adult workers in retail and service sectors (Peek-Asa, Runyan, & Zwerling, 2001).

In addition to the above research findings, the National Victims of Crime Survey (NVCS) confirms adolescents are victims of WPV (Harrell, 2011). From 2005-2009, workers 16-19 years-old experienced non-fatal WPV such as rape, sexual assault, robbery, aggravated assault, and simple assault at a rate of 3.2 victims per 1,000 employed persons – a rate lower than reported among all employed persons age 16 and older (5.1 victims per 1,000 employed persons) (Harrell, 2011). Moreover victims of non-fatal WPV age 16-19 represented only 3% of all non-fatal WPV victims even though workers 16-19 years-old comprise nearly 4.8% of all employed persons age 16 and older. Though these statistics indicated that adolescent workers experience lower rates of non-fatal WPV than older workers, they do provide additional confirmation that adolescents indeed experience WPV. One limitation of the NVCS worth noting is respondents are only asked about experiences of rape, sexual assault, robbery, aggravated assault, and simple
assault. Consequently other forms of non-fatal WPV incidents such as verbal harassment, sexual harassment, and physical threats are not reported.

The strength of previous adolescent WPV studies has been the use of random sampling to generate representative samples ranging in size from 396 to 1,059 participants (Runyan et al., 2005; Runyan et al., 2007; Runyan et al., 2009). Use of random sampling to conduct these telephone surveys resulted in new prevalence and incidence rates of WPV among adolescents. Nonetheless, the previous studies have several limitations. The first limitation was that most adolescent WPV research has been conducted by one particular researcher. Lack of depth among researchers conducting on this topic could lead to a narrow perspective among published findings. The second limitation was the lack of variation in study design and methods of data collection. The studies used cross-sectional designs (Runyan et al., 2005; Runyan et al., 2007; Rauscher, 2008; Runyan et al., 2009) and relied on telephone surveys data (Runyan et al., 2005; Runyan et al., 2009). Limitations with using telephone survey methods are the inability to collect data from participants who do not own a telephone, language barriers if survey only offered in English, the lack of ability to collect non-verbal responses, and response bias due to only willing participants completing the survey. Other limitations were the use of closed response questions based on the experiences of adult employees. Response options may not include options pertinent to the adolescent population thus producing results that may not accurately reflect the unique experiences of WPV among adolescents. Another limitation was only quantitative data were generated to describe WPV among adolescent employees. It remains unknown whether adolescent experiences of WPV contain risk factors and consequences different from those of their adult counterparts. Through the gathering of qualitative data, WPV can be examined through the eyes of adolescent employees. As previously mentioned, it is unknown if the
adolescent employees’ perceptions and experiences of WPV are similar to those of adults. Therefore it is essential that studies allow for the qualitative exploration of this phenomenon to develop an understanding of adolescents’ own experiences and perceptions of WPV.

Based on previous research, it was clear that WPV continues to be a significant problem for adolescents as well as adults. However, there remained numerous gaps in knowledge about adolescent employees’ and their exposure to WPV. The first gap was the lack of research data on adolescent employees’ perceptions of safety as it relates to violence in the workplace. Questions remained as to whether adolescent employees’ believe they are at risk for WPV exposure and whether they felt adequately prepared to handle an incident of WPV should it occur. The second gap in knowledge was how past WPV exposure (direct or indirect) influenced adolescent employees’ perceptions of personal safety in the workplace. Questions remained as to whether differences in perception of safety as it relates to WPV existed between adolescent employees who’ve had past exposure to WPV and those who have not. A third gap in knowledge was whether adolescents’ perceptions of safety as it relates to WPV influenced psychological health, specifically feelings of anxiety, stress, or depression and productivity levels at work. Other gaps in knowledge included: (a) determining how WPV education and training influenced adolescent employees’ perceptions of safety, (b) determining how WPV specific policies and procedures influenced adolescent employees’ perceptions of safety, and (c) identifying the context of adolescent employees’ exposure to WPV.

The present study sought to address some of the gaps discussed in the previous paragraph. The study generated qualitative data exploring adolescent employees’ perception of safety as it relates to WPV and how these perceptions influenced individual’s psychological health and productivity. Using a MMR approach, the study examined differences in perceptions
of safety as it relates to WPV between adolescent employees with previous exposure and those with no previous exposure to WPV. Finally the study generated new knowledge about adolescent employees’ perceptions of safety as it relates to WPV and confidence in handling future incidents of WPV as influenced by prior training and education and knowledge of WPV policies and procedures.

Working during adolescence can have positive and negative consequences. Certain developmental and cognitive vulnerabilities may influence adolescents’ abilities to respond and cope with situations that jeopardize their personal safety, including WPV. Because there are only a few studies that focused on the topic of adolescent employees and WPV, gaps in the literature existed. Whereas these studies indicated that WPV was a significant and prevalent problem for adolescent workers, there was a dearth of data to provide insight into the problem with this unique working population. This study sought to fill some gaps in the literature by generating knowledge about adolescent employees’ perceptions of safety as it relates to WPV and exploring the influence of these perceptions on psychological health (i.e., stress, anxiety) and productivity in the workplace. Results of the study will be used in future studies to develop a quantitative instrument to measure adolescent employees’ perception of safety as it relates to WPV and future interventions to reduce negative effects of WPV exposure.

**Conceptual Model**

The study used a conceptual model (Figure 2.1) developed to explore adolescent employees’ perceptions of safety as it relates to WPV. Due to the dearth of research among adolescent employees, concepts and relationships commonly found in the adult WPV literature were used in the model (Spector et al., 2007; Kessler et al., 2008). The following concepts are included in the model: (a) perception of safety from WPV, (b) past exposure to WPV, (c)
psychological health, (d) productivity, (e) participation in WPV education/training, and (f) awareness of WPV policies/procedures.
Figure 2.1. Perception of safety as it relates to WPV conceptual model.
The conceptual model was critical to this study as it served as the foundation for developing survey and interview questions. Results from the study will be used to modify the existing model to reflect: (a) pertinent concepts related to WPV and the adolescent employee population and (b) how concepts relate to one another. The following section will define each concept in the model and explain why its inclusion in the model was deemed important.

The primary focus of the study was exploring adolescent employees’ perception of safety as it relates to WPV thus this concept was centrally located in the model. This concept represented the beliefs and concerns adolescent employees held regarding personal safety from violence in the workplace and how likely they felt an act of WPV may occur.

The next concept in the model was past exposure to WPV and was defined as being the victim of or witness to WPV. Evidence in the adult WPV literature indicated that past exposure to WPV negatively affects employees’ fear of future violence (BLS, 2006; Lanza, 2006; LeBlanc & Kelloway, 2002; Mueller & Tschan, 2011), psychological health (Driscoll et al., 1995; Hogh & Viitasara, 2005; Hutchinson, Wilkes, Jackson, & Vickers, 2010; Lanza, 2006; Wieclaw et al., 2006), and productivity levels (BLS, 2006; Hogh & Viitasara, 2005). Since adolescent employees are likely to report similar concerns, the model depicted past exposure to WPV influencing the adolescent employee’s perception of safety from WPV, psychological health, and productivity.

Psychological health was defined as feelings of stress or anxiety as self-reported by participants. WPV research among adult employees found exposure to past experiences of WPV was associated with negative psychological health effects among victims (Driscoll et al., 1995; Gillespie, Gates, Miller, & Howard, 2010; Hogh & Viitasara, 2005; Lanza, 2006; Wieclaw et al., 2006). Therefore it was plausible adolescent employees would report similar feelings of stress or
anxiety in response to past exposure to WPV. Further it was possible that adolescents who reported concerns of personal safety from WPV would also report increased levels of stress or anxiety while at work.

Productivity was defined as adolescent employees’ self-reported beliefs about their ability to engage in and complete job activities. Adult workers who experienced WPV reported being distracted while performing job activities (Gates, Gillespie, & Succop, 2011; Hogh & Viitasara, 2005) and affecting productivity (BLS, 2006; Gillespie et al., 2010). Again, it was plausible an adolescent’s perception of safety might influence engagement in job activities thus affecting their ability to be productive.

Participation in WPV education or training and awareness of WPV policies and procedures are the last two concepts in the model. Participation in WPV education and training was defined as adolescent employee self-reports of participating in education or training about how to prevent or respond to incidents of WPV. Awareness of WPV policies and procedures was defined as adolescent employees’ self-reported awareness of existing policies and procedures specifically dealing with WPV. It was plausible that employee participation in WPV education and training about how to handle such incidents as well as awareness of policies and procedures may influence the employee’s overall perception of safety and plans to respond to future incidents of WPV.

The conceptual model developed for this study included the key concepts found in the adult WPV literature. Mueller and Tschan (2011) developed and tested a model that demonstrated exposure to client-initiated WPV predicted perceived likelihood of violence (β = .44, p < .01) and perceived likelihood of violence predicted fear of future violence (β = .40, p < .01). As our study was designed to explore how past exposure of WPV influence perceptions of
safety as it relates to WPV, findings by Mueller and Tschan (2011) influenced the placement of
the past exposure to WPV and perceptions of safety as it relates to WPV concepts in our model.
Similarly, results of a different structural equation modeling study testing the factors of
individual, work group, and organizational on bullying in the nursing workplace provided
support that bullying incidents predicted negative health effects (β = .31, p = .02) (Hutchinson et
al., 2010). Based on previous findings from statistical models the key concept of interest,
adolescent employees’ perceptions of safety as it relates to WPV, was placed in the center of the
model and surrounded by the other concepts of interest. The model depicted potential
relationships between concepts based on adult WPV literature, and was instrumental in the
development of survey and interview questions.

**Chapter Summary**

WPV is a significant occupational safety issue facing adolescent employees. Adolescents
often work in the retail or service sector and hold jobs containing known risk factors for certain
types of WPV. Adolescents are a vulnerable population in part due to their cognitive and
emotional immaturity or inadequate work experience, and may be ill equipped to handle violence
in the workplace. Since adolescents are at the beginning of their work lives, exposure to negative
incidents such as WPV may result in short and long term consequences for their health and
career trajectory.

It was important to conduct this study, because most previous WPV research studies used
adult worker samples and therefore yielded results which may not reflect the experiences of
adolescent employees. Moreover, the studies examining WPV among adolescent employees
were limited to prevalence data and had not explored perceptions of safety as it relates to WPV.
Because gaps in the adolescent employee WPV research literature existed, it was important that
this MMR study develop a comprehensive view of adolescent employees’ perceptions of safety as it relates to WPV. Findings from this study may guide the future development of a quantitative instrument to measure perception of safety from WPV and the development of population specific interventions with a larger, representative sample of adolescent employees.
CHAPTER 3 - METHODS

The aims of this qualitative dominant mixed method study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety affect stress, anxiety, and productivity while at work. In this chapter, I will present the study design, study procedures, data analysis plan, human participants’ protections, permissions, funding, and budget.

Design

The study used a qualitatively dominant mixed methods design in which data were gathered via qualitative semi-structured interviews and a quantitative survey. In this section, I will present the principles of mixed methods research (MMR) including various mixed methods designs, and describe the qualitative dominant mixed method approach.

Mixed Methods Research

Mixed methods research is an approach to research where knowledge is developed through combining quantitative and qualitative techniques, methods or approaches in a single study or series of studies (Johnson & Onwuegbuzie, 2004). MMR acknowledges that perceptions and facts are influenced by one’s experiences and that these experiences may differ between individuals (Creswell & Plano Clark, 2011). Through combining quantitative and qualitative data, investigators use whatever methods are best suited to capture multiple viewpoints – allowing investigators to develop more compelling evidence and a comprehensive view of the phenomenon than either a quantitative or qualitative approach alone (Creswell & Plano Clark, 2011; Johnson, Onwuegbuzie, & Turner, 2007; Yin, 2006).

Rooted in the philosophical approach of pragmatism, MMR is guided by many of pragmatism’s underpinnings. According to Merriam-Webster (2012), the term pragmatism is
defined as “the belief that meaning of conceptions is to be sought in their practical bearings, that the function of thought is to guide action, and that truth is preeminently to be tested by the practical consequences of belief.” When it comes to conducting research, Creswell and Plano Clark (2011) identified four characteristics that distinguish the pragmatist perspective from traditional post-positivist and constructivist perspectives. First, the pragmatist perspective is outcome focused and seeks to develop knowledge about the phenomenon in its practical form. The research focus on developing outcomes and practical implications is a departure from traditional focuses of cause-and-effect (i.e. quantitative) and understanding (i.e. qualitative). Second, the pragmatist approach is problem-centered which means the research question(s) and creating answers to the question(s) drive the selection of methods and design to generate data. This problem-centered approach differs from deductive only methods used in post-positivists and inductive only methods used by constructivists. Third, pragmatists collect various types of data using multiple methods to develop a rich, comprehensive view of the phenomenon. In contrast, post-positivists collect empirical data through observation and measurement and constructivists collect constructed data from participants’ perspectives of the phenomenon. Finally, pragmatists seek to develop findings that are practical and applicable to consumers; whereas, post-positivists seek to develop findings that test and verify theory and constructivists seek to create findings that help develop theory.

As described above, research studies rooted in pragmatism differ from traditional quantitative and qualitative forms of research. Johnson et al. (2007) report “many (or most) mixed methods writers have argued for some version of pragmatism as the most useful philosophy to support mixed methods research” (p. 125). But why do pragmatism and mixed methods work so well together? One reason is that both pragmatism and MMR appreciate both
singular and multiple realities. Another reason is that pragmatism and MMR seek to collect data using whatever methods will work best to address and answer the research question. Finally, both pragmatism and MMR strive to represent both the empirical and practical consequences of the phenomenon. In sum, MMR based on pragmatism is a versatile approach in that it “opens up inquiry to all possibilities while tying that search to practical ends” (Maxcy, 2003, p. 86).

Reasons for selecting a MMR design can vary from study to study. Johnson and Onwuegbuzie (2004) identified five reasons or rationales for researchers to select a MMR study versus a traditional quantitative or qualitative study. The rationales were “triangulation, complementarity, initiation, development, and expansion” (Johnson & Onwuegbuzie, 2004, p.22). The first rationale – triangulation – refers to corroborating research findings using various types of data sources rather than depending on a single type of data (i.e. quantitative or qualitative). The second rationale – complementarity – refers to the researcher’s ability to enhance or elaborate the results from one method with supporting evidence from another method using MMR. The third rationale – initiation – refers to the ability of researcher to expose contradictions in results produced using different methods (i.e. quantitative and qualitative) through use of MMR. Exposing contradictions in data allow researchers to rethink previously made assumptions, challenge previous findings about the phenomenon. The fourth rationale for conducting MMR is development where MMR allows investigators to use the results from one method to guide various aspects of the other method (i.e. sampling strategy, identification of key variables, tool development). The fifth rationale for conducting MMR is expansion. MMR allows investigators to expand the amount and type of knowledge in the area.

For this study, a MMR design worked best to answer the research questions because the design allowed me the flexibility to explore the phenomenon using qualitative and quantitative
methods. Using Johnson and Onwuegbuzie’s (2004) rationales presented above, a MMR design was selected because the two different types of data would complement each other and expanded current knowledge about the phenomenon. The qualitative data gathered provided new insights from adolescent employees’ perspective about the issue of safety as it relates to WPV. The quantitative data gathered in this study enhanced the analysis and interpretation of the qualitative data. In addition, the MMR design was a departure from previous studies on adolescent WPV which have primarily been quantitative in focus and expanded the current understanding of WPV and adolescents.

**Mixed methods research designs.** Various classifications of mixed methods designs exist. According to Morse and Niehaus (2009): “A mixed methods design is a scientifically rigorous research project, driven by the inductive or deductive theoretical drive, and comprised of a qualitative or quantitative core component with qualitative or quantitative supplementary component(s)” (p. 14). Therefore, the overall purpose of conducting a study, or its theoretical drive, dictates what type of method should be used to collect the core (i.e. primary) component. Timing also influences the type of MMR design as the core and supplementary components may be conducted simultaneously or sequentially (Morse & Niehaus, 2009). Based on the various combinations of core and supplementary components and two types of timing, Morse and Niehaus (2009) describe eight possible MMR designs.

Another unique aspect of mixed methods research is the allowance for study design flexibility. Researchers may approach a mixed methods study with a fixed and/or emergent design (Creswell & Plano Clark, 2011). Creswell and Plano Clark (2011) encourage researchers to view the categories of fixed and emergent design as the end points along the spectrum of MMR design rather than dichotomous choices. Fixed MMR designs involve the use of
predetermined quantitative and qualitative methods of the study and thus the study is conducted as planned. Conversely, emergent MMR designs allow for modification or expansion of the original study design to explore new or unexpected findings that emerge or when one method is deemed inadequate to address the study aim. It is due to the fixed-to-emergent study design spectrum that mixed methods researchers may incorporate well planned qualitative and quantitative methods yet have flexibility to modify the study design to allow for exploration of emergent findings when necessary. Therefore, based on the philosophy of pragmatism, fixed and emergent qualities of MMR design allow researchers the flexibility to make use of whatever methods will assist in answering the question of concern and additional questions that may emerge during the research process.

**Qualitative dominant mixed methods design.** This study used a qualitative dominant MMR design in which data were collected the qualitative interviews were the core component or primary source of data and the quantitative survey provided supplementary, supportive data. Both components were conducted at the same time (simultaneously) as depicted in Figure 3.1.
Aim 1: What are adolescent employees’ perceptions of safety from WPV?
Aim 2: How do perceptions of safety affect stress, anxiety, and productivity?

Explorative focus: QUAL (Inductive)
Enhance description by simultaneously including a quan (deductive) component

Core component of project
- Select core QUAL method (semi-structured interviews)
- Collect core (primary) data for QUAL
- Analyze core QUAL data using constant comparative analysis
- Research findings for QUAL
- Mixed method research findings
- Inform the research aims

Simultaneous supplemental component
- Select supplementary quan data collection method (survey)
- Simultaneously collect supplementary quan data
- Simultaneously analyze supplementary quan data
- Simultaneously integrate quan supplementary findings with those of core component

Figure 3.1. An overview of the study’s qualitative dominant mixed methods design.
According to Creswell and Plano Clark (2007), rationales behind selecting MMR design may include: (a) “one approach to research is inadequate by itself to address the research problem” (p. 32) and (b) “a need to enhance the study with a second source of data” (p. 33). For this study, a qualitative dominant design was selected for two reasons. The first reason was the aims of the study (i.e. theoretical drive) were to explore adolescent employees’ perceptions of safety as it relates to WPV and how these perceptions affect levels of stress, anxiety, and productivity. Due to the exploratory focus of this aim, a qualitative method was selected to be the primary data source with results reflecting themes generated from individual participant interviews. The second reason for selecting the qualitative dominant design was the quantitative survey designed for this study was limited in its purpose and design. The survey was designed with the purpose of generating descriptive statistics about participants’ past exposure to WPV, participation in WPV training and education, awareness of WPV-specific policies and procedures, and demographics. The survey contained questions that yielded simple descriptive statistics (e.g., frequencies, percentages, means) and was subjected to content validity. However due to the small sample size, the survey data were not sufficiently powered to generate statistically significant results and were used only to describe the study participants and develop categories for further exploration of the qualitative results. Therefore based on the two reasons above, the qualitative dominant design was deemed the best design choice for this study.

**Summary.** Mixed methods research is an approach where both quantitative and qualitative data are collected and mixed to develop comprehensive results. Mixed methods research is rooted in the philosophy of pragmatism and seeks to generate knowledge using whatever methods will best answer the research question at hand. Mixed methods research has
various potential designs. Based on the qualitative aims of the study and limitations of the quantitative data collection tool, I selected a qualitative dominant MMR design for this study.

**Research Questions**

The aims of the study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety affect stress, anxiety, and productivity while at work. The following research questions guided the study.

1) What are adolescent employees’ perceptions of safety as it relates to WPV?

2) In what ways do adolescent employees’ perceptions of safety as it relates to WPV influence stress, anxiety, and productivity at work?

**Setting**

The setting for this study was a family-owned company that operates a chain of fourteen retail ice cream stores in a Midwestern metropolitan area. The company was established in 1870 to manufacture and sell its unique brand of French pot ice cream. Currently the retail stores are located in both urban and suburban areas.

**Population**

The population of interest was adolescent employees age 15-18. Altogether the retail stores have approximately 250 full-time and part-time employees, half (n = 125) of whom were age 15-18 at the start of data collection (April 2010). Convenience sampling was used to generate a study sample of 30 participants or one-quarter (25%) of the total number of employees age 15-18 who worked at the retail stores. The sample size of 30 was deemed sufficient for this study based on the ability to achieve qualitative data saturation (Molnar, Robers, Browne, Gardener, & Buka, 2005; Varjas et al., 2008; Waldon, 2005).
**Inclusion and exclusion criteria.** There were several inclusion criteria to participate in the study. Employees had to be between the ages of 15-18 years at the time of recruitment, work at least 8 hours per week, and be able to read and speak English. Employees of both genders and any ethnic and racial background were eligible to participate in the study. Rationale for the inclusion criteria were as follows. Participants had to be between the ages of 15-18 to ensure that they represented the adolescent age group targeted in this study. The minimum age of 15 was selected, because the participating company hired adolescents as young as age 15 to work in the retail stores. Potential participants had to work at least 8 hours per week at one of the participating retail store locations to ensure working sufficient time in the workplace to reflect on risks to personal safety from WPV. According to David Blink (personal communication, April 10, 2010), comptroller at the participating company, employees age 15-18 work on average 10-12 hours per week during the school year and 15-20 hours per week during the summer. The last criterion was potential participants had to speak and read English. Employees aged 15-18 who were non-English speaking were excluded from the study since the current number of non-English speaking adolescent employees at the participating retail stores was low. Furthermore it was not within the study’s budget to pay for an interpreter for non-English speaking interview participants or translating the study materials into a second language. Therefore, all recruitment materials, consent/assent/parental permission forms, and interviews used the English language and all potential study participants had to be able to read and speak English.

**Procedures**

The following section presents the procedures used for this study. Recruitment was conducted using three rounds. Data collection activities were conducted with individual participants at a mutually agreeable time. Written informed consent and parental permission for
participants younger than 18 years was obtained prior to data collection. The sources of data were participant surveys and interviews. To ensure privacy, data collection activities took place over the phone or in a private meeting room at one of 26 locations of the Cincinnati and Hamilton County Public Library system with such facilities (see Appendix A for a complete list of library locations). Procedures for recruitment, obtaining informed consent and collecting each type of data are described below.

**Recruitment**

Study participation was voluntary and used three rounds of recruitment. During round one, recruitment flyers were hung in the employee break room, by the time clock at the 14 participating retail store locations, and in employee restrooms. The recruitment flyers were visible to all employees at that worksite. The recruitment flyer instructed interested employees to contact me via phone or text message by a specified date to be screened for study eligibility. Because the desired sample size was not achieved by the specified deadline in the first round of recruitment, a second round of recruitment was conducted. The second round involved a direct recruitment strategy in which I personally distributed the study recruitment flyer and gave a three minute study presentation to potential participants. During the three minute explanation, potential participants were informed about the study’s purpose, study activities, eligibility requirements, and instructions to contact me by phone or text message if interested in study participation. The final round of recruitment repeated the direct recruitment strategy used during the 2nd round with one exception. Instead of asking interested participants to contact me, I obtained contact phone numbers immediately after the study presentation from employees whom verbally expressed interest in the study to facilitate the study enrollment process. I contacted
interested employees within 48 hours of receiving their contact information to confirm interest in the study and determine eligibility.

**Informed Consent**

Study participation was voluntary. Eligible participants under the age 18 were required to have written permission from one parent to participate in the study. To facilitate the process of obtaining parental permission, I requested contact phone numbers for a parent and/or legal guardian of eligible participants under age 18 during the screening phone call or in-person recruitment. I personally contacted a parent of each eligible participant under age 18 by phone to inform them of their child’s interest in the research study and to obtain an email address to which I could email copies of the assent and parental permission documents. During a second parental phone call I discussed the purpose of the research study, reviewed the assent and parental permission forms, answered parent questions, and obtained verbal parental permission for their child to participate in the study. Parents who provided verbal permission were instructed to print and sign a copy of the parental permission form and to have their child bring the signed form to the data collection session. All assent and consent documents were reviewed and signed by participants immediately prior to data collection activities.

**Data Collection**

**Survey.** Participants were asked to complete a 36-item paper and pencil investigator-developed survey (see Appendix B – Adolescent Employees WPV Survey). A survey created by the study team was used to gather sample demographic data (ten items) as well as assess the participants’ direct exposure to WPV (nine items), attendance at employer-offered WPV training and education (nine items), and awareness of policies or procedures addressing WPV (eight items) while working for the participating employer. Survey questions were developed from
previous WPV research (Rauscher, 2008; Runyan et al., 2005; Runyan et al., 2007). To establish content validity for the survey, I invited nine WPV experts to review the survey for relevance, clarity, simplicity, and ambiguity (Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2003). Seven experts submitted responses which were used to calculate the content validity index (CVI) for individual survey items and the overall survey. The item level CVI ranged from 0.8-1.0 and the survey CVI was 0.96, indicating that content validity for the survey was within acceptable range and indeed reflected content related to WPV.

Direct exposures to WPV were measured with a series of yes/no questions asking participants if they had ever experienced verbal harassment, sexual harassment, physical threats, or physical assaults while working at their current workplace. Participants who indicated WPV exposure(s) were asked to identify their relationship with the perpetrator(s) (i.e., customer, coworker, supervisor, family member, friend). The survey did not ask participants to report the number or frequency of WPV exposure(s) rather it captured reports the forms of WPV exposure. Definitions of incidents considered as WPV for the purpose to this study were embedded in the survey document and included:

- *Verbal harassment* includes incidents involving cursing, cussing, yelling at or berating a person in front of another, insulting, racial slurs, or humiliating actions.

- *Sexual harassment* includes incidents of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, insulting gestures, whistling, jokes or humor about gender specific traits, offensive pictures, offensive contact such as patting, pinching, brushing against body, attempted or actual fondling, or kissing.
• **Physical threats** includes all actions, statements, written (including email, text messages) or non-verbal messages conveying threats of physical injury which were serious enough to unsettle your mind. It includes expressions of intent to inflict pain, injury, or punishment.

• **Physical assaults** includes the following incidents: hitting with body part, slapping, kicking, punching, pinching, scratching, biting, pulling hair, hitting with an object, throwing an object, spitting, beating, shooting, stabbing, squeezing, and twisting.

The survey was administered prior to conducting the interview for several important reasons. First the survey directions presented the participant with definitions and some examples of what to be considered as WPV (e.g., verbal harassment, sexual harassment, physical threat, and physical assault) to introduce consistency among participants’ responses. Next responses on the survey provided important information regarding past exposure to WPV that guided me in asking interview questions to ascertain more information about those specific incidents. Finally completion of the survey immediately before the interview was believed to assist the participant in recalling their personal exposure to WPV.

**Semi-structured interviews.** Upon completion of the survey, I conducted an individual semi-structured interview with each participant (see Appendix C - Interview Question Guide). An interview guide was used to ensure consistency of questions between interviews though additional probing questions were asked to explore participants’ unique responses. Interviews were audio-recorded with the permission of the participant. Interview questions explored participants’ perceptions of safety as it relates to WPV (e.g., Do you have any concerns about your personal safety while at work?), 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?),
productivity (e.g., When you were exposed to WPV, was your ability to focus or concentrate on your work affected by experiencing WPV? If yes, tell me how you feel your ability to focus was affected?), and stress and anxiety (e.g. When you were exposed to workplace violence, how did you feel physically? emotionally?).

**Participant Payments**

Each participant received a $25 VISA gift card as payment for their time and travel. Payments were distributed immediately after conclusion of the data collection activities. Participants were informed that they were entitled to receive payment regardless of whether they finished the survey or interview. The payment amount of $25 was based on the following rationale. Data collection activities did not occur during the participants’ work hours, nor did data collection take place at the participants’ worksites. Participants were compensated at a rate comparable to their hourly wage for the total time spent participating in the data collection activities. Data collection activities were estimated to take up to 90 minutes to complete and travel to and from the library may have taken an additional 90 minutes – representing a total of 180 minutes or 3 hours. Since the 2010 Ohio minimum wage is $7.30 (The Ohio Department of Commerce, 2009), I felt it was reasonable to provide participants with a payment comparable to at least three hours of pay or $25. All participants were given the same payment amount as each person’s participation was valued equally.

**Data Management**

All data from the surveys were entered into Microsoft® Excel 2007 (Redmond, WA) for management and analysis. One dissertation committee member reviewed 10 (1/3 of total surveys) randomly selected surveys to assess data entry accuracy. Digital audio-files of all participant interviews were downloaded and stored on a secure research server. All interviews
were transcribed verbatim by a professional transcription service. To ensure accuracy, I checked all typed transcripts with the audio-files prior to analysis. Interviews ranged in length from 8-62 minutes (mean = 25.9 minutes; median = 22.9 minutes; SD = 12.1).

**Protection of Human Participants**

The following section will present the risks and benefits of participation, procedures to ensure privacy of data and confidentiality of participants, data storage plan, and permissions received to conduct the study.

**Risks and Benefits**

There were no more than minimal risks for the study population. Each participant was informed of their right to cease the interview without loss of the participant payment if study participation made them emotional or distressed. In addition, I used my assessment skills as a registered nurse to monitor participants for signs of emotional or physical distress during each interview. No participants demonstrated or verbalized any emotional or physical signs of distress during the interview.

By participating in the individual interview, participants may have experienced catharsis, or an emotional release of stress and anxiety, by talking about their concerns about direct or indirect exposure to WPV. In addition, individuals may have benefitted from feeling their concerns about or exposure to WPV were valid and worthy of scientific research. Finally, all participants received a handout containing educational information about their rights and responsibilities as a teen worker at the end of the data collection session (see Appendix D - Teen Worker Rights & Responsibilities Handout).

Few studies have described the effects of WPV upon the psychological health and productivity of adolescent employees. The results of this study may be used in the future to
develop an instrument to measure the perceived effects of all four types of WPV upon the work lives of adolescent employees age 15-18. As such, this line of research has the potential to develop individual and organizational level interventions to address the issue of WPV among the adolescent working population which could be beneficial for future adolescent employees.

**Privacy and Confidentiality**

To ensure the confidentiality of individuals participating in the study, no identifiers were used on the surveys and during the interviews. All participants were assigned a study number and this number was used in place of the participant’s name on the survey, interview transcript, and digital audio-file of the interview. Participants provided verbal responses to the interview questions. All interviews were conducted at a neutral library location, not at the participants’ worksite. Any names used in the interviews were replaced with alternate names in the transcription. Participants were assured that only the investigators had access to the names of participants, survey data, interview audio-files, and transcripts.

All participants’ records were kept private. To decrease identification of participants, no data regarding worksite addresses were collected. All names used in the interview were replaced with alternate names in the transcription. Paper documents containing private information are stored in a locked cabinet within the Institute for Nursing Research and Scholarship at the University of Cincinnati - College of Nursing while the study is active and will be destroyed by shredding five years after study completion. All research reports used de-identified or aggregated data without participants’ names.

**Data Storage Plan**

The study involved the collection of identifiable data including interview digital audio-files. Research materials obtained from each participant included the Adolescent Employee WPV
Survey, interview audio-file, and transcription. All materials and data from this study were collected according to the study protocol. All surveys and data sheets were coded with the participant’s number; no participant names appeared on the data records. Quantitative data analyses were performed using participant number as the only identifier. Qualitative data analyses were performed using the transcriptions. Interview data were managed using NVivo 8® - qualitative data management software (Victoria, Australia). No personal identifiers were used to label the digital audio-files or corresponding verbatim transcripts. Each interview audio-file was compared with the verbatim transcript to verify accuracy of the transcribed data. Participants were informed in writing via the consent/assent form that their data would not be shared with their employer. Data were only reported in de-identified or aggregate form. The transcription company provided a confidentiality agreement prior to receiving the digital audio-files. Audio-files and typed transcripts were kept by the researcher in a locked cabinet at Institute of Nursing Research and Scholarship at the University of Cincinnati - College of Nursing. Only the research team had access to the audio-files and typed transcripts.

Permissions

Permission to conduct the study was obtained from executive and store level management of the participating company and the University of Cincinnati. Permission to recruit adolescent employees was obtained from the co-owner and Vice President of Retail Operations of the participating ice cream and confections manufacturer. The study protocol received approval from the University of Cincinnati Institutional Review Board – Social and Behavioral Sciences on January 14, 2010.
**Data Analysis**

This section will describe how analyses of data were completed for the study and how strategies were built into the study to generate legitimate results. Descriptive statistics were generated to describe the sample’s demographics (e.g. gender, race, ethnicity, mean age), mean number of hours worked each week, and number of current jobs. Separate analyses were performed for the quantitative and qualitative data. After these analyses were completed, the data were combined to perform the mixed data analysis. Each data analysis plan is outlined below.

**Quantitative Data Analysis**

The quantitative survey data were analyzed using simple descriptive statistical techniques. Because the 36-item Adolescent Employee WPV Survey provided several types of data, several descriptive statistical tests were run to generate means, frequencies, and percentages. The research questions addressed with the quantitative survey data were:

1. What number and percentage of participants reported ever being exposed to WPV at their current workplace?
2. What number and percentage of participants reported ever being exposed to each form of WPV at their current workplace?
3. What number and percentage of participants reported WPV exposures at their current workplace were perpetrated by criminals, customers, co-workers, supervisors, and personal acquaintances?
4. What number and percentage of participants reported ever participating in workplace training or education addressing WPV at their current workplace?
5. What number and percentage of participants reported awareness about their workplace’s WPV policies and procedures?
Quantitative survey findings are reported in Chapters 4 and 5 as percentages.

**Qualitative Data Analysis**

The goal of qualitative data analysis was to derive meaning from the data (Miles & Humberman, 1994). In this study, exploring and understanding data generated from interviews with working adolescents was a way to learn about perceptions of safety as it relates to WPV. Conventional content analysis using Miles and Huberman’s (1994) technique for conducting qualitative data analysis was used to analyze the transcribed interview data with a focus on identifying themes among the participants’ responses related to experiences of WPV and the effect of WPV on individual self-reports of stress, anxiety, and productivity at work. The following questions guided the analysis of the interview data.

1. What are adolescent employees’ perceptions of safety as it relates to WPV?
2. How do adolescent employees’ perceptions of safety as it relates to WPV affect feelings of stress and anxiety at work?
3. How do adolescent employees’ perceptions of safety as it relates to WPV affect their ability to be productive at work?

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 direct from the data (Hsieh & Shannon, 2005). The process of analyzing the content of the interview data consisted of “three concurrent flows of activity: data reduction, data display, and conclusion drawing” (Miles & Huberman, 1994, p.10). Continual reflection on the data as they were collected and analyzed allowed the researcher to dwell with the data and develop conclusions rooted in the qualitative data.
To perform data reduction, my dissertation chair and I independently conducted line-by-line reading and coding of the interview data. A focus was placed on identifying themes among the participants’ responses to the interview questions. My dissertation chair and I met routinely after the initial coding to develop a coding schema for themes and sub-themes related to adolescent employees’ experiences with WPV. NVivo 8® qualitative management software (Burlington, MA) was used to organize the participant responses by theme and sub-themes for distribution to the other three dissertation committee members for consensus building and triangulation. NVivo 8® also assisted with the identification and organization of the de-identified qualitative data into factors related to perceptions of safety as it relates to WPV and its effects on individual levels of stress, anxiety, and productivity at work.

Data display means an “organized assembly of information that permits conclusion drawing and action taking” (Miles & Huberman, 1994, p.11). Because textual data is too cumbersome to display and process, Miles and Huberman (1994) advise displaying data in selected, simplified configurations such as matrices, graphs, or charts. The result is the assembly of a large amount of data in a compact form that is readily accessible for continuing analysis. Codes representing textual data from the semi-structured interviews were entered into a table designed to display the data in the interviews according to the perceptions of safety as it relates to WPV and perceptions of safety’s effect on psychological health (i.e., stress and anxiety) and productivity (see Appendix E – Qualitative Data Display). The columns of the table included the identification number of the interview, the participant’s age and gender, perceptions of safety as it relates to WPV, reported psychological health effects, and reported effects on productivity. Information and codes from one interview were displayed in each row. Therefore looking at the
table horizontally, one can see each interview coded as a whole. Looking at the table vertically, similarities and differences among the interviews can be seen.

As data were collected, possible patterns/themes, explanations, and relationships were noted. Miles and Huberman (1994) caution that initial impressions should be held as tentative until they are verified. Strategies for verifying conclusions included identifying pervasive themes in the data, examining the plausibility of conclusions, clustering data into meaningful themes and sub-themes, and identifying contrasts and comparisons (Miles & Huberman, 1994). The identification of pervasive themes and patterns occurred throughout qualitative data analysis and resulted in the noting of connections or similarities and differences in the data. Seeing plausibility refers to the making of initial conclusions that make good sense or just seem to fit the data (Miles & Huberman, 1994). However these initial, plausible conclusions need further investigation to see if they hold true. In this study, findings are reported in Chapter 5 as qualitative themes and include quotes that best reflect the theme.

**Mixed Data Analysis**

After independent analysis of the quantitative and qualitative data, the quantitative and qualitative data were analyzed together. The quantitative data were used to develop categorical groups based on previous experiences of WPV and gender to further guide the analysis of the qualitative themes. The purpose of the qualitatively driven mixed method analysis was to uncover and describe differences in the qualitative themes about perceptions of safety as it relates to WPV among the quantitative categorical groups. Questions that guided the mixed method analysis were the following:

1. How does previous exposure to WPV affect adolescent employees’ perceptions of safety as it relates to WPV?
2. How does previous exposure to WPV affect adolescent employees’ perceptions of their ability to be productive?

3. How does previous exposure to WPV affect adolescent employees’ level of stress and anxiety?

4. How does previous exposure to WPV affect adolescent employees’ desire for additional WPV prevention strategies?

5. What gender differences exist in terms of their perceptions of safety as it relates to WPV?

6. What gender differences exist in terms of ability to be productive after WPV exposure?

7. What gender differences exist in terms of levels of stress and anxiety after WPV exposure?

8. What gender differences exist in terms of adolescent employees’ desire for additional WPV prevention strategies?

To organize and analyze the combined data, data displays were used to assemble qualitative data to answer the mixed methods questions presented above (see Appendix F – Mixed Method Data Display). The columns of the original data display table were expanded to include the categories of past experience with WPV (yes/no), WPV education/training (yes/no), and knowledge of WPV policies/procedures (yes/no). Information from each interview was displayed in each row. Therefore looking at the table horizontally, one can see each interview coded as a whole. Looking at the table vertically, one can see the similarities and differences among the interviews. The mixed method data display assisted in the detection of additional themes. 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 (Miles & Huberman, 1994). Mixed method findings are reported in Chapter 5.

Emergence of a new area – Proposed responses to WPV

In keeping with MMR methods, the data collection plan evolved early in the process. This was based on findings from the first four participants. An additional area of focus surfaced during several different lines of questioning including: questions about witnessed or rumored WPV incidents at their workplace, employer provided WPV education and training, and whether concerns about future WPV made participants feel stressed or anxious. During the course of responding to the above questions, participants expressed they had wondered or thought about how they might respond to future WPV incidents. The area of proposed response to future WPV incidents was not a phenomenon identified from the literature as being related to perceptions of safety as it relates to WPV. Yet, because this area of focus emerged in all of the first four interviews and appeared to be associated with participants’ perceptions of safety as it relates to WPV, it was worthy of further exploration. Therefore, the original study design was expanded to allow for exploration of how adolescent employees thought they would respond to future WPV incidents.

To guide the exploration of this new focus area, the following research study question was added: What responses do adolescents propose in response to hypothetical vignettes of violence they might encounter in the workplace? To assist in generating answers to this new research question, a series of hypothetical vignettes were added as an addendum to the interview study guide (see Appendix G). For consistency sake, the hypothetical vignettes of WPV presented to the participants consisted of the same forms (i.e. verbal harassment, sexual harassment, physical threats, physical assaults, robbery) and perpetrators (i.e. customer,
coworker, supervisor, personal acquaintance) of WPV presented to participants during the quantitative survey.

**Qualitative data analysis.** Conventional content analysis (as described in the previous qualitative data analysis section) was used to analyze participants’ responses to the hypothetical vignettes of WPV. The research question that guided the qualitative analysis of this emergent data was: In what ways do adolescent employees propose responding to WPV? Data were reduced through line-by-line reading and coding conducted by my dissertation chair and I. Initial coding led to the development of themes and subthemes. NVivo 8® qualitative management software (Burlington, MA) was used to organize the coding and theme-building process. Qualitative findings are reported in Chapter 6 as themes and include direct quotes that best exemplify each theme.

**Legitimation**

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 (Onwuegbuzie & Collins, 2007; Onwuegbuzie & Johnson, 2006). In our study we addressed the following types of legitimation described by Onwuegbuzie and Johnson (2006): sampling integration, inside-outside, weakness minimization, sequential legitimation, and multiple validities (Onwuegbuzie & Johnson, 2006). Sample integration, or the “extent to which the relationship between the quantitative and qualitative sampling designs yield quality meta-inferences” (Onwuegbuzie & Johnson, 2006, p. 57), 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 utilizing 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 sequence in which data are collected 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 quantitative and qualitative results as described below were incorporated into the study design, data collection, and analysis.

**Content validity.** Content validity was established for the survey. According to Polit & Beck (2006): “content validity concerns the degree to which a sample of items, taken together, constitute an adequate operational definition of a construct” (p. 490). Acceptable values for content validity are .80 – 1.0 for individual items and .90 – 1.0 for an overall survey (Polit & Beck, 2006). As described previously, content validity was established for the survey thus increasing my level of confidence that the survey items would capture the type of data they were intended to produce.

**Trustworthiness.** Trustworthiness in qualitative research parallels validity and reliability in quantitative research (Lincoln & Guba, 1985). Since the study used a qualitative dominant MMR design, trustworthiness was addressed through credibility, transferability, dependability, and confirmability during collection and analysis of the qualitative core component. Credibility refers to the truth value of the data and is equivalent to internal validity (Lincoln & Guba, 1985).
This criterion for rigor was met through investigator triangulation and debriefings. Investigator triangulation was achieved when the consensus was achieved among all members of the dissertation committee regarding the themes, subthemes and findings from the data. In addition, I conducted debriefing sessions with a third-party after each interview to sort through issues encountered with each interview. The third-party individual signed a confidentiality agreement and was not provided with identifiable information. Debriefing occurred before I reviewed the raw data to minimize any researcher bias. Lincoln and Guba (1985) wrote that the purpose of debriefings are to “…provide the inquirer an opportunity for catharsis, thereby clearing the mind of emotions and feelings that may be clouding good judgment or preventing emergence of sensible next steps” (p. 308). Transferability is the reader’s ability to draw conclusions between the context of the study findings and a second population (Lincoln & Guba, 1985). Transferability is equivalent to external validity and can only be determined by a reader because only the reader can know the context of the second population (Lincoln & Guba, 1985). To increase the transferability of the study findings, a thick description with excerpts for each theme was provided as well as summary findings in data display tables. Dependability is equivalent to reliability and confirmability is equivalent to objectivity (Lincoln & Guba, 1985). Both dependability and confirmability were met through the use of an audit trail and investigator triangulation. An audit trail is a process used by qualitative researchers to track decisions for the theme and subtheme generation. In addition, the audit trail was used to discuss the study findings in relation to the published literature (Lincoln & Guba, 1985). Investigator triangulation was done with the committee members whom did not conduct the individual interviews; therefore, all findings and conclusions by committee members came directly from the data.
Funding and Budget

This research was supported by the NIOSH Pilot Research Training Program of the University of Cincinnati Education and Research Center Grant #T42/OH008432-05. Major expenses covered by the grant were participant payments, digital audio-recording equipment, professional transcription fees, and qualitative analysis software.

Manuscript Option Dissertation

The format for this dissertation was the manuscript option dissertation. A benefit of the manuscript option dissertation is the ability for the student to author and submit manuscripts based on the dissertation prior to graduation versus attempting to collaborate with dissertation committee members on manuscript development during the first several years after graduation (deJong, Moser, & Hall, 2005). As a result, Chapters 4, 5, and 6 are individual manuscripts. Each chapter-based manuscript includes an introduction, methods, results, and discussion of the findings. Chapter 4 reports the quantitative survey results and describes adolescent workers’ direct exposures to WPV, participation in WPV education and training, and awareness of WPV policies and procedures at their current workplace. Chapter 5 reports the results of the qualitative dominant mixed methods study exploring adolescent employees’ perceptions of safety as it relates to WPV. Perceptions of safety as it relates to WPV were explored by categories of past exposure to WPV and gender. Chapter 6 reports the results of qualitative findings related to data related to adolescents’ proposed responses to hypothetical vignettes of violence they might encounter in the workplace.

Chapter Summary

This study used a qualitative dominant mixed method approach to explore adolescent employees’ perceptions of safety from workplace violence. A minimum of 30 adolescent
employees age 15-18 who work at 1 of 14 retail ice cream and confectionary stores were recruited to complete a 36 item closed answer survey and participate in one semi-structured interview. There were no more than minimal risks to the participants and study procedures were used to ensure participant confidentiality and privacy of data. Data from the interviews were analyzed using conventional content analysis and survey data was analyzed using simple descriptive statistical techniques. Mixed data analysis was performed using categories developed from the quantitative data to explore the qualitative data for differences among quantitative groups. Various strategies were utilized throughout the study to yield legitimate mixed methods results.
CHAPTER 4 - ADOLESCENT WORKERS’ DIRECT EXPOSURES TO WORKPLACE VIOLENCE (MANUSCRIPT 1)

Approximately 5.9 million adolescents age 16-19 were employed in the U.S. civilian labor force in 2010 (U.S. Department of Labor, 2011) – primarily in the retail and service sectors (Runyan et al., 2007). Certain work environment characteristics (e.g., high levels of customer interaction, cash handling, working early morning and late night hours) contribute to increased workplace violence (WPV) risk among retail and service sector workers (Schaffer, Casteel, & Kraus, 2002; Schat et al., 2006). This brief reports results of adolescent workers’ direct exposures to WPV at their current workplace.

Methods

A cross-sectional research design was used adolescent workers’ direct exposures to WPV at their current workplace during the first phase of a larger mixed methods study exploring adolescent workers’ perceptions of WPV. Participants were employed by a chain of 14 retail stores selling ice cream, confectionaries, and baked goods. These stores employ over 250 retail workers in one Midwestern metropolitan area of which approximately 50% are adolescents. A convenience sample of 30 workers aged 15-18 was recruited through direct solicitation and flyers hung in participating stores. Participants were required to work at least eight hours weekly and be proficient in English. The pilot sample size of 30 was deemed sufficient for this study based on the ability to achieve qualitative data saturation (Molnar et al., 2005; Varjas et al., 2008; Waldon, 2005).

Survey data were collected by the principal investigator (PI) between April 2010 and April 2011. Assent and parental permission (for those 15-17 years old) or informed consent (for those 18 years old) was obtained prior to any data collection. Interviews were conducted by the
PI at a public library or by telephone. Participation was voluntary. Participants could refuse to answer any question or stop participation at any time. The University of Cincinnati Institutional Review Board approved the research protocol.

An investigator-developed survey was used to assess the participants’ direct exposures to WPV (definitions were provided for all forms of WPV), attendance at employer-offered WPV training and education, and awareness of policies or procedures addressing WPV at their current workplace. Survey questions were developed from past workplace research (Rauscher, 2008; Runyan et al., 2007; Runyan et al., 2005). The content validity index (CVI) for individual survey items ranged from 0.8 to 1.0 and the overall survey CVI was 0.98. Direct exposures to WPV were measured with a series of yes/no questions asking participants if they had ever experienced verbal harassment, sexual harassment, physical threats, or physical assaults at this job. Participants who experienced WPV were asked to identify their relationship with the perpetrator(s) (i.e., customer, coworker, supervisor, family member, friend). Survey responses were analyzed using simple descriptive statistics.

**Results**

Table 4.1 presents demographic characteristics of the sample: 67% were female, 53.3% were age 18, and 76.7% worked evening hours. Table 4.2 presents reports of WPV exposure, participation in WPV training, and awareness of WPV policies and procedures.
**Table 4.1.**
*Worker Demographics (n = 30)*

<table>
<thead>
<tr>
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<th>Total Percent</th>
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<tbody>
<tr>
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<td>Evenings</td>
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<td>76.7</td>
</tr>
<tr>
<td>Days/Evenings</td>
<td>7</td>
<td>23.3</td>
</tr>
</tbody>
</table>

**Table 4.2.**
*Reports of WPV Exposure, Participation in WPV Training, and Awareness of WPV Policies and Procedures (n = 30)*

<table>
<thead>
<tr>
<th></th>
<th>Total Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Any Exposure to WPV</td>
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<td>50</td>
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<tr>
<td>Verbal Harassment</td>
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<td></td>
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<tr>
<td>Customer</td>
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<td>23.3</td>
</tr>
<tr>
<td>Coworker</td>
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<td>3.3</td>
</tr>
<tr>
<td>Supervisor</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Coworker</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Robbery</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Participation in WPV training/education</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Awareness of WPV policies/procedures</td>
<td>27</td>
<td>90</td>
</tr>
</tbody>
</table>
Half the respondents reported exposure to at least one form of WPV including verbal harassment, sexual harassment, and robbery and one-third of those exposed reported experiencing more than one form of WPV. None of the respondents reported exposure to physical threats or physical assaults. WPV perpetrators included customers, coworkers, and supervisors but not friends or family. Nine respondents (30%) reported exposure to verbal harassment: seven from customers, one from a coworker, and four from supervisors. Six respondents (20%) reported sexual harassment exposure: three from customers, two from coworkers, and one from a supervisor. Six respondents (20%) reported exposure to robbery by customers. No incidents involved a weapon. While less than half the respondents participated in WPV training or education, 27 respondents (90%) were aware of at least one policy or procedure pertaining to WPV (e.g., sexual harassment, robbery).

Discussion

The current findings support previous research that adolescent workers experience WPV (Rauscher, 2008). In a cross-sectional survey of nearly 1,200 adolescents age 14-17, Rauscher (2008) reported one-third had experienced WPV while employed at a formal job – a rate lower than reported in the current study. Similarities between current findings and Rauscher (2008) include verbal threats being the most common form of WPV and customers being the most common perpetrator. Unlike Rauscher’s findings, there were no reports of physical assault. In this study 40% of respondents reported participating in WPV training or education – a rate comparable to findings of two previous studies among adolescent workers (Runyan et al., 2005; Runyan et al., 2007). Study limitations include the small non-representative sample, use of self-report survey data, and measuring violence exposure categorically (yes/no) versus the number of WPV exposures experienced.
As adolescence is a time of cognitive, emotional and social maturation (Runyan et al., 2003; NRC, 1998), adolescent workers may possess limited confidence, social skills, and decision-making capacity to maximize their personal safety in the workplace. Combined with previous research, current findings suggest adolescent workers are exposed to WPV and receive inadequate education and training. Consequently lack of training compounded by developmental immaturity may place adolescent workers at an increased risk for WPV exposure when compared to adult workers in the retail and service sector. Research with large randomized samples needs to be conducted to measure WPV incidence, risk factors and consequences among adolescent workers. Only then can targeted WPV interventions be developed and tested to determine their effectiveness among this vulnerable worker population.
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 (Lambert, Ialongo, Boyd, & Cooley, 2005; Vermeiren, Schwab-Stone, Deboutte, Leckman, & Ruchkin, 2003; Zinzow et al., 2009) and development (Lambert et al., 2005; Schiavone, 2009). One setting where violence exposure among adolescents may occur, yet has received little attention from researchers, is in the workplace. With nearly six million U.S. adolescents age 16-19 working in the private sector (BLS, 2011a) researchers and health care professionals need to understand adolescents’ risk for WPV exposure so interventions to mitigate said risks can be developed. However, before intervention development 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 as it relates to workplace violence (WPV).

Most employed U.S. adolescents work at jobs in the retail and service sector (Runyan et al., 2007). 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 (Runyan et al., 2005; Runyan et al., 2007). Despite the presence of known risk factors, adolescent employees report receiving limited WPV specific training and education from their employers (Runyan et al., 2005; Runyan et al., 2007). Moreover researchers previously determined adolescents do experience WPV (Rauscher, 2008) and express concerns about how to handle future WPV incidents such as anger from customers, co-worker conflict, and robbery (Runyan et al., 2005).
Perceptions of safety as it relates 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 (LeBlanc & Kelloway, 2002; Mueller & Tschan, 2011). An organizational factor found to influence perceptions of safety is the psychological violence prevention climate of their workplace (Chang et al., 2012; Kessler et al., 2008; Spector et al., 2007). 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 (Kessler et al., 2008; Spector et al., 2007). Organizations with positive psychological violence prevention climates have been associated with lower rates of WPV (Chang et al., 2012; Kessler et al., 2008; Spector et al., 2007), associated with increased motivation to perform behaviors to prevent or reduce WPV (Chang et al., 2012), and can moderate the negative psychological effects of WPV (Law, Dollard, Tuckey, & Dormann, 2011). Conversely organizations with poor psychological violence prevention climates have been associated with previous WPV victimization, increased levels of employee physical and psychological health complaints (Chang et al., 2012; Kessler et al., 2008; Law et al., 2011; Spector et al., 2007), and reduced compliance with violence prevention compliance (Chang et al., 2012). Environmental factors have been found to influence rates of criminally-related WPV and therefore may influence individuals’ perceptions of safety from some forms of WPV include the presence of environmental design features (e.g., cash-control measures, good lighting/visibility, safety, and surveillance equipment) (Casteel, Peek-Asa, Greenland, Chu, & Kraus, 2008).

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 the relationship of 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 as it relates to WPV differ based on (a) exposure to WPV and (b) gender?

**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 (Johnson & Onwuegbuzie, 2004). Qualitative interviews were the core component (primary source of data) and a survey was the supplementary component (supportive data) to enhance the analysis and interpretation of the qualitative data (see Figure 5.1).
Figure 5.1. Qualitative dominant mixed methods study design.

What are adolescent employees’ perceptions of safety from WPV?

Explorative focus: QUAL (Inductive)

Select core QUAL method (semi-structured interviews)

Collect core (primary) data for QUAL

Analyze core QUAL data using conventional content analysis

Research findings for QUAL

Mixed method research findings

Inform the research question

Enhance description by simultaneously including a quan (deductive) component

Simultaneous supplemental

Select supplementary quan data collection method (survey)

Simultaneously collect supplementary quan data

Simultaneously analyze supplementary quan data

Simultaneously integrate quan supplementary findings with those of core component

Results point of interface
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 who were eligible for study participation. Thirty participants or one-quarter (25%) of the total number of employees aged 15-18 comprised the study sample. 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 above inclusion criteria were deemed eligible to participate. This study was approved by the University’s Social and Behavioral Sciences Institutional Review Board. Participation was voluntary and participants were informed of their right to refuse to answer any questions and withdraw at any time. No participants withdrew.

Procedures

After permission was obtained from corporate and store-level management, 31 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 principal investigator (PI). Interested employees were instructed to contact the PI 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 and conducted at a neutral location (i.e. public library) or over the telephone to ensure confidentiality. Participants received a $25 Visa gift card as payment.

**Survey.** A survey created by the study team was used to assess the participants’ direct exposure to WPV, participation in employer-offered WPV training and education, and awareness of policies or procedures addressing WPV at their current workplace. Survey questions were developed from previous WPV research (Rauscher, 2008; Runyan et al., 2005; Runyan et al., 2007). Direct exposures to WPV were measured with a series of yes/no questions asking participants if they had experienced verbal harassment, sexual harassment, physical threats, or physical assaults at this job. Definitions of each form of WPV were provided. Participants who reported WPV exposure(s) were asked to identify their relationship with the perpetrator(s) (i.e., customer, coworker, supervisor, family member, friend). Seven WPV experts reviewed the survey for content validity. The CVI for individual survey items ranged from 0.8 to 1.0 and the overall survey CVI was 0.98. Survey responses were analyzed using simple descriptive statistics.

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 PI 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.** Semi-structured interviews were conducted with participants after survey completion and review of survey responses by the PI. 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’ perceptions of safety as it relates to WPV including 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?), productivity (e.g., When you were exposed to WPV, was your ability to focus or concentrate on your work affected by experiencing WPV? If yes, tell me how you feel your ability to focus was affected?), and psychological health (e.g. When you were exposed to workplace violence, how did you feel?). 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 CS prior to analysis. Interviews ranged in length from 8-62 minutes (mean = 25.9 minutes; median = 22.9 minutes; SD = 12.1).

**Data Analysis**

Separate analyses were performed for the survey and interview data. After these analyses were complete, the data sets were combined to conduct the mixed-method analysis.

**Quantitative data analysis.** Descriptive statistics were used to examine the sample’s demographics, self-reports of direct exposure to WPV, WPV training and education, and awareness of workplace policies and procedures to address WPV. All descriptive statistics were performed using Microsoft® Excel 2007 (Redmond, WA).

**Qualitative data analysis.** 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 direct from the data (Hsieh & Shannon, 2005). A systematic approach for conducting the analysis as described by Miles and Huberman (1994) was used to structure the steps of analysis. Data were reduced through line-by-line reading and coding by the PI 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® qualitative management software (Burlington, MA) was used to organize the coding and theme-building process. Qualitative findings are reported as themes and include quotes that best exemplify the theme.

**Mixed data analysis.** After independent qualitative and quantitative analyses were completed, the data were analyzed together. Qualitative themes were explored for nuances in perceptions of safety as it relates to WPV, stress and anxiety, productivity, and desired WPV prevention strategies 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 (Miles & Huberman, 1994).

**Legitimation**

Strategies were incorporated into the study design to address legitimation for quality in mixed methods research. Legitimation refers to the processes researchers incorporate to obtain and report findings that are credible, trustworthy, dependable, transferable, and confirmable (Onwuegbuzie & Collins, 2007; Onwuegbuzie & Johnson, 2006). In our study we addressed the following types of legitimation described by Onwuegbuzie and Johnson (2006): sampling integration, inside-outside, weakness minimization, sequential legitimation, and multiple validities (Onwuegbuzie & Johnson, 2006). Sample integration, or the “extent to which the relationship between the quantitative and qualitative sampling designs yield quality meta-inferences” (Onwuegbuzie & Johnson, 2006, p. 57), 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 utilizing 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 sequence in which data is collected 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 utilized 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 utilized throughout qualitative data collection and analysis to produce trustworthy qualitative findings.

Results

Sample Characteristics

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 5.1.

**Table 5.1.**
**Sample Demographics (n = 30)**

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<tr>
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<th>Total number</th>
<th>Percent</th>
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<tr>
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<td>0</td>
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<tr>
<td>Evenings (3 p.m. – 11 p.m.)</td>
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<td>Days/Evenings</td>
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**Survey Results**

Half the participants (n = 15) reported direct exposure to at least one form of WPV including verbal harassment, sexual harassment, and robbery with one-third of those (n = 5) reporting direct exposure to more than one form of WPV. No participants reported direct exposure to a physical threat or physical assault.
Survey results were then analyzed using the Cal/OSHA WPV typology (1995). Six participants (20%) reported exposure to incidents perpetrated by people who had criminal intentions (Type 1 WPV). Nine participants (30%) reported exposure to incidents perpetrated by customers (Type 2 WPV). Seven participants (23.3%) reported exposure to WPV perpetrated by a coworker or supervisors (Type 3 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 4 WPV). Table 5.2 shows reported perpetrators by form of WPV exposure.

Table 5.2.
Perpetrators of WPV, by Form of Violence Exposure (n = 15)

<table>
<thead>
<tr>
<th>Form of workplace violence exposure</th>
<th>Number (%)</th>
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<tr>
<td></td>
<td>Verbal harassment</td>
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<tr>
<td>Criminal</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Customer</td>
<td>7 (46.7%)</td>
</tr>
<tr>
<td>Coworker</td>
<td>1 (6.7%)</td>
</tr>
<tr>
<td>Supervisor</td>
<td>4 (26.7%)</td>
</tr>
<tr>
<td>Family/friend</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

\(^a\) = Categories are not mutually exclusive as respondents were asked to identify all persons who had ever perpetrated each form of WPV against them.

Twelve participants (40%) reported participating in some form of WPV training from their current employer. The median number of scenarios for which training was received was 3.5 (average = 4.3; range 2-7). Twenty-seven participants (86%) reported awareness of at least one
policy or procedure to handle a WPV scenario at their current place of employment. The median number of policies and procedures reported was three (average = 3.3; range 0-8). Table 5.3 presents the categories of WPV specific training and education and policies or procedures of which participants reported participation and awareness.

Table 5.3.
Employee Participation in Training/Education and Awareness of Policies/Procedures, by Potential WPV Exposure

<table>
<thead>
<tr>
<th>Potential WPV exposure</th>
<th>Training/education participation</th>
<th>Policies/procedure awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (%) (n = 12)</td>
<td>Number (%) (n = 27)</td>
</tr>
<tr>
<td>Robbery</td>
<td>6 (50)</td>
<td>12 (44.4)</td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal harassment</td>
<td>8 (66.7)</td>
<td>18 (66.7)</td>
</tr>
<tr>
<td>Sexual harassment</td>
<td>4 (33.3)</td>
<td>8 (29.6)</td>
</tr>
<tr>
<td>Physical threat or assault</td>
<td>7 (58.3)</td>
<td>13 (48.1)</td>
</tr>
<tr>
<td>Coworker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal or sexual harassment</td>
<td>6 (50)</td>
<td>16 (59.3)</td>
</tr>
<tr>
<td>Physical threat or assault</td>
<td>7 (58.3)</td>
<td>15 (55.6)</td>
</tr>
<tr>
<td>Repeated phone calls</td>
<td>5 (41.7)</td>
<td>9 (33.3)</td>
</tr>
<tr>
<td>Stalking</td>
<td>6 (50)</td>
<td>8 (29.6)</td>
</tr>
</tbody>
</table>

Qualitative Themes

Several themes described adolescent employees’ perceptions of safety as it relates to WPV as well as the perception’s effect upon the employee’s levels of stress, anxiety, and productivity at work. Themes identified were (a) perceptions of safety, (b) productivity, (c) stress responses, and (d) desire for workplace violence strategies. The following sections will present
each theme along with exemplars to describe how they inform the respondents’ perception of safety from WPV.

**Perceptions of safety.** Participants were asked directly about their overall perception of safety from WPV. The theme *Perception 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.* Two subthemes of overall safety of the work environment included a positive safety perception and mixed feelings about perception of safety. Perceptions of safety as it relates 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 [low level WPV] did happen, but I wouldn’t say I’m afraid of it, because I don’t think it’s really a huge deal.”

*Safety in numbers.* Participants described how perceptions of safety as it relates to WPV were influenced by 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 as it relates 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.

**Stress responses.** Participants described experiencing stress responses to WPV. Stress responses were cognitive, physical, emotional, and behavioral. Participants often described experiencing more than one type of stress response.

**Cognitive stress response.** Participants described confusion in thinking, difficulty in making decisions, lowered concentration, or intrusive thoughts in response to a WPV incident. An 18 year-old female recalling her involvement in a robbery provoked the following response: “I just kind of kept talking about it, and I would get distracted and stuff, or be thinking about it… so it was in my head for the rest of the night.”

**Physical stress response.** Participants reported experiences of excessive sweating, dizziness, feeling flush in the face, or crying in response to a WPV incident. After being verbally harassed by a customer, a 17 year-old male recalled: “I got that sweeping cold feeling, like and kind like this tingly sensation and my skin turned red… and I felt real hot.”
Emotional stress response. Participants described feeling shock, anger, overwhelmed, frustration, and humiliation in response to a WPV incident. An 18 year-old male remembered being verbally harassed by a customer because of a discrepancy in pricing: “I mean I felt frustrated that [the customer] was taking it out on me, like I had nothing to do with pricing.”

Behavioral stress response. Participants reported intentionally avoiding the perpetrator, avoiding similar situations, and being hyper-alert in response to a WPV incident. A 17 year-old female recalled her behavior changing after being directly involved in a quick-change robbery where the con artist intentionally confused her by paying with a large denomination bill and then kept changing his mind about how he wanted the change returned to him: “I mean, every single time, like, someone, like, looked like him would come in, I’d be, like, is that the guy?”

Productivity. Participants expressed how exposure to WPV affected their ability to do their jobs. Responses in this theme were categorized as “affected” or “not affected.” Participants who reported exposure to WPV as affecting their productivity described the effect lasting from only a few moments to the remainder of the work shift and influenced their interactions with others (e.g., coworkers, manager, customers). An 18 year-old female recalled her productivity was affected by an incident of sexual harassment from her manager:

I’m sure my interaction with [the manager] wasn’t very good like for the rest of the shift. And then for like a little bit after that maybe with like the customers I wasn’t as happy as I had been before. I kept thinking about it, and just like mulling it over in my head but I wasn’t just like sitting there doing nothing. I just kept working but my thoughts were kind of like racing but I kept working.

Conversely some participants felt their exposure to WPV had no effect on productivity. A 16 year-old male described how experiencing customer verbal harassment did not affect his
productivity: “Um I mean I obviously made a comment to my coworkers like, ‘Oh, that guy was a jerk,’ but – Yeah. I mean typical coworker, talking about stuff, but um no, it didn’t really change anything [ability to work].”

**Desired WPV prevention strategies.** The theme “Desired WPV prevention strategies” encompasses three distinct subthemes of participant responses about what they thought could foster a safer work environment.

**Safety measures.** 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.

**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.
Everything is fine. A few participants felt 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.”

Mixed Data Results

The qualitative themes were reanalyzed to assess for differences among participant responses based on the dichotomous categories of direct exposure to WPV (yes/no) and gender. The mixed data results are discussed below and presented in Table 5.4.
Table 5.4.
Perceptions of Safety, by Direct WPV Exposure and Gender

<table>
<thead>
<tr>
<th>Perception of Safety from WPV Environment</th>
<th>Direct Exposure to WPV</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (%) (n = 15)</td>
<td>No (%) (n = 15)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Feels safe”</td>
<td>11 (73.3)</td>
<td>10 (66.7)</td>
</tr>
<tr>
<td>“Has concerns”</td>
<td>4 (26.7)</td>
<td>5 (33.3)</td>
</tr>
<tr>
<td>Safety in Numbers</td>
<td>5 (33.3)</td>
<td>14 (93.3)</td>
</tr>
<tr>
<td>Perceived effect of actual WPV incident on productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity affected</td>
<td>8 (53.3)</td>
<td>--</td>
</tr>
<tr>
<td>Productivity not affected</td>
<td>7 (46.7)</td>
<td>--</td>
</tr>
<tr>
<td>Stress Response to actual WPV incident&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>12 (80)</td>
<td>--</td>
</tr>
<tr>
<td>Cognitive</td>
<td>6 (40)</td>
<td>--</td>
</tr>
<tr>
<td>Behavioral</td>
<td>5 (33.3)</td>
<td>--</td>
</tr>
<tr>
<td>Physical</td>
<td>5 (33.3)</td>
<td>--</td>
</tr>
<tr>
<td>Desired WPV Prevention Strategies&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Measures</td>
<td>5 (33.3)</td>
<td>7 (46.7)</td>
</tr>
<tr>
<td>Education and Training</td>
<td>13 (86.7)</td>
<td>12 (80)</td>
</tr>
<tr>
<td>None needed – “everything is fine”</td>
<td>2 (13.3)</td>
<td>2 (13.3)</td>
</tr>
</tbody>
</table>

<sup>b</sup> = Categories were not mutually exclusive

**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 differences 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 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, unique differences were 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 differences were observed between the groups among all three subthemes of desired WPV prevention strategies. Less than half of participants in both 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 that view that everything was fine. Whereas the themes of productivity and stress response were developed from responses provided only by participants with direct exposure to WPV, mixed analysis of themes based on the category of direct exposure was not conducted.

**Gender.** Gender differences 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. Differences among female and male responses were also 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. Among the 15 participants who reported direct exposure to WPV, half (n = 8) reported that the incident affected their ability to do their job. A difference was observed between males and females, where a higher proportion of
females reported that the incident affected their productivity than males (58.3% vs. 33.3%). However no differences were observed among male and female participants who reported experiencing a stress response. A few differences were observed between male and female participants’ responses in the theme of Desired WPV prevention strategies. Though a small difference existed among the percentage of female versus male participants discussing safety measures (35% vs. 50% respectively), unique differences 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.

**Discussion**

The results of this study demonstrate adolescent employees’ express positive and mixed perceptions of safety as it relates to WPV. Despite the current positive and mixed perceptions of safety as it relates to WPV, most adolescent participants expressed an overall desire for their employer to address future WPV through increasing safety measures and/or providing targeted education and training on how to handle WPV incidents. Differences in perceptions of safety were detected based on direct exposure to WPV and gender. Exposure to WPV influenced perceptions of safety related to the theme of Safety in numbers present but did not influence overall safety of the work environment. Gender differences were present among perceptions of safety related to the work environment and the desire for WPV education and training.

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 (2008) 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, findings similar to previous studies which found adolescents working in the retail sector receive limited WPV-specific education and training from their employer (Runyan et al., 2005; Runyan et al., 2007).

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 interventions such as cash control, maintaining good lighting and visibility inside and outside of the store (Zahm, 2004), training employees in violence prevention, and the presence of safety and security equipment (Casteel & Peek-Asa, 2000) have been associated with lower rates of criminally-related WPV among retail and service establishments (Casteel et al., 2008). 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 that contributed 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 theme of Safety in numbers. As working alone is a known risk factor for WPV among adolescent employees (Runyan et al., 2005), 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 (2011) found that employees’ exposure to WPV increased their perceived likelihood of future violence and indirectly increased fear of future violence. 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 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 theme Everything is fine more than female participants. Gender differences may have been influenced by several factors. Females are more often the recipient of WPV as compared to males (Mayhew & Chappell, 2007; Rauscher, 2008). Rauscher (2008) discovered statistically significant differences by gender with 34% of female adolescent workers reporting experiences of any 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). 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%) (Rauscher, 2008). In our study no participants reported exposure to physical threats or assaults, so it may be that our male participants do 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 adolescent workers found twice as many females (8%) as males (4%) reported fear of assault at work (Dunn et al., 1998). In addition, research with adults found women were more likely to express concerns or fears about future crime than males (Jackson, 2009). 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 responding, Sutton and Farrall (2005) 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. 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 theme of *Everything is fine.*

**Limitations**

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

**Conclusion**

A majority of adolescent employee participants from a retail chain expressed positive perceptions of safety as it relates 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 as it relates to WPV suggest that adolescents may not consider violence exposure as a major concern while at work. Even though our participants may not consider WPV as 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.

Health care professionals are well positioned to discuss the issue of employment with adolescents and their parents. As providers (i.e. nurse practitioners, physicians) in community, primary care, and episodic care settings have frequent contact with adolescents, they have the opportunity to educate about and screen for work-related safety risks including WPV exposure. Providers should advise adolescents and their parents to investigate current and future worksites for the presence of WPV control and elimination strategies. 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 direct education and screening, health care professionals should advocate that adolescents complete work-readiness training 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 (Centers for Disease Control and Prevention, 2007; Linker, Miller, Freeman, & Burbacher, 2005). 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.”
Future research needs to be conducted to further explore adolescent employees’ perceptions of safety from violence and how these perceptions influence their ability to recognize risks for WPV, handle incidents of WPV, and cope with exposure to WPV. 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 life as a productive and healthy employee.
CHAPTER 6 – WHEN FACED WITH WORKPLACE VIOLENCE,
HOW WOULD ADOLESCENTS RESPOND? (MANUSCRIPT 3)

Violence exposure among adolescents has received increased attention among researchers, practitioners, and educators in recent years (deLara, 2008; Elledge, Cavell, Ogle, Malcolm, Newgent, & Faith, 2010; Rauscher, 2008; Waasdorp & Bradshaw, 2011). Violence exposure occurs in various contexts such as home, school, and the community. One understudied context where adolescents are exposed to incidents of violence is in the workplace violence. Approximately 5.9 million U.S. adolescents age 16-19 hold part-time or full-time positions in the private sector (BLS, 2011a) and are at risk for incidents of workplace violence (WPV). It remains unknown whether adolescent employees not exposed to WPV have a planned response to future WPV incidents that is appropriate for the occupational setting. The purpose of this study was to explore what adolescents propose to do when faced with WPV.

Workers of all ages, including adolescents, are exposed to WPV (Harrell, 2011). A survey of 1,171 adolescent workers age 14-17 reported that nearly one-third of participants (n = 368) had experienced violence at least once since they started working (Rauscher, 2008). Exposure to WPV included verbal threats (25%; n = 294), physical attacks (10%; n = 117), and sexual harassment (10%; n = 115) perpetrated by customers, coworkers, supervisors, or a family member or friend. Further, adolescents express concerns regarding potential for exposure to WPV. A multi-site cross-sectional survey conducted by Runyan et al. (2005) found adolescents age 14-17 (n = 396) with current or past work experience in the retail sector expressed concerns about experiencing future WPV, such as dealing with angry customers, not getting along with coworkers, and being physically attacked. Despite adolescent workers reporting concerns about and experiences of WPV, adolescents reported receiving minimal training and education on
handling incidents of WPV (Runyan et al., 2007). No published studies were found evaluating adolescent employees’ proposed or actual responses to aggressive incidents in the workplace.

Compared to the dearth of research examining adolescent employees’ responses to WPV, several researchers have explored adult employees’ actual responses to violence. Responses to WPV reported by adult employees include problem-focused, escape-avoidance, and support-seeking strategies (Aquino & Thau, 2009; Skinner, Edge, Altman, & Sherwood, 2003). Problem-focused strategies include ones in which the victim deals directly with the problem and include tactics such as ingratiation (Yagil, Ben-Zur, & Tamir, 2011), making the aggressor happy (Grandey et al., 2007), direct communication (Turte, Correa, da Luz, & Fischer, 2012; Yagil et al. 2011), or retaliation/defending oneself (Zapf & Gross, 2001). Conversely, escape-avoidance strategies include ones in which the victim seeks to disengage from rather than deal with the problem through tactics such as avoiding contact with aggressor (Yagil et al., 2011). Support-seeking strategies include ones in which the victim seeks out help, advice, or support from others to deal with one’s feelings about the problem and include venting/sharing emotions about the WPV incident, advice-seeking (Yagil et al. 2011), and seeking support from coworkers as witnesses to the incident (Reynolds & Harris, 2006).

The application of WPV responses to WPV reported by adult employees among adolescent employees may be limited due to difference between adolescent and adult employees among factors such as work experience, maturity, and job investment. Most adolescents have limited or no work experiences from which to draw on should WPV occur. Conversely, adults have more years of working experience and therefore may have previous knowledge of or experience with WPV to inform their response to future WPV. Adolescents are still developing their cognitive, emotional, and social maturity skills (NRC, 1998; Runyan et al., 2003; Rauscher,
This immaturity and inexperience may interfere with their ability to (a) assess aggressive behaviors and appropriately respond, (b) recognize, control, and channel the emotional responses of themselves and/or aggressors, and (c) communicate concerns about violence to obtain support and assistance from coworkers and supervisors. Finally, adolescents differ from adult employees in that they may not be financially dependent upon maintaining their job. Unlike adults who typically work to earn a living wage, many adolescents seek employment to earn money for ancillary expenses and therefore may be less inclined to preserve their job should a negative encounter take place in the workplace.

Although research documents that adolescent workers experience violence (Rauscher, 2008), have concerns about future violence (Runyan et al., 2005), and report receiving minimal training to handle violence (Runyan et al., 2005; Runyan et al., 2007) it remains an open question, one ripe for inquiry, as to how adolescent employees might handle WPV incidents. Findings from adult samples may not represent adolescent responses. There are two key reasons why it is important to understand how adolescent employees’ may respond to WPV. First, this information will provide valuable insight into whether proposed responses are appropriate for the given perpetrator and/or form of WPV. Second, findings will guide the development of adolescent-focused occupational education and training that provides these novice workers with skills for responding to WPV in ways that preserve their personal safety, address the problem directly, and prevent adolescents from quitting the job to avoid WPV.

This study explored the various types of proposed responses to violence encountered by adolescents in the workplace. Since the workplace is an understudied setting where adolescents most likely are exposed to incidents of violence, it is important to know if adolescent workers’ responses to future WPV will be similar to (a) adolescents’ responses to other types of violence
encountered, and (b) responses to WPV among adult workers. Therefore, the research question guiding the study was: What responses do adolescents propose in response to hypothetical vignettes of violence they might encounter in the workplace?

**Methods**

This study used a qualitative design to explore adolescent workers’ proposed responses to future incidents of WPV. Approval for the study was obtained from the first author’s university Institutional Review Board.

**Setting and Sample**

The setting for this study was a family-owned food manufacturer operating a retail store chain. The stores sell ice cream, confectionaries, and baked goods at 14 locations across one Midwestern metropolitan area employing about 250 full-time and part-time workers. Of the workers, there were approximately 125 adolescents aged 15-18 eligible for study participation. The three inclusion criteria were 1) being between the ages of 15-18 years, 2) working at least eight hours per week, and 3) proficient in English. Employees of each gender and any ethnic and racial background meeting the inclusion criteria were deemed eligible to participate. Thirty-one participants or one-quarter (25%) of the total number of eligible employees comprised the study sample.

**Procedures**

After permission was obtained from executive and store management, 31 adolescent employees were recruited from April 2010 to April 2011. Direct recruitment activities included a three-minute study presentation and distribution of recruitment flyers the 14 retail stores by the PI. Interested employees were instructed to contact the PI to confirm eligibility and enroll in the study. Potential participants were informed that participation was voluntary and they could
withdraw at any time; no participants withdrew. Parental permission and written assent for participants younger than 18 years and signed consent for participants age 18 was obtained. Due to lack of written parental permission, data from one participant was excluded from analysis. The first author conducted the individual interviews at a public library or by phone to ensure confidentiality and reduce coercion to participate. Participants received a $25 prepaid credit card as payment.

Semi-structured interview questions explored participants’ proposed response to various WPV scenarios. The PI read the scenario aloud and then participants were asked to describe how they would respond in that situation. Seventeen scenarios were presented addressing four forms of violence (i.e., verbal harassment, sexual harassment, threat of physical violence, physical assault) based on the relationship to the adolescent employee (i.e., customer, coworker, supervisor, personal acquaintance) in addition to a scenario describing an attempted robbery. Table 6.1 presents a sample of the scenarios. The PI asked additional questions to probe participants’ responses. All interviews were audio-recorded and transcribed verbatim by a professional transcription service. To ensure accuracy, all typed transcripts were checked against the audio-files by the PI prior to analysis. Interviews ranged in length from 8 to 62 minutes (mean = 25.9 minutes; median = 22.9 minutes; SD = 12.1).
Table 6.1.
Sample Hypothetical Vignettes Presented to Participants

<table>
<thead>
<tr>
<th>Type of workplace violence</th>
<th>Hypothetical vignette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal harassment</td>
<td><em>(Aggressor)</em> starts yelling and cursing at you in front of everyone else in the store. How would you respond?*</td>
</tr>
<tr>
<td>Sexual harassment</td>
<td><em>(Aggressor)</em> is making unwanted sexual passes or advances towards you or is saying inappropriate sexual things to you. How would you respond?*</td>
</tr>
<tr>
<td>Physical threat</td>
<td><em>(Aggressor)</em> starts threatening to physically harm you and you really do feel like this is a legitimate threat of harm. How would you respond?*</td>
</tr>
<tr>
<td>Physical assault</td>
<td><em>(Aggressor)</em> physically assault you. How would you respond?*</td>
</tr>
<tr>
<td>Robbery</td>
<td>…someone comes in with a gun demanding money from the cash register. How would you respond?*</td>
</tr>
</tbody>
</table>

Data Analysis

Conventional content analysis was used to analyze the transcribed interviews.

Conventional content analysis is used to describe a phenomenon while deriving codes and themes directly from the data (Hsieh & Shannon, 2005). A systematic approach for conducting the analysis, as described by Miles and Huberman (1994), was used to structure the steps of analysis. Data were reduced through line-by-line reading and coding by two study team members. Initial coding led to the development of themes and subthemes. NVivo 8® qualitative management software (Burlington, MA) was used to organize the coding and theme-building process. Qualitative findings are reported as themes and include direct quotes that best exemplify each theme.
Trustworthiness

Trustworthiness was addressed through credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985). Credibility (or truth value) of the data was addressed by the use of investigator debriefings and investigator triangulation between the first and third authors to develop and confirm themes. Next, themes with representative exemplars were discussed with remaining coauthors periodically during the analysis process. Transferability was addressed by providing detailed descriptions with excerpts for themes, thereby enhancing a reader’s ability to draw conclusions between the context of this study’s findings and a second population. Dependability (or reliability) and confirmability (or objectivity) were both met through use of an audit trail to track coding and theme development and investigator triangulation.

Results

Sample Characteristics

The sample (n = 30) included 20 female and 10 male adolescents. All participants self-identified as Caucasian and non-Hispanic. The average age of participants was 17.3 years (range 16-18). Participants reported working on average 15 hours per week (range 8-28) and had been employed by the participating company for an average of 11 months (range 1-40).

Themes

Twelve themes emerged from analysis of participants’ proposed responses to the hypothetical vignettes of WPV.

Tolerate or ignore it. Thirteen participants described putting up with or paying no attention to an aggressor’s behavior. Proposed responses of tolerance or ignoring the situation were commonly given to vignettes of verbal or sexual harassment when the aggressor was a
customer or coworker. For example, an 18-year-old male participant believed he would respond to customer verbal harassment in the following manner:

I normally just ignore [customer verbal harassment]. I don’t let it get to me. Just try to remain pleasant to them, and that’s about it. If they’re just saying stuff, just ignore it and try to get them out of there as fast as possible.

Similarly, the vignette of customer sexual harassment yielded the following response from a 16-year-old female:

Yeah, I try and ignore [sexual harassment from a customer], and then I’d just kind of like take it as like a small – I’d play it off as a small compliment, and I’d just give them their stuff as fast as I could, and just move onto the next person really fast.

A final example came from an 18-year-old female in response to a vignette where a customer is physically threatening her with harm: “I probably wouldn’t really pay attention to [customer physical threat]. I was – they're angry and they – and they're just probably gonna cool off, and I would not worry about it.”

**Give them what they want.** A total of 17 participants believed they would keep the aggressors happy by doing or giving what they want as a way to defuse or mitigate the violence. Hypothetical vignette of customer verbal harassment and robbery were the primary situations that evoked this response and described below. When responding to customer verbal harassment, participants believed they would give in to customers’ demands accompanied by apologies and offers to remedy the situation. Participants explained that this action was a way to salvage the business transaction. The following excerpts provide examples of this theme. A 16-year-old female supposed:
I’d probably just apologize profusely, and tell [verbally harassing customers] I could remake [the food items] for them, or I could get something for them, or get it for free or something like that, and just fix whatever the problem was, and, uhm, apologize, and apologize.

An 18-year-old male said: “Just basically calm [the verbally harassing customers] down and do whatever I can to appease them because you want them to come back and everything. You don’t want to lose business, basically.”

Similar to appeasing a verbally harassing customer, participants proposed responding to the hypothetical vignette of a robbery by giving in to a robber’s demands. However, unlike the rationale provided for giving in customer demands, participants explained this response was motivated by a desire to ensure personal safety. For example, a 16-year-old female participant indicated:

I’d probably just do what [the robbers] say, just because if my life’s in danger, I don’t really care what happens to like – if they want money, I think my life’s more important than money. So I’d probably give them what they want.

An 18-year-old female responded:

I’d probably end up just giving the money because that’s a lot better than dying in the process. And just like cooperate with what they [the robbers] said and try to stay as calm as possible, but that probably wouldn’t be happening.

Withdraw or remove myself. Twenty-one participants’ responses depicted intentionally removing themselves from the situation or attempting to avoid the aggressor. Avoiding the aggressor could be accomplished by going to the employee-only area or leaving the store premises. This theme was noted in response to various vignettes ranging from verbal harassment,
sexual harassment, and physical threats from customers and acquaintances. To handle customer verbal harassment, a 16-year-old female said: “I’d probably just walk away because I just don’t feel like I’d be authoritative enough to be like, to like ask them to leave.” Similarly, a 17-year-old female participant believed she would respond to any form of WPV from a personal acquaintance through removing herself from the situation: “If I'm out on the floor, I'd go into the back room.”

**Quit the job.** This theme reflected the plan of not returning to work until the issue was addressed by management and resolved or quitting the job altogether. Fifteen participants described this response which was limited to vignettes where a supervisor was the aggressor. The following excerpt was provided by a 16-year-old female:

I don't think I would work there anymore, to be honest. Like, because I mean it's an important position to me, but not so important that I would be willing to put up with [the supervisor] making me feel uncomfortable, or giving me attention in a negative way.

**Solicit support from a manager.** A total of 25 participants reported they would seek support from a manager either to assist in handling WPV or by telling the manager about the incident afterwards. One 18-year-old female said she would handle customer sexual harassment by immediately soliciting support from the manager: “Go grab a store manager, explain to him what happened and then have him talk to the person.” Likewise a 17-year-old female participant reported she would handle coworker sexual harassment by informing the manager and asking her to intercede: “Just tell my manager, tell her that they’ve been doing [sexual harassment] to me. If she could talk to [the coworker], that would be awesome; or – and ask her if I could just, like, not work with them.”
Solicit support from a coworker. Coworkers would be sought by 21 participants to provide immediate help to handle uncomfortable or unfamiliar situations or for emotional support. A 16-year-old female participant proposed engaging a coworker to help her handle customer sexual harassment: “Ask someone else that he wasn’t coming onto, like, to handle that customer.” In addition to providing immediate assistance, participants proposed having coworkers provide protection from potential violence. A 17-year-old female reported she would solicit support and protection from coworkers to handle physical threats from a customer: “I would have somebody else there help me handle the [customer]. Uh, like if it was something, like, they were going to see after [work] or something, I’d definitely go with somebody to wherever, like, my car.” Finally in response to verbal harassment from an acquaintance, a 17-year-old female thought she would seek help from her coworkers: “If I'm out on the floor, I'd go into the back room, and then, talk to my coworkers, and be like, ‘Can one of you ask them to leave?’”

Solicit support from parent/family. Family members, primarily parents, were viewed as a potential source of support should WPV occur. Eighteen participants proposed seeking out family members for support and guidance about additional actions to take to respond to WPV as well as to provide emotional support. Only female participants would solicit support from family. For example, to handle violence from a supervisor an 18-year-old female said: “I would probably go to my parents first and see what they thought before I brought [supervisor harassment and threats] completely out and open into the workplace.” Another 18-year-old female thought she’d seek support and assistance from her parents to handle an incident of customer physical threats of harm: “If the customer said they were going to come back and
[physically] hurt me, I would probably have my dad come up to my work and escort me out and make sure I got to my car okay.”

**Protect myself.** Eleven participants supposed they would protect themselves using tactics ranging from distancing oneself from the aggressor to using self-defense skills to fight back. These responses were limited to the hypothetical vignettes containing threats of physical harm or actual physical assault from an aggressor. An 18-year-old female participant proposed distancing herself from a customer who’s making physical threats: “I would protect myself. It depends on what they’re doing. If it was like I don’t know if they look like they were ready to punch me, I’d back off and I’d probably, I probably would just walk away.” Use of self-defense tactics was mentioned by a 16-year-old female in response to potential physical assault: “I mean I’m not that strong, but I know ways to get out of stuff and everything.” Finally, an 18-year-old male believed that he’d fight back in self-defense in response to a customer physical assault:

> Once [the customer’s] physically assaulted you, then they’ve crossed the line. I mean, for me, in the back of my head, personally, it’s – I mean, if you do anything to harm the customer, you could get fired, especially if it’s physical, but if he hits you first, I mean, you can hit them back or it’s self-defense at that point.

Contrary to the previous responses, a 16-year old female participant expressed hesitation in taking defensive action:

> I would say that if [a customer assaulted me] at work – I’d almost be afraid to hit back or, like, fight back just because I’m at work and I feel like I need to portray some sort of like look for the ice cream store.

**Contact corporate management.** The theme “contact corporate management” describes 15 participants’ responses stating they would contact corporate-level management to report the
incident. This theme was limited to responses addressing WPV from a supervisor. An 18-year-old female proposed response to supervisor sexual harassment was: “I would definitely call corporate, call the store owner because I know him. So they would listen, and they would investigate or call my district manager.” Another 18-year-old female participant proposed responding to supervisor verbal harassment by: “I would possibly email the people from corporate and let them know what’s happening and ask them what they think I should do [about supervisor verbal harassment].”

**Intervene directly with aggressors.** Twenty-four participants described taking immediate action to directly address the situation through verbally or physically engaging the aggressor. Specific interventions mentioned included telling the aggressor to stop the unwanted behavior, demanding the aggressor leave the premises, or taking action to stop a robbery. A 16-year-old female participant would directly address customer sexual harassment:

If [customers] would try to [sexually] touch me I would probably say ‘This isn’t the time or place to do this. I am 16. You need to stop.’ Or I’d just be like, ‘Please stop!’ like, something like that or ‘That’s inappropriate.’

An 18-year-old male thought he would directly confront the aggressor:

I probably wouldn’t mess around with [physically threatening customers] at all. I’d probably tell them to get the hell out or we’ll have some problems. So, yeah, I don’t really mess around with that at all. The niceness pretty much ends.

Several male participants thought they would try to stop a robber. An example of this response came from a 16-year-old male:

Probably try and stop [the criminals] from taking whatever it was” and “I mean I guess it all depends on the situation, like if the [robber] had a gun, I don’t know if I would like
resist or not. . . I think if I had an opportunity where I felt that I would be able to disarm him, I think I would.

**Notify the authorities.** Contacting the authorities – namely the police – by calling 911 to report the WPV incident was mentioned by 22 participants. This tactic was frequently seen as part of a response plan to a robbery such as “I would call 911 right away.” Participants also mentioned notifying the authorities when customers were perceived to be “out of control” and when presented with hypothetical scenarios of physical threats or physical assault regardless of aggressor. An 18-year-old female participant reported that the first thing she’d do in response to a customer assault is:

> I would probably call the cops immediately [for physical assault from customers]. I know it is bad to say, but I probably wouldn’t even tell who was working with me, but most likely they would see the incident and I would probably just go call the cops immediately.

> I wouldn’t even handle the customer. I would just go straight to the phone.

Another 18-year-old female voiced how her response to notifying the police about a physical assault differed if the aggressor was a coworker versus a supervisor:

> I would… maybe call the police, I don’t know. It’s just like, I don’t want to press charges on someone that’s like 16, but [a supervisor] who’s an adult and knows better, it’s like, come on. I mean I feel like it’s a different situation.

**Unable to formulate a plan.** Some participants responded with “I don’t know” or were unsure of how they would respond if confronted with WPV despite prompting by the investigator. Six participants (5 female, 1 male) were uncertain of their response to at least one hypothetical vignette. Scenarios provoking ambivalent responses included robbery, supervisor verbal harassment, customer and supervisor sexual harassment, and coworker physical assault.
An 18-year-old female said she was unsure how she’d respond to customer sexual harassment because she’d never encountered it:

I have no idea because [customer sexual harassment] would make me really, really mad. Uhm, I don’t even know what I would do in that situation. I guess it would just have to happen for me to experience it. I have no idea.

In response to the scenario of supervisor sexual harassment, a 16-year-old female reported she was unsure how she’d respond because of not knowing to whom she would report the incident:

If [supervisor sexual harassment] was like really serious – I don’t even know what I would do if it was really serious because they’re like, you know, they’re the top. Who else is there to tell, really? Who else is going to get them into trouble? So I’m not really sure what I’d do in that sense.

Robbery was another hypothetical vignette that produced participant responses of uncertainty. A different 16-year-old female struggled to develop a response and finally responded: “I’ve never received any education for what to do during a robbery… For robbery, like I wouldn’t really know what to do.”

Discussion

Findings reveal adolescent employees have considered how they would respond when faced with future situations of WPV. Themes share similarities with the response strategy categories of problem focused, escape avoidance, and support seeking identified in adult-based WPV studies (Aquino & Thau, 2009; Skinner et. al, 2003). Table 6.2 displays the themes that emerged from our study in relation to the above response strategy categories. Proposed responses differ based on perpetrator relationship and the act of violence. Finally, findings demonstrate several proposed responses that could jeopardize personal safety. The following section explores
how responses were influenced by perpetrator relationship and type of violence, how findings compared with previous research, implications for workplace safety, and opportunities for school nurses to address WPV faced by adolescents.

Table 6.2.
Qualitative Themes by Category of Response Strategy

<table>
<thead>
<tr>
<th>Categories of Response Strategies</th>
<th>Problem-focused</th>
<th>Escape/avoidance</th>
<th>Support-seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tolerate or ignore</td>
<td>• Withdraw or remove myself</td>
<td>• Solicit support from supervisor</td>
<td></td>
</tr>
<tr>
<td>• Give them what they want</td>
<td>• Solicit support from coworker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Quit the job</td>
<td>• Solicit support from parent/family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Protect myself</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Contact corporate management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Intervene directly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Notify the authorities</td>
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Responses Based on Aggressor Relationship

**Customer.** Potential incidents of violence by customers yielded responses such as *Tolerate or ignore, Give them what they want, Protect myself, Intervene directly,* and *Notify the authorities* though a few respondents proposed *Withdraw or remove myself, Solicit support from supervisor,* and *Solicit support from coworker.* Our findings share similarities with previous studies that report adult employees attempt to diffuse violent customers by taking measures to keep the customer happy (Grandey et al., 2007) or by giving into customer demands (Reynolds & Harris, 2006). Such problem-focused response strategies may be viewed by employees as a way to preserve a successful business transaction and maintain a customer oriented environment (Reynolds & Harris, 2006). Similarly, participants use of *Withdraw or remove myself* to handle
incidents of customer verbal and sexual harassment was similar to adult employee responses of avoidance and ignoring customers (Yagil, 2008). Unlike problem-based response strategies, withdraw or avoiding violent customers are escape/avoidance strategies which enable the employee to disengage from the customer rather than deal with the WPV directly. Selection of this response may be influenced by the individual’s biological stress response or “fight or flight response.” Therefore, some participants may prioritize the prevention of negative impacts of customer WPV through avoidance rather than preserving the customer-employee relationship as the best plan to preserve personal safety when WPV occurs.

Coworker. Violence perpetrated by coworkers yielded proposed responses such as Tolerate or ignore and Intervene directly. These findings share some similarities with adult workers responses to psychological violence or harassment from coworkers where adults pretend nothing is happening or do not to tell anyone (Djurkovic, McCormack, & Casimir, 2005; Leck & Galperin, 2006; Turte et al., 2012). Sexual harassment from a coworker yielded similar responses with the addition of soliciting support from their supervisor. Conversely, physical threats and assaults from coworkers provoked taking steps such as Protect myself, Intervene directly, Contact corporate management, and Notify the authorities. Participants’ responses to coworker-perpetrated WPV share similarities with previous findings of adolescents’ response to school-bullying (deLara, 2008; Elledge et al., 2010; Waasdorp & Bradshaw, 2011). Response strategies in school-bullying literature include telling the bully you don’t like it/asking bully to stop, telling an adult, getting a friend to help (Elledge et al., 2010), and doing nothing/ignoring the bully (deLara, 2008; Elledge et al., 2010; Waasdorp & Bradshaw, 2011). Similarities between our participants’ responses to WPV and responses reported in school bullying literature may be due to the peer relationship that may exist between coworkers of similar status. Thus, WPV
perpetrated by a coworker might provoke the use of response strategies viewed as helpful when dealing with other forms of peer violence such as school bullying.

**Supervisor.** Verbal or sexual harassment by a supervisor or manager yielded responses of *Contact corporate management* to report the incident, *Quit the job*, and *Solicit support from a parent or family member*. Though a few participants mentioned they might intervene directly by discussing an incident of verbal harassment with the supervisor, most participants’ responses were similar to adult employees’ responses of avoidance and support seeking (Yagil et al., 2011). It is plausible that participants’ proposed responses to handle supervisor WPV are rooted in the nature of supervisor/supervisee relationships and the potential for power imbalances to exist. Researchers have shown that supervisors who openly communicate and respect their employees foster positive employee relationships which can decrease perceived power gaps (Willemyns, Gallois, & Callan, 2003). Conversely, employees who feel disrespected by supervisors report poor employee relationships and amplification of perceived power gaps (Willemyns et al., 2003). As future incidents of supervisor WPV may be viewed as disrespectful and detrimental to one’s relationship with a supervisor, adolescent participants may view indirect responses to WPV as the best approach to take.

**Acquaintance.** Proposed responses to WPV such as verbal and sexual harassment by acquaintances at the participants’ workplace yielded responses of *Withdraw/remove myself* or *Intervene directly*. However, once the WPV escalates to a physical threat or assault, participants’ proposed responses reflected a need to preserve personal safety through the addition of strategies such as *Protect myself* and *Notify the authorities*. As previous research regarding adult employee responses to personal issues spilling over into the workplace was not found, adolescents’ responses to violence within dating relationships were explored. U.S. population-based estimates
indicate 1 in 5 adolescent females and 1 in 10 adolescent males report experiencing violence in their dating relationship (CDC, 2010). Based on these estimates, it is plausible that adolescent employees may experience the spillover of dating violence in a workplace setting. High school students whom experienced adolescent dating violence report responding to this form of violence with violence, ending the relationship, seeking informal help from friends, and taking no action (Watson, Cascardi, Avery-Leaf, & O’Leary, 2001). Moreover, when violence spills over into a workplace setting, adolescent employees’ responses may be motivated by the need to prevent the incident from escalating further as it could lead to personal embarrassment or jeopardize their employment. When incidents of dating violence are witnessed adolescents feel compelled to talk with the witness to express fear, embarrassment, or to explain why the incident occurred (Black, Tolman, Callahan, Saunders, & Weisz, 2008). Though our findings did not reveal talking with a coworker or supervisor witness as a proposed response, it is possible our findings of withdraw or intervene reflect participants’ strategy to prevent or minimize a witnessed incident of violence from taking place.

**Responses Based on Type of Violence**

Findings demonstrate differences in proposed responses based on the form of violence. All forms of violence except robbery yielded the proposed responses of *Intervene directly* to address the incident. However, some important differences were noted between responses to verbal and sexual harassment and physical threats and assaults. Participants proposed responses to verbal and sexual harassment were more likely include responses such as *Tolerate or ignore*, *Give them what they want*, and *Withdraw or remove myself*, whereas proposed responses to physical threats or assaults, regardless of the perpetrator, yielded response strategies of *Protect myself* and *Notify the authorities*. These differences may be explained by the degree to which one
feels his or her personal safety is being threatened and therefore warrants taking direct action. Similar to proposed responses addressing physical threats and assaults, proposed responses to robbery focus primarily on taking steps to maintain personal safety by giving in to the perpetrator’s demands first and then notifying the authorities. Overall proposed responses were appropriate for most WPV incidents; however some proposed responses were not. Responses such as attempting to disarm a potential robber or fighting back when physically threatened or assaulted demonstrate a lack of priority for one’s personal safety and indicate the need for further violence education and training.

Limitations

The study has several limitations: (1) single employer represented, (2) use of a convenience sampling strategy, and (3) non-representative sample. We attempted to mitigate these limitations by sampling from several store locations and by continuing to conduct interviews until no new information was identified during data analysis (i.e. data saturation). Due to the non-representative sample, results may not be generalizable to all adolescent workers. However, our findings may be similar to proposed responses of adolescent employees working in comparable retail settings.

Implications for School Nurses

Whereas violence can occur anywhere and range in intensity from verbal harassment to physical assault, adolescents need to learn how to appraise the situation, select a response to maximize personal safety, and intervene safely when witnessing violence towards others. According to the National Association of School Nurses (2011), the role of the registered professional school nurse includes, but is not limited to, promoting health education, providing care to students, performing health screening, referring students to appropriate resources, and
advocating for a healthy school environment. Therefore it is through these roles that school
nurses must promote adolescent students’ awareness of WPV and knowledge of appropriate
responses to WPV incidents. Activities to address WPV consist of health promotion and
education, primary prevention, secondary prevention, and advocacy as school nurses have the
opportunity to interact with students on a daily basis. Table 6.3 displays a list of activities in each
of these categories that we recommend school nurses employ to address the issue of WPV
among current and future working age students in their particular school(s) and surrounding
communities.
### Table 6.3
**Recommended Activities for School Nurses to address WPV**

<table>
<thead>
<tr>
<th>Focus</th>
<th>Activities</th>
</tr>
</thead>
</table>
| Health Promotion and Education | • Conduct a school wide education sessions among working age students about work-readiness, occupational safety, and WPV  
                                 • Partner with teachers to address the topic of WPV in addition to other types of violence exposures in health class curriculum  
                                 • Hold annual safety fair to increase students’ awareness of various types of violence exposure  
                                 • Provide resource materials to students seeking employment giving them tips to assess potential workplaces for occupational safety concerns (including WPV) |
| Primary Prevention           | • Conduct yearly one-on-one sessions with working students to assess presence of occupational safety hazards at current job and, *if necessary*, provide counseling on how to address hazards  
                                 • Educate teachers about signs or symptoms of potential violence exposure and how to refer student to school nurse |
| Secondary Prevention         | • Include screening for WPV exposure among working students with documented changes in performance or behavior at school  
                                 • Refer students suspected of violence exposure to appropriate resources (e.g., primary care provider, counseling) |
| Advocacy and Health Policy   | • Advocate for and participate in community-school-academic partnership to develop and provide work readiness program  
                                 • Lobby state legislature to pass a law requiring those under age 18 to complete a work readiness program prior to obtaining work permit and entering the workforce |

### Conclusion

This study was the first to explore adolescent employees’ proposed responses to future WPV. Categories of proposed responses were similar to those reported by adolescent victims of school-bullying, adolescent dating violence, and adult victims of workplace violence. Future efforts need to be focused on educating and training students about to enter the workplace about
WPV and how to appropriately respond. To address this need, it is recommended that school nurses implement activities at their school to address the issue of WPV. Furthermore, it is recommended that school nurses advocate for and participate in the creation of a community-school-academic partnership to address the issue of work readiness and occupational safety in a collaborative fashion among school administrators, community agencies, employers, parents, and adolescents. Future research needs to be conducted to evaluate the model of partnership and its ability to effectively deliver work readiness training to adolescents. Finally, school nurses must seize the opportunity to play an integral part as health promoters and educators to address adolescents’ responses to future violence regardless the context.
CHAPTER 7 – DISCUSSION, RECOMMENDATIONS, AND FUTURE RESEARCH

Employees of all ages are at risk for WPV exposure (Harrell, 2011). As a result, decreasing WPV as an occupational safety hazard has been identified as a research priority among various sectors including the service and wholesale/retail trade setting (NIOSH, 2009a; NIOSH, 2009b). Numerous WPV studies have been conducted with adult employees (e.g. Gates, Ross, & McQueen, 2006; Mayhew, 2000; Perrott & Kelloway, 2006); however, only a few studies have addressed the issue of WPV among adolescent employees (Rauscher, 2008; Runyan et al., 2005; Runyan et al., 2007). Findings from these studies were limited as they did not explore whether adolescent employees view the potential for WPV exposure as a safety risk in the workplace. Perception of safety from WPV and direct exposure to WPV has been shown to influence an individual’s fear regarding future WPV (BLS, 2006; Lanza, 2006; LeBlanc & Kelloway, 2002; Mueller & Tschan, 2011). Therefore, the overall purposes of this study were to explore adolescent employees’ perceptions of safety as it relates to WPV and describe how adolescent employees’ perceptions of safety affect stress, anxiety, and productivity while at work. Chapter 7 reviews how the results of this study (a) address the study’s specific aims, (b) have limitations, (c) support recommendations for addressing the issue of WPV exposure among adolescents, (d) inform implications for key stakeholders, and (e) provide the foundation for future research.

Discussion

This section will provide a targeted discussion of the study’s specific aims. It will also discuss the planned responses of participants and the conceptual fit of the study findings to the original conceptual framework.
Specific Aims Addressed and Answered

The specific aims of the study were to (a) explore adolescent employees’ perceptions of safety as it relates to WPV and (b) describe how adolescent employees’ perceptions of safety as it relates to WPV affect stress, anxiety, and productivity while at work.

Specific aim 1. The primary aim of this study was to explore adolescent employees’ perceptions of safety as it relates to WPV. Results indicated most adolescent employee participants expressed positive and mixed perceptions of safety as it relates to WPV despite half of participants reporting direct WPV exposure and only 40% reporting receiving WPV-specific education and training. Factors that influenced adolescents’ perceptions of safety as it relates to WPV included themes of overall safety of the work environment and the presence of others (i.e. coworkers, customers). Environmental factors such as crime prevention strategies (e.g., adequate lighting, video-monitoring, employee education and training) have been documented to decrease certain types of WPV in retail and service sector establishments (Casteel & Peek-Asa, 2000; Zahm, 2004). Therefore adolescent employees’ perceptions of safety as it relates to WPV may be influenced by the presence or absence of WPV prevention strategies in the work environment.

The presence of other individuals in the workplace influenced perceptions of safety as it relates to WPV among a majority of participants, though, this finding was less apparent among participants with direct exposure to WPV. Working alone is a known risk factor for WPV for adolescent workers (Runyan et al., 2005) perhaps explaining why most participants view the presence of others increases feeling safe from WPV. However, differences were observed among those who had reported exposure to WPV and those who had not. Explanations for this finding may include that those who reported direct exposure to WPV experienced an incident of WPV despite others being present or that past WPV exposure may increase an individual’s overall fear
of future WPV (Mueller & Tschan, 2011).

Despite overall positive and mixed perceptions of safety as it relates to WPV, participants expressed the desire for additional WPV-specific education and training. In particular, adolescent employee participants want employers to provide them with specific strategies to manage and report WPV incidents so that expectations related to WPV are clearly defined. Further discussions related to this study aim are detailed in Chapters 4 and 5.

**Specific aim 2.** The second specific aim of the study was to describe how adolescent employees’ perceptions of safety as it relates to WPV affect stress, anxiety, and productivity while at work. Participants were asked if they felt the possibility of experiencing an incident of WPV made them feel stressed, anxious, and affected their ability to be productive at work.

Analysis revealed that participants with no direct exposure to WPV reported the possibility of WPV did not impact their level of stress, anxiety, or productivity. Thus the qualitative themes related to stress responses and productivity were developed from responses provided by only those participants who reported direct exposure to WPV. Results indicated most participants who reported direct exposure to WPV experienced stress responses during or immediately after the WPV incident. Stress responses included emotional, behavioral, cognitive, and physical reactions – findings similar to those reported among adult employees who experienced WPV (e.g., Lanza, 2006; Wieclaw et al., 2006). Conversely only half of participants who were exposed to WPV expressed that their productivity was negatively affected by the incident. This finding may indicate that adolescent employees consider commonly reported types of WPV such as customer verbal and sexual harassment as “just part of the job” and therefore, something to be tolerated or ignored (Yagil, 2008) rather than the WPV interfering with them performing job duties. Further discussions related to this study aim are detailed in Chapters 4 and 5.
Proposed responses to future incidents of WPV emerged as a new area related to perceptions of safety as it relates to WPV early during data collection. This previously unidentified area emerged during portions of the qualitative interview which explored witnessed or rumored WPV incidents at the workplace, employer provided WPV education and training, and whether concerns about future WPV made participants feel stressed or anxious. Based on the emergence of this new area, an additional line of questioning was added to the qualitative interviews. Findings described how adolescent employees’ might respond should they encounter WPV despite their lack of employer provided WPV education and training. Participants’ proposed responses to hypothetical vignettes of WPV yielded problem-focused, emotion-focused, and escape/avoidance strategies and differed based on one’s relationship to the perpetrator and the type of violence. Overall, proposed responses provided were similar to adolescents’ responses to peer-bullying at school (deLara, 2008; Elledge et al., 2010; Waasdorp & Bradshaw, 2011) and violence within a dating relationship (Watson et al., 2001) as well as adult employees’ responses to WPV (Djurkovic et al., 2005; Grandey et al., 2007; Leck & Galperin, 2006; Turte et al., 2012; Yagil, 2008). Yet, a few of the participants’ proposed responses (i.e., disarming a criminal) indicated the need for further WPV-specific education and training for adolescent employees so they learn to prioritize personal safety in the workplace. Previous literature among adult employees found that employees’ risk for future WPV exposure and perception of safety are influenced by the presence of WPV-specific policies and procedures and organizational practices (Spector et al, 2007; Kessler et al., 2008; Chang et al., 2012). Further discussion related to adolescent employees’ proposed responses to future WPV was provided in Chapter 6.

**Conceptual model.** As described in Chapter 2, the perception of safety from WPV
conceptual model was developed from concepts taken from adult WPV literature. Modifications were made to the conceptual model based on study findings. In the initial model, past exposure to WPV, participation in WPV-specific education and training, and awareness of WPV-specific policies and procedures were proposed to influence adolescent employees’ perceptions of safety as it relates to WPV. However, the mixed methods findings did not support that adolescent employees’ past exposure to WPV influenced participants’ perceptions of safety. Additionally, participants’ did not express the view that WPV-specific education and training, nor WPV-specific policies and procedures had any impact upon their perception of safety from WPV. On the other hand, support was found for the relationship between past exposure to WPV upon productivity and psychological health, specifically experiences of stress responses, as well as stress responses being associated with productivity. Based on these study findings, the conceptual model was modified (Figure 7.1) in the following ways:

- Perceptions of safety as it relates to WPV was retained as the central concept in the model.
- Themes of *Overall safety of the environment* and *Presence of others* were added to the model as concepts that are related to adolescent employees’ perceptions of safety.
- The concept of psychological health was changed to *Stress responses* and depicted as a direct consequence of past exposure to WPV.
- The area of *Proposed response to future WPV* was added to the model. This new area appears to be associated with Perceptions of safety as it relates to WPV. In addition, participation in WPV education and training and past exposure to WPV seem to inform this new area.
- Conceptual relationships based on adult WPV literature, yet had limited or no support
from data gathered from our participants, were retained for future testing and refinement with a larger sample of adolescent employees. To depict the need for further testing to confirm these concepts and their relationship with perception of safety from WPV, solid lines were changed to dashed lines.
Figure 7.1. Modified perception of safety from WPV conceptual model.
Study Limitations

Study limitations include 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 yielded no new findings (i.e. saturation). Due to the homogeneous sample and small sample size, results are not generalizable but may be transferable to similar retail workplace settings and other adolescent employee populations.

Recommendations and Implications

Several recommendations have been developed from the results of this study. This section will report the recommendations and discuss how each recommendation creates implications for the following stakeholders: occupational safety and health professionals, nurses, employers of adolescents, and adolescent employees and their parents.

Recommendation 1

Work-readiness training programs need to be developed and provided to adolescents prior to entering the workforce. Health care professionals, employers, schools, and parents must collaborate to increase awareness among adolescents about safety risks involved with employment through work-readiness training programs. Such programs can provide adolescents preparing to enter the workforce with basic job skills (e.g., money handling, how to interact with customers), occupational safety training, rights and responsibilities as an adolescent employee, and the opportunity to practice newly acquired knowledge and skills in a safe environment. Creation of work-readiness programs will benefit occupational safety and health professionals and potential employers of adolescents in that adolescent workers will be better prepared to recognize and address safety issues should they arise. Similarly, adolescents
(and their parents) will benefit from participation in work-readiness programs as these programs would facilitate adolescents’ acquisition of basic knowledge and skills that may contribute to being a safe and productive employee. Moreover, work-readiness programs will help foster a healthy view of occupational safety issues among adolescents including what should not be considered “just part of the job.”

Recommendation 2

Employers of adolescents need to provide specific education and training to all employees regarding risk factors for, management of, and reporting of WPV incidents. As reported in Chapter 5, an overwhelming majority of study participants requested additional WPV education and training to recognize the potential for WPV, specific strategies to de-escalate or manage WPV, and what steps should be taken to report WPV. Therefore, employees of adolescents need to provide WPV-specific education and training to all employees during initial orientation as well as an annual refresher course. Employers who implement this recommendation may benefit in that all of their employees will be able to respond to WPV in ways that promote personal safety and the integrity of the occupational setting. For occupational safety and health professionals, implementation of WPV-specific education and training to all employees may lead to a decrease in incidents of WPV and related physical and psychological health consequences among employees.

Recommendation 3

Nurses need to address the issue of workplace safety and potential violence exposure during encounters with working age adolescents. Nurses have frequent contact with adolescents and their parents in a variety of locations including primary care, schools, and episodic care settings (i.e., emergency department and urgent care); therefore, nurses are well
positioned to address the issue of WPV exposure through primary and secondary prevention. Primary prevention in the form of health promotion and education interventions may include increasing awareness of occupational safety issues, including the potential for WPV exposure, among adolescents and their parents. Providing education regarding occupational hazards to be aware of when at work may help adolescents to prioritize personal safety when seeking or maintaining a job. Nurses need to incorporate routine assessment and screening for all forms of violence exposure such as peer-bullying, gang violence, dating violence, and WPV during health care encounters as part of secondary prevention efforts. Through routine assessment for violence exposure risks, various forms of violence can be detected early and referrals made to appropriate resources.

**Future Research Opportunities**

Findings from this study indicate that future research needs to be conducted to further explore the issue of WPV exposure among adolescent employees. Research with large randomized samples needs to be conducted to measure WPV incidence, risk factors, and consequences among adolescent workers. This information could serve as a foundation for developing and testing targeted WPV interventions to determine their effectiveness among this vulnerable worker population. In addition, future research needs to be conducted to further explore adolescent employees’ perceptions of safety from violence and how these perceptions influence their ability to recognize risks for WPV, handle events of WPV, and cope with exposure to WPV. This information could help to develop and later test a conceptual framework related of adolescent employees’ perceptions of safety as it relates to WPV. Finally, future research needs to be conducted to determine the effectiveness of work-readiness training
programs aimed at preparing adolescents to handle various occupational safety concerns including WPV prior to entering the workforce.

**Conclusion**

Adolescents are at risk for violence exposure in the workplace. Adolescents deserve to be educated and trained to recognize risk factors for WPV exposure and how to respond to WPV incidents in a way that preserves personal safety given the occupational setting. Stakeholders must address the issue of adolescent WPV exposure through various strategies such as developing work-readiness programs, routinely assessing and screening for WPV exposure, and providing WPV-specific education and training to all adolescent and adult employees. Additional research needs to be conducted to further explore the incidence and effects of WPV exposure among adolescent employees so tailored interventions can be developed and tested. As adolescents are at the beginning of their work-life, it is essential to equip them with occupational safety training to address this known risk and help them to launch their career as a productive and healthy employee.


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http://www.dol.gov/whd/regs/compliance/whdfs43.pdf


Appendix A

LIBRARY LOCATIONS WITH MEETING ROOMS

MEETING ROOMS

Meeting rooms for use by groups or individuals are available at the following library agencies (meeting room seating capacity in parenthesis). More information about using our meeting rooms is available in our Meeting Room Policy and Guidelines. To reserve a room, use our Request for Meeting Room form.

- Anderson Branch (58)
- Avondale Branch (50)
- Blue Ash Branch (50)
- Bond Hill Branch (50)
- Cheviot Branch (54)
- College Hill Branch (35)
- Corryville Branch (65)
- Covedale Branch (20)
- Forest Park Branch (30)
- Green Township Branch (70)
- Groesbeck Branch (28)
- Harrison Branch (50)
- Hyde Park Branch (25)
- Madeira Branch (62)
- Madisonville Branch (55)
- Main Library
  - Room 2A (20)
  - Room 3B (32)
  - Room 3A (34)
  - Huenefeld Tower Room (100)
- Monfort Heights Branch (40)
- North Central Branch (82)
- Northside Branch (30)
- Norwood Branch (50)
- Oakley Branch (35)
- Pleasant Ridge Branch (10/100)
- Sharonville Branch (67)
- Symmes Township Branch (100)
- Walnut Hills Branch (30)
- Westwood Branch (95)
- Wyoming Branch (80)
Appendix B

ADOLESCENT EMPLOYEE WORKPLACE VIOLENCE SURVEY

Participant ID: ____

Please read and use the following definitions to answer the questions in this survey.

- **Verbal harassment** includes cursing, cussing, yelling at or berating a person in front of another, insulting, racial slurs, or humiliating actions.

- **Sexual harassment** includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, insulting gestures, whistling, jokes or humor about gender specific traits, offensive pictures, offensive contact such as patting, pinching, brushing against body, attempted or actual fondling, or kissing.

- **Physical threats** include all actions, statements, written (including email, text messages) or non-verbal messages conveying threats of physical injury which were serious enough to unsettle your mind. It includes expressions of intent to inflict pain, injury, or punishment.

- **Physical assaults** include the following actions: hitting with body part, slapping, kicking, punching, pinching, scratching, biting, pulling hair, hitting with an object, throwing an object, spitting, beating, shooting, stabbing, squeezing, and twisting.

**DIRECTIONS:** Using the definitions above, please circle the response that best describes your personal experiences with aggression or violence in the workplace at Graeters. If you have experienced any of these forms of WPV, please indicate **WHO** committed the act in the second column.
<table>
<thead>
<tr>
<th>While you were working at Graeters, have you ever been:</th>
<th>If Yes, who did it? (Circle all the choice that apply to your experiences)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERBALLY HARASSED?</td>
<td>Customer Coworker</td>
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<td></td>
<td>Family member Supervisor</td>
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<td>Friend</td>
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<td>Other: (please describe)________________________</td>
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<tr>
<td>SEXUALLY HARASSED?</td>
<td>Customer Coworker</td>
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<td>Family member Supervisor</td>
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<td>Friend</td>
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<td>Other: (please describe)________________________</td>
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<tr>
<td>PHYSICALLY THREATENED?</td>
<td>Customer Coworker</td>
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<td></td>
<td>Family member Supervisor</td>
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<td>Friend</td>
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<td></td>
<td>Other: (please describe)________________________</td>
</tr>
<tr>
<td>PHYSICALLY ASSAULTED?</td>
<td>Customer Coworker</td>
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<tr>
<td></td>
<td>Family member Supervisor</td>
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<td>Friend</td>
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<tr>
<td></td>
<td>Other: (please describe)________________________</td>
</tr>
<tr>
<td>WORKING WHEN A ROBBERY (or ATTEMPTED ROBBERY) OCCURRED?</td>
<td>No Yes</td>
</tr>
<tr>
<td>OCCURRED?</td>
<td></td>
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</tbody>
</table>
**Directions:** The following questions will ask you about training, education, policies and procedures to handle aggression or violence in the workplace. Circle the response that best describes your experiences at your current job at Graeter’s.

1) Have you received **ANY** employee training or education about how to handle aggression or violence in the workplace?

   NO  (If NO, skip to #3)                 YES

2) **IF YOU HAVE RECEIVED** employee training and/or education, did you receive any training or education about how to handle any of the following situations?

   - A person who attempts to rob the store? No Yes
   - A customer who yells or curses at you? No Yes
   - A customer who sexually harasses you? No Yes
   - A customer who threatens you with physical harm? No Yes
   - A co-worker or supervisor who verbally or sexually harasses you? No Yes
   - A co-worker or supervisor who physically threatens or assaults you? No Yes
   - A friend or family member who repeatedly calls or texts you and interferes with you doing your job (could be considered harassing you)? No Yes
• A friend or family member who comes to your workplace and interferes with you doing your job (could be considered stalking or harassing you)?

No Yes

3) Are you aware of any workplace **policies or procedures** to handle the following situations?

• A person who attempts to rob the store? No Yes

• A customer who yells or curses at you? No Yes

• A customer who sexually harasses you? No Yes

• A customer who threatens you with physical harm? No Yes

• A co-worker or supervisor who verbally or sexually harasses you? No Yes

• A co-worker or supervisor who physically threatens or assaults you? No Yes

• A friend or family member who repeatedly calls or texts you and interferes with you doing your job (could be considered harassing you)? No Yes

• A friend or family member who comes to your workplace and interferes with you doing your job (could be considered stalking or harassing you)? No Yes
**Directions:** Please circle the choice the best reflects your response.

1) How old are you? 15 16 17 18

2) What gender are you? Male Female

3) Which of the following best describes your racial category?

   - American Indian or Alaskan Native
   - African-American or Black
   - Asian
   - Native Hawaiian or Pacific Islander
   - White
   - More than one race

4) Which of the following best describes your ethnic category?

   - Hispanic or Latino
   - Non-Hispanic or Latino

5) How long have you worked for Graeters? ______ years ______ months

6) How many hours do you typically work each week at Graeters? ________________

7) What hours do you usually work at Graeters? (example 3pm – 10pm)

________________
8) a. Do you work at a paid job other than Graeters?  No    Yes

Answer the following questions ONLY if you currently have another paid job.

b) How many other jobs do you have right now in addition to Graeters?  1  2  3  4 or more

c) How many total hours do you typically work during the week at all of your jobs?

Thank you for completing this survey.
Appendix C

INTERVIEW GUIDE

1) Tell me about your job at Graeter’s.

2) Do you have interactions with the following groups of people while you’re at work? If yes, tell me about what type of interaction you have with these people.
   a. Customers
   b. Co-workers
   c. Supervisors/managers
   d. Personal acquaintances such as friends, boyfriends/girlfriends, & family members

3) What is the first thing that comes to your mind when I say the words “WORKPLACE VIOLENCE”? Please explain.

4) If it were up to you, how would you define the term “WORKPLACE VIOLENCE”? Please explain.

5) Do you have any concerns about your personal safety while at work? (if yes, then “Tell me about your concerns.”)
Please answer the following questions using the definitions of workplace violence provided to in the survey. (PI will provide all participants with a copy of the WPV definitions used on the survey for participants to use as a reference.)

6) Have you ever directly experienced any episode(s) of workplace violence as described in the definitions provided to you? If yes, please describe this episode or episodes.

a. Tell me what you were doing before this episode occurred.

b. Tell me what you did immediately after experiencing this episode of workplace violence.

c. At the time you experienced workplace violence, how did you feel physically?

d. At the time you experienced workplace violence, how did you feel emotionally?

e. Was your ability to work affected after experiencing workplace violence? If yes, tell me how your work was affected.

f. Was your ability to focus or concentrate on your work affected by experiencing workplace violence? If yes, tell me how your ability to focus was affected.

g. Was your ability to communicate with co-workers and/or customers affected? If yes, tell me how your ability to communicate was affected.
h. Was your ability to be safe and avoid injuries at work affected? If yes, tell me how your safety was affected.

7) Have you ever witnessed or heard about an incident of workplace violence against one of your co-workers? If yes, please explain.

8) Do you have any concerns that an incident of workplace violence will happen again? Please explain why or why not.

9) Does the possibility of experiencing an incident of workplace violence make you feel stressed while at work? Please explain why or why not.

10) Does the possibility of experiencing an incident of workplace violence make you feel anxious while at work? Please explain why or why not.

11) Does the possibility of experiencing an incident of workplace violence affect your ability to be productive while at work? Please explain why or why not.

The following questions will ask you about any training, education, and policies you know about to handle incidents of workplace violence. Please remember the definitions and types of workplace violence.
12) Please tell me about any education or training you received at your current job to handle workplace violence from criminals, customers, co-workers, supervisors, or family/friends.

13) Please tell me about workplace policies you’re aware of at your current job to handle workplace violence from criminals, customers, co-workers, supervisors, or family/friends.

14) What do you think needs to be done at your workplace to make you & your coworkers safer from workplace violence? Please explain.

15) Is there anything else you would like to tell me about your perceptions of safety from workplace violence?

Thank you for your participation in the study.
Appendix D

TEEN EMPLOYEE RIGHTS & RESPONSIBILITIES HANDOUT
Teen Rights

As a teen worker, you have the right to…

**A safe and healthful workplace** free of recognized hazards. The Occupational Safety and Health Administration (OSHA) within the Department of Labor has primary responsibility for setting and enforcing standards through the OSH Act of 1970 to promote safety and health, including the health and safety of young workers.

**Speak up!** If you notice a safety hazard at work, report it to your supervisor or boss. If they don't address your concerns, you can file a complaint with OSHA or your state labor offices. Please remember, it is illegal for your employer to punish or fire you for reporting a workplace problem.

**Refuse to work** if you believe in good faith that the job or conditions are dangerous and are exposing you to imminent danger. Report it to your supervisor or boss. If they don’t address your concerns, call (800) 321-OSHA immediately to report imminent dangers.

**Work only the limited hours and at the types of work permitted by state and federal laws.** Federal child labor laws and state labor laws apply if you are under 18 years of age.

**Use required personal protective equipment (PPE),** including safety clothing, hard hats, goggles, ear plugs, and get training on how to use them properly.

**Get training about health and safety,** including information about machines, job tasks, and hazardous chemicals that could be harmful to your health.

**Demand payment for your work,** at least minimum wage for your state.

**Ask for payment for medical care (workers' compensation) if you get injured or sick because of your job.** You may also be entitled to payment for lost wages if you miss work because of your injury.

**Work without racial or sexual harassment.** Contact the US Equal Employment Opportunities Commission to report racial or sexual harassment.
Teen Responsibilities

As a teen worker, you have the responsibility to…

Follow safe work practices for your job, as directed by your employer and/or supervisor. Working safely may slow you down, but ignoring safe work procedures is a fast track to injury. There are hazards in every workplace, and recognizing and dealing with them correctly may save your life or prevent serious injury.

Follow your employer's safety and health rules and wear or use all required gear and equipment.

Ask questions! Ask for workplace training if it is not offered. Ask how to deal with irate customers or how to perform a new task or use a new machine. Don't worry about looking ignorant. Asking questions will help you stay safe.

Tell your supervisor, boss, parent, or other adult if you feel threatened or endangered at work.

Be aware of your environment at all times. Be careful. It's easy to get careless after your tasks have become predictable and routine. But remember, you're not indestructible.

Be involved in establishing or improving your worksite safety and health program. Trust your instincts. If someone asks you to do something that feels unsafe or makes you uncomfortable, check with your supervisor or safety officer before doing the task. Keeping yourself safe is your first responsibility.

Stay sober. In order to work, you must remain drug free. Workers using alcohol or other drugs are more likely to get hurt or hurt others. If you suspect someone at your work is using, tell your supervisor.

Adapted from:

## Appendix E

### QUALITATIVE DATA DISPLAY

<table>
<thead>
<tr>
<th>ID</th>
<th>Age</th>
<th>Gender</th>
<th>Perceptions of safety as it relates to WPV</th>
<th>Effects on Psychological Health</th>
<th>Effects on Productivity</th>
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Appendix F

MIXED METHOD DATA DISPLAY

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<th>ID</th>
<th>Age</th>
<th>Gender</th>
<th>Past Exposure to WPV</th>
<th>Perceptions of safety as it relates to WPV</th>
<th>Effects on Psych Health</th>
<th>Effects on Productivity</th>
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Appendix G

HYPOTHETICAL SCENARIOS OF WPV

Questions added to interview guide to explore proposed responses to WPV. Questions asked after Item #13 on the Interview Guide.

1) Now I’m going to take you through a series of hypothetical scenarios. Please tell me how you think you would respond to or handle this situation if you encountered it at your workplace.

   a. Imagine that you are working your shift and a customer starts yelling and cursing at you in front of everyone else in the store. How would you respond?

   b. Imagine that you are working your shift and a coworker starts yelling and cursing at you in front of everyone else in the store. How would you respond?

   c. Imagine that you are working your shift and your supervisor starts yelling and cursing at you in front of everyone else in the store. How would you respond?

   d. Imagine that you are working your shift and a friend of yours comes into the store and starts yelling and cursing at you in front of everyone else in the store. How would you respond?

   e. Imagine that you are working your shift and a customer is making unwanted sexual passes or advances towards you or is saying inappropriate sexual things to you. How would you respond?

   f. Imagine that you are working your shift and a coworker is making unwanted sexual passes or advances towards you or is saying inappropriate sexual things to you. How would you respond?
g. Imagine that you are working your shift and your supervisor is making unwanted sexual passes or advances towards you or is saying inappropriate sexual things to you. How would you respond?

h. Imagine that you are working your shift and a friend of yours comes into the store and is making unwanted sexual passes or advances towards you or is saying inappropriate sexual things to you. How would you respond?

i. Imagine that you are working your shift and a customer starts threatening to physically harm you and you really do feel like this is a legitimate threat of harm. How would you respond?

j. Imagine that you are working your shift and a coworker starts threatening to physically harm you and you really do feel like this is a legitimate threat of harm. How would you respond?

k. Imagine that you are working your shift and your supervisor starts threatening to physically harm you and you really do feel like this is a legitimate threat of harm. How would you respond?

l. Imagine that you are working your shift and a friend of yours comes into the store and starts threatening to physically harm you and you really do feel like this is a legitimate threat of harm. How would you respond?

m. Imagine that you are working your shift and a customer physically assaults you. How would you respond?

n. Imagine that you are working your shift and a coworker physically assaults you. How would you respond?
o. Imagine that you are working your shift and your supervisor physically assaults you. How would you respond?

p. Imagine that you are working your shift and a friend of yours comes into the store and physically assaults you. How would you respond?

q. Imagine that you are working your shift and someone comes in with a gun demanding money from the cash register. How would you respond?”
Appendix H

ADOLESCENTS AND WORKPLACE VIOLENCE:

IS THERE CAUSE FOR CONCERN? (MANUSCRIPT 4)
Abstract

Adolescence is a time of growth and change for most individuals. Employment is one way adolescents can develop their individual identities and financial independence. Employment, however, is not without risk as workers may be exposed to various occupational hazards including violence. This article calls attention to the growing problem of workplace violence (WPV) among a vulnerable population – adolescents – through (a) exploring WPV as an occupational hazard, (b) discussing developmental concerns related to adolescents and work, and (c) describing what is known about adolescents and WPV. Future research opportunities and practice implications for pediatric nurses are provided.

Keywords: adolescents; violence; violence exposure; workplace
Adolescents and Workplace Violence: Is There Cause for Concern?

Occupational hazards are important considerations when seeking employment. Hazards may include slippery floors, loud noises, and exposure to microbes from customer contact and handling money (Breslin, Polzer, MacEachen, Morrongiello, & Shannon, 2007; Dunn, Runyan, Cohen, & Schulman, 1998) and may lead to illness or injury. One occupational hazard gaining increased attention among researchers is workplace violence (WPV). Literature on WPV is growing for the adult worker population, but not for adolescents. The need to study violence exposure among adolescent workers is important, as adolescents possess unique characteristics that may place them at equal or higher risk for WPV than adult workers. The purpose of this article is to bring attention to the topic of adolescent workers and WPV – an issue not clearly discussed in the research literature or among the general public. To accomplish this purpose, we will discuss the issue of WPV, explore developmental concerns related to adolescents and work, describe what is known about adolescents and WPV, identify opportunities for future research, and provide practice implications for pediatric nurses.

What is Workplace Violence?

WPV is a critical safety issue facing workers in the United States (U.S.) and includes any “behavior by an individual or individuals within or outside an organization that is intended to physically or psychologically harm a worker or workers and occurs in a work-related context” (Schat & Kelloway, 2005, p.191). According to the U.S. Department of Labor, nearly 18% of 4,557 fatal occupational injuries recorded in 2010 were due to assaults or incidents of violence in the workplace (Bureau Labor Statistics [BLS], 2011), making assaults and violent incidents the second leading type of occupational-related fatality, trailing only transportation accidents.
Whereas incidents of WPV resulting in fatalities garner the media’s immediate attention, WPV is not limited to incidents that result in the death of a worker. WPV incidents that involve verbal, sexual, or physical threats or assaults are much more prevalent compared to WPV related fatalities and may inflict emotional or non-fatal physical harm to the target. Findings from the National Crime Victimization Survey (NCVS) conducted by the U.S. Department of Justice estimate that in 2009 alone approximately 572,000 non-fatal violent crimes such as rape/sexual assault, robbery, and aggravated or simple assault occurred in the workplace (Harrell, 2011, p.1).

To help distinguish between various types of WPV, the National Institute for Occupational Safety and Health adopted the California Occupational Safety and Health Administration (Cal/OSHA) typology, which differentiates types of WPV by the perpetrator’s relationship to the victim rather than on behavior (Cal/OSHA, 1995; Howard, 1996) (See Table 1). This typology system has assisted researchers with identifying the risks and evaluating the consequences of WPV upon the individual and overall organization (e.g. Peek-Asa, Runyan, & Zwerling, 2001).

Consequences of WPV exposure have been observed on individual and organizational levels. Studies conducted with adult workers demonstrate the negative impact of physical and non-physical WPV on adult workers’ individual health and ability to work. Physical health problems reported among adult victims of WPV include headaches, muscle tension, chest pain, and abdominal pain (Hogh & Viitasara, 2005; Lanza, 2006). Psychological health problems reported include anxiety (Lanza, 2006), depression (Wieclaw et al., 2006), and fear of future violence (Lanza, 2006; LeBlanc & Kelloway, 2002; BLS, 2006). WPV may also negatively affect an individual victim’s stress level (Elklit, 2002) and overall perception of well-being (LeBlanc & Kelloway, 2002). In addition to health consequences, studies suggest that WPV exposure may influence an individual’s work performance. Adult victims of WPV may
experience difficulty concentrating while performing job activities (Gates, Gillespie, & Succop, 2011; Hogh & Viitasara, 2005) which could influence one’s ability to be productive. WPV has also been associated with lower levels of individual job satisfaction (Driscoll, Worthington, & Hurrell, 1995), increases in absenteeism, and increased intention to leave (BLS, 2006). Furthermore, research suggests that negative effects of WPV exposure extend beyond the individual level and may impact the overall organization. According to a survey by the U.S. , employers reported that incidents of WPV negatively affected overall productivity and morale of workers and may have contributed to increased rates of worker turnover (BLS, 2006).

To date, most studies have focused on experiences of adult workers age 18 and older (e.g., Mayhew, 2000; Schaffer, Casteel, & Kraus, 2002) producing valuable information about the risk for and impact of WPV. Yet it remains unclear if research evidence derived from adult workers accurately depicts the risks, experiences, and consequences of WPV among adolescent workers. Before we can understand and appreciate the toll that WPV has on adolescent workers, it is important to review relevant developmental issues that influence employment during adolescence.

**Adolescents and Work**

Like adults, employment offers benefits and risks for the adolescent worker (Mortimer, 2010). Yet adolescents are different from adults who seek employment due to the developmental stage which they are in and the settings in which they are typically employed. Cognitive, emotional, and social characteristics unique to adolescence may contribute to an individual’s ability to perform job duties and maintain personal safety in the workplace. Moreover, adolescents often work in settings that offer little pay, low status, and limited resources such as safety training and adequate supervision (Sudhinaraset & Blum, 2010) – potentially affecting
their ability to respond to work-related concerns. This section will discuss benefits and risks of employment during adolescence, examine developmental characteristics unique to adolescent workers, and address workplace characteristics that impact adolescent employees’ ability to work safely.

Formal employment is one way adolescents experience developmental growth. Benefits of employment include financial and physical independence from parents and development of self-identity as a worker. Adolescent workers incur other benefits from formal employment such as learning new skills, increased self-efficacy and self-confidence (Cunnien, MartinRogers, & Mortimer, 2009), and cultivation of valued work attributes such as time management skills, money handling, or working with adults (Mortimer, 2003). Then again, employment may negatively affect adolescents. According to surveillance data from the Centers for Disease Control and Prevention (2010), young workers (age 15-24 years) experience non-fatal occupational injuries at a rate twice that of older workers (ages 25 and older) (5.0 vs. 2.4 injuries per 100 full-time equivalents; RR = 2.0; 95% CI ±0.3; p < .001). In addition to higher rates of non-fatal injuries, researchers have found negative correlations between the numbers of hours worked and job intensity and adolescent engagement in healthy behaviors such as adequate sleeping, exercising, and eating breakfast (Safron, Schulenberg, & Bachman, 2001). Working also places demands on an adolescent’s time and may negatively impact relationships with parents and friends (Largie, Field, Hernandez-Reif, Sanders, & Diego, 2001), academic performance (Largie et al., 2001; Ruscoe, Morgan, & Peebles, 1996; Weller, Kelder, Cooper, Basen-Engquist, & Tortolero, 2003), and participation in extracurricular activities (Safron et al., 2001).
Though the positive and negative effects of work during adolescence remain under debate, it is clear adolescent workers are unique and differ from adult workers in several important ways. One difference is that adolescents are still developing cognitively, emotionally, and socially (National Research Council [NRC], 1998; Runyan, Schulman, & Hoffman, 2003; Rauscher, 2008; Sudhinaraset & Blum, 2010); therefore they may have limited capacity to make necessary decisions to maximize personal safety and health in the workplace. Lack of cognitive maturity can interfere with an adolescent’s ability to clearly assess the situation to generate solutions, evaluate the credibility of information sources, and anticipate consequences of actions when faced with workplace hazards. Emotional immaturity may interfere with an adolescent’s ability to recognize, control, and channel emotional responses to achieve desired outcomes and goals (Dahl, 2004) and consequently lead to problems in responding appropriately to stressful situations in the workplace (Dahl, 2004; NRC, 1998). Finally, social immaturity may interfere with an adolescent’s ability to connect and communicate with fellow coworkers and supervisors. This lack of connection could contribute to adolescent workers’ hesitation in speaking up to address concerns encountered in the workplace.

In addition to developmental differences, adolescents vary from adults in that they have different motivations for seeking employment, are new to the work environment, and often work in settings that pay minimum wage, provide limited safety training, and offer little supervision (Sudhinaraset & Blum, 2010). Adolescents often seek employment to earn money for ancillary expenses such as clothing, car insurance, or college saving whereas adult workers’ motivation for working is often focused on earning a living wage. One’s motivations for seeking and maintaining employment can influence the level of engagement and value on keeping that job. As adolescents often do not rely on maintaining a steady source of income, adolescents may be
less engaged and committed to keeping a job than adult workers when they encounter challenges or concerns in the workplace. Unlike adults who have an established history of work, lack of work experience may contribute to an adolescent’s ability to handle potential safety issues (NRC, 1998). Whereas adult workers may have experienced and learned from past encounters with safety issues, adolescents do not have occupationally rooted experiences from which to draw. Thus adolescent workers may be left trying to figure out and safely manage occupational concerns as they occur. Finally, work settings in which adolescents often are employed may not differ from those employing adults however they can exacerbate vulnerability issues among this population. For example, adolescents often work in low-status positions that pay minimum-wage and offer limited safety training and supervision. So if an adolescent worker faced a workplace safety concern, their lack of status and authority combined with little or no safety training would most certainly hamper their ability to properly handle the issue.

Despite known developmental differences between adolescent and adult workers, adolescents will continue to seek formal employment and will be exposed to several occupational hazards, including violence. The next section will explore what is known about adolescents and WPV.

**Adolescent Workers and WPV**

With nearly 90% of working adolescents employed in retail or service work settings (Runyan, Schulman, Dal Santo, Bowling, Agans, & Ta, 2007), the potential for exposure to WPV may be similar to adult workers in comparable jobs. Increased incidents in the retail sector can be attributed to the following factors. Workers in retail environments are often exposed to known risk factors for criminally associated WPV (i.e. Type I) (Runyan et al., 2007) such as working early or late hours (Runyan, Bowling, Schulman, & Gallagher, 2005; Runyan et al.,
2007), working alone or with limited supervision (Runyan et al., 2005), having limited or no training specific to WPV (Runyan et al., 2005; Runyan et al., 2007), and handling cash (Runyan et al., 2007). In addition to the above risk factors, adolescents often work in retail and service settings where the primary focus is on providing excellent customer service. Previous research has indicated that customer-oriented businesses often encourage worker behaviors and attitudes that promote the comfort of customers to yield high customer satisfaction levels with the service encounter (Lloyd & Luk, 2011). Thus adolescent employees holding low-status retail and service jobs may not know how to respond when dependence on customer satisfaction leads to power imbalances that enable aggressive behavior by customers (Yagil, 2008) and subsequent exposure to customer-perpetrated WPV (i.e. Type II).

Though most adolescents work at jobs that knowingly place them at risk for exposure to certain types of WPV, not all adolescents identify concern about the potential for violence exposure. A cross-sectional survey among adolescents (n = 396) at five study sites conducted by Runyan et al. (2005) found adolescent workers were mainly concerned about dealing with angry customers (57%), experiencing conflict with co-workers (27%), and being robbed while at work (26.4%). Adolescents expressed the least amount of concern with being physically attacked (15.2%). In a similar cross-sectional telephone survey, parents of employed adolescents (n = 1,059) responded very differently when asked to identify their own attitudes and beliefs about adolescent work and workplace safety (Runyan, Schulman, Dal Santo, Bowling, & Agans, 2009). Half the parents of employed adolescents (50.5%; 95% CI 45.1-56.0) expressed concern about their children being present during a robbery, while more than one third (36.8%; 95% CI 31.5-42.1) were concerned about their child being physically or sexually assaulted at work (Runyan et al., 2009). Despite the aforementioned concerns, most of the parents (97%; 95% CI
95.7-99.7) reported feeling confident their own child knew how to keep safe while at work (Runyan et al., 2009).

The above findings of adolescent concerns about WPV (Runyan et al., 2005) and parent concerns about their adolescent worker (Runyan et al., 2009) demonstrated unique differences between these two perspectives. Whereas adolescents expressed the most concern with encountering angry customers and some concern related to coworker violence and being present during a robbery, parents expressed the highest concerns for scenarios where their child might encounter extreme violence such as robbery and severe injuries such as physical or sexual assault. Perhaps adolescent participants expressed the highest concerns with scenarios of customer WPV because it the most frequently encountered and because they often struggle with handling it due to their cognitive and emotional immaturity. Conversely, parents’ concerns were likely motivated by the magnitude of harm their child might encounter if faced with robbery or physical assault. Parents did report that they thought their own child knew how to keep safe at work, however, no information was provided to support how parents knew their own child could keep safe at work.

Research regarding safety in the workplace extends beyond concern for WPV to adolescent workers’ reports of experiences of WPV. Building on the research completed by Runyan, Bowling, et al. (2005) and Runyan, Schulman, et al. (2007), Rauscher (2008) examined adolescent workers’ reports of lifetime exposure to WPV. Out of 1,171 U.S. students 14-17 years old who reported ever being employed, one-third of respondents (n = 368) reported experiencing at least one episode of WPV during their lifetime. Types of violent behaviors reported by the 368 participants included verbal threats (25%; n = 294), sexual harassment (10%; n = 115), and physical attacks (10%; n = 117). In addition to asking about the violent behavior experienced,
Rauscher asked respondents to identify by whom the behavior was perpetrated. Out of the 368 responding, customers were the most frequent perpetrators of verbal threats (55%; n = 157) and physical attacks (31%; n = 34), whereas coworkers were the most frequent perpetrators of sexual harassment (45%; n = 50). Of note, this study did not ask participants about experiences with incidents committed by criminals – a leading source of fatal and non-fatal WPV among adult workers in retail and service sectors (Peek-Asa et al., 2001).

In addition to the above research findings, the NCVS confirms adolescents are victims of WPV (Harrell, 2011). From 2005-2009, workers 16-19 years-old experienced non-fatal WPV such as rape, sexual assault, robbery, aggravated assault, and simple assault at a rate of 3.2 victims per 1,000 employed persons – a rate lower than reported among all employed persons age 16 and older (5.1 victims per 1,000 employed person) (Harrell, 2011). Moreover victims of non-fatal WPV age 16-19 represented only three percent (3%) of all non-fatal WPV victims even though workers 16-19 years-old comprise nearly five percent (4.8%) of all employed persons age 16 and older. Though these statistics indicated that adolescent workers experience lower rates of non-fatal WPV than older workers, they do confirm that adolescent indeed experience WPV. One limitation of the NCVS worth noting is respondents are only asked about experiences of rape, sexual assault, robbery, aggravated assault, and simple assault. Consequently other types of non-fatal WPV incidents such as verbal harassment, sexual harassment, and physical threats are not reported.

The studies presented above clearly illustrate adolescent workers are at risk for and do experience WPV. Adolescents work in settings that contain known risk factors for WPV (Runyan et al., 2005; Runyan et al., 2007). In addition, over half of adolescents expressed concerns about dealing with a potentially violent situation at work (Runyan et al., 2005). Finally,
one-third of adolescent workers reported experiencing at least one form of WPV during their lifetime as an employee (Rauscher, 2008). Despite these findings, the research literature still lacks information regarding incidence rates of all potential forms of non-fatal WPV (including verbal and sexual harassment), risk factors and consequences of WPV exposure unique to adolescent workers. The following section presents suggestions for future research on adolescents and WPV.

**Opportunities for Future Research**

Adolescent workers are at risk for violence exposure in the workplace, but little is known about incidence rates or about the unique risk factors for and consequences of WPV among this population. Future research efforts should be focused on developing more comprehensive reporting mechanisms to yield more accurate incidence rates of all forms of WPV among workers of all ages. In addition to developing incident tracking systems, future studies should explore if there are risk factors for WPV unique to the adolescent population. Specifically, researchers should examine to what extent an adolescent’s cognitive, social, and emotional maturity level may place him or her at increased risk for WPV compared with adult workers. Moreover, future research should focus on the consequences of WPV exposure among adolescent workers. Questions remain about the similarities and differences in consequences between adolescent and adult workers. Finally, research should be conducted to test interventions developed to target WPV prevention and/or management among workers in general and among adolescents specifically.

**Implications for Practice**

Nurses play a vital role in recognizing and addressing exposure to WPV among adolescents. Pediatric nurses in particular are well situated to address the issue of WPV as it
relates to two professional standards of pediatric nursing practice: (1) health teaching and health promotion and (2) assessment (National Association of Pediatric Nurse Practitioners, Society of Pediatric Nurses, & American Nurses Association, 2008). Pediatric nurses have the opportunity to address the risk of WPV among adolescents through prevention strategies such as health teaching and health promotion. In particular, school nurses can promote safe and healthy behaviors among students through educational interventions (Krause-Parello & Samms, 2011).

Youth violence, especially school-bullying, has received a great deal of attention from parents, health care professionals, and school administrators in recent years. As such, school nurses should consider collaborating with teachers, parent associations, and the community to educate students about how to recognize, prevent and manage all forms of violence, including WPV. Likewise, school nurses can partner with teachers and parent associations to educate adolescent students preparing to enter the workforce about work-readiness issues including occupational hazards. Topics such as maintaining personal safety from violence exposure and how to manage situations of WPV should be addressed to provide these novice workers with adequate knowledge and skills to handle WPV should it occur.

In addition to health promotion and education, pediatric nurses have the opportunity to address the issue of WPV through assessment. Pediatric nurses in primary care settings routinely assess patients for exposure to known health risks such as bike helmet usage, junk food consumption, and exposure to lead and second-hand smoke. Nurses should consider incorporating a WPV risk assessment when conducting routine assessments for exposure to other forms of violence such as child abuse, bullying, and gang violence. Similar to primary care settings, nurses in episodic care settings (e.g., emergency departments, urgent care centers) routinely assess patients for violence exposure (Houry, Cunningham, Hankin, James, Bernstein,
As recommended in national guidelines, routine violence assessments should be performed whether symptoms or signs are present and whether the provider suspects that violence has occurred (The Family Violence Prevention Fund, 2004). As no evidence exists regarding adolescent health consequences of WPV exposure, nurses should assess for the presence of health symptoms commonly reported among adolescent victims of violence exposure. These symptoms can include physical injuries, depression, anxiety, and increased aggression (Lambert, Nylund-Gibson, Copeland-Linder, Ialongo, & 2010), and should trigger nurses to conduct a comprehensive violence exposure screening tool such as the Exposure to Violence Screening Measure (EVSM) (Weist, Youngstrom, Myers, Warner, Varghese, & Dorsey, 2002). Appropriate for patients aged 10 and older, the EVSM screens for direct and indirect exposures to robbery, assault, shooting, and sexual abuse and yields a total score of violence exposure for the individual patient (Weist et al., 2002). Comprehensive violence exposure screening can assist the nurse in determining (a) the extent of the patient’s violence exposure, (b) if the injury could be violence-related, and (b) if violence related, whether the violence exposure occurred in the workplace.

**Summary**

WPV is a well-documented occupational hazard among adult workers, yet little is known about the topic of adolescents and WPV. What is known is that most adolescents are employed in the retail and service sector and thus are exposed to risk factors associated with certain types of WPV such as robbery (Type I), customer threats or attacks (Type II), and coworker harassment (Type III). Furthermore, an adolescent worker’s ability to handle violent incidents may be hampered by lack of confidence, immature social skills, and limited decision-making ability. Exposure to negative incidents such as WPV may result in short and long term
consequences for adolescent workers’ health and career ambitions. Therefore, future research needs to be conducted to determine if adolescent workers’ risk factors for, exposure to, and consequences of WPV differ from those documented among adult workers. With this knowledge, appropriate interventions to address WPV can be developed and evaluated among this vulnerable population of workers.
References


### Types of Workplace Violence

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<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Example</th>
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<tbody>
<tr>
<td>Type 1</td>
<td>Violent acts committed against the worker by criminals who have no legitimate reason for being in the workplace</td>
<td>Worker experiences physical or psychological harm during the course of a criminal act (e.g., robbery),</td>
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<tr>
<td>Type 2</td>
<td>Violent acts committed against the worker by the recipient of goods or services</td>
<td>Worker experiences verbal harassment or physical assault from a customer</td>
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<tr>
<td>Type 3</td>
<td>Violent acts committed against the worker by a current or former coworker or supervisor</td>
<td>Worker experiences harassment, threats, or attacks from a current or former employee</td>
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<tr>
<td>Type 4</td>
<td>Violent acts committed against the worker by a personal acquaintance including family, friends, and current or former romantic partners</td>
<td>Worker experiences harassment, threats, or assault from a personal acquaintance while in the workplace</td>
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