

Understanding How Young Workers Recover from Workplace Aggression and Violence
by
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Understanding How Young Workers Recover from Workplace Aggression and Violence

by Michael Teed

Abstract

Three studies were conducted to examine how young workers experienced and dealt with workplace aggression and violence. The first study consisted of 190 young adults employed in a movie theatre who completed a brief survey. Consistent with previous research, participants reported higher levels of aggression in comparison to violence, and victims of aggression reported significant levels of strain. Interestingly, participants reported higher levels of aggression between co-workers which has not been found in past research. Study 2 had 41 young victims of workplace aggression and violence complete 107 critical incidents to examine severity levels of workplace aggression and violence and also asked participants to identify what they did to help them recover from their experiences. Violence was reported as being more severe than aggression. The only technique that was reported in helping young adults recover from workplace aggression was that “nothing helped” and “acceptance” for victims of workplace violence. The 3rd study had 28 participants complete six short surveys over the course of three weeks to examine whether emotion and problem focused coping strategies moderated the effects of workplace aggression and violence on participants’ general health. Problem-focused coping significantly positively moderated the effects for workplace aggression on participants’ general health whereas emotion-focused coping negatively moderated the effects. Neither emotion nor problem focused coping strategies moderated the effects of workplace violence on an individual’s general health. These three studies demonstrate that workplace aggression and violence are a reality for young adults and that additional research and programs are required to help young adults deal with these experiences.

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Introduction

Employment, at least on a part-time basis, is now a normative experience for young people between the ages of 15-24 (Loughlin & Barling, 1999, 2001). Past research has noted that more high school and post secondary students were employed and spent more time in their work environment than in the past (Marshall, 2010; Usalca and Bowlby, 2006). In fact, a 2012 labour force survey found that 54.5% of young adults between the ages of 15 and 24 were employed in Canada and almost half (47.3%) of this sample worked on a part-time basis (Human Resource and Skill Development Canada, 2013). While another study found that at the end of 2012 roughly 2.43 million young adults had some form of employment, representing a 54.6% employment rate for that age group (Hodgson, 2013).

While on-the-job, young workers are exposed to many of the same hazards as adult workers. In some respects, young workers may be disproportionately exposed to incidents of workplace aggression and violence. Past research indicates that young adults are at an increased risk of workplace aggression and violence in contrast to older age-groups (Schat, Frone, & Kelloway, 2006; Vaez, Ekburg & LaFlamme, 2004). Many young adults are employed in service and retail sectors where employees are often expected to tolerate aggressive behaviours based on the dictum that the “client is always right” (Grandey, Dickter, & Sin, 2004). However, there are repercussions for tolerating such behaviours. Data consistently suggest that employees experiencing workplace violence report impaired physical and psychological well-being (Frone, 2000; LeBlanc & Kelloway, 2002; Rogers & Kelloway, 1997; Schat & Kelloway, 2000; 2003).

Young Workers

The term “young workers” typically refers to young adults between the ages of 15 and 24 (Barling & Kelloway, 1999). Throughout the United States, Canada, and Europe, many of these young adults are employed on a part-time basis while still at school (Loughlin & Barling, 1999, 2001; Marshall, 2010; Davis, 2012). In fact, a staggering 80% of North American high-school students would have held part-time jobs before they even graduated (Greenberger & Steinberg, 1986). In fact, 67% of Canadian youth (aged 15 to 24) were holding employment in 2002 (Statistic Canada, 2005). These statistics are representative to other workforces including the United States (Bureau of Labor Statistics, 2005) and the UK (Duffield, 2002). More recently the Labour Division of Statistics Canada reported that 45% of post-secondary students aged between 15 and 24 worked during the academic year of 2009-2010, the student worked an average of 15.6 hours a week (Marshall, 2010). In addition, the 2011 U.S. Census Report noted that out of 19.7 million undergraduate students, 71% were also employed during their time of study (Davis 2012).

Working as a young adult plays an important part in their developmental process (Frone, 2000; National Institute on Occupational Safety and Health, 1996, 1997). Research has associated early employment with several positive outcomes, including responsibility and maturity (Goodnow, 1988) and financial and economic gain (Kelloway & Harvey, 1999); however, there is also a downside to such early employment. Existing research shows that young adults are faced with the same hazards on the jobs as adults,

including increased work stress (Loughlin & Lang, 2005) and increased substance use (Barling & Kelloway, 1999).

Almost half of all young workers are employed in the retail or service sector placing young adult in situations where they must interact with customers on a regular basis (Zakocs, Runyan, Schulman, Dunn, & Evensen, 1998). Unfortunately, not all customers treat employees with the amount of respect that they deserve. Some customers perceive that they are entitled to receive a level of service that is beyond what is typically offered to customers. Should they not receive this level of service, they need simply to complain or to raise their voices in order to receive it; hence, the saying the customer is always right (Grandey et al., 2004). In addition, it can be quite easy for customers who are having a terrible day to displace their negative emotions and frustrations on a retail employee as there are few consequences to their aggressive behaviour. Consequently, it is not surprising that young adults are so frequently the target of workplace aggression (Chappell & Di Martino, 2000; Keashly, Trott, & MacLean, 1994).

Between the years 1998 and 2007, The Centers for Disease Control and Prevention (2010), using data from the National Institute of Occupational Safety and Health (NIOSH) and Census of Fatal Occupational Injuries (CFOI) and the National Electronic Injury Surveillance Systems occupational supplement reported that 5, 719 young workers died from occupational injuries which is equivalent to 3.6 deaths for every 100 000 full time equivalent worker (i.e., an individual who works 2 000 hours worked per year). This statistic is lower than older workers (i.e., 25 years and older). During this same period, an estimated 7.9 million non-fatal injuries within young workers were

reported in hospital emergency departments. This statistic is two times higher than the older workers group. It should be noted that out of 5 719 fatal injuries, 788 (14%) were caused by assaults and violent acts.

In a previous report, the National Institute of Occupational Safety and Health (2003) reported that between 1992 and 2000 there were 603 workers who suffered fatal injuries. Out of these 603 fatal deaths, 63% were due to assaults and violent acts (e.g. homicide associated with robbery). The second highest number of workplace fatalities occurred in retail trades (e.g. restaurants and retail stores). Unfortunately the study uniquely focused on young adults and did not provide any comparisons to older workers. With respects to non-fatal injuries, in 1998 more than half of non-fatal injuries occurred in retail trades, with more than 60% of which occurred in dining and drinking establishments. Many of these injuries were not related to workplace violence or aggression. The most common form of non-fatal injury was cuts which was followed by burns (Mardis and Pratt, 2003). Given that there are now more young adults working than in the past, understanding how they react and deal with circumstances of workplace aggression and violence is both conceptually and practically important.

Defining Workplace Aggression and Violence

For the purpose of this study, workplace aggression was defined as “behaviour 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 content” (Schat & Kelloway, 2005, p. 191). This definition encompasses a broad range of physical and psychological behaviours. It should be noted, that these aggressive actions

can come from a variety of sources including people from within (i.e., supervisors, coworkers) and/or outside (i.e. clients, customers) the organization (Schat et al., 2006). Although the terms workplace aggression and violence are often used interchangeably, it should be noted that they are in fact two separate constructs (LeBlanc & Kelloway, 2002). Several researchers have noted that although workplace aggression is a higher-order construct that can be a precursor to workplace violence, workplace violence is characterized as a behaviour that is aimed at causing physical harm. Workplace psychological aggressions, on the other hand, are behaviours that are intended to cause psychological harm (Greenberg & Barling, 1999; Schat et al., 2006; Schat & Kelloway, 2005).

Summary of Studies

To date, most of the available research on workplace aggression and violence has focused on the experience itself (e.g., frequency rates and sources) with little consideration of how individuals respond, cope, and/or recover from this aspect of their jobs. The current research was designed to address this omission by examining how young workers respond to, and deal with, acts of workplace aggression and violence. To do so, I conducted three studies. The first study consisted of a cross-sectional survey, which was used to examine the occurrence of workplace violence and aggression among a sample of young workers employed in a chain of theatres. Unlike many previous studies that have examined workplace aggression and violence within older age groups who were employed in predominately white collar jobs, the first study contributes to the existing literature by focusing uniquely on young adults who were employed in a service sector

job. Given that service sector jobs require higher levels of interactions with customers, it was anticipated that young adults may experience different frequencies of workplace aggression and violence from different sources and report higher levels of strain.

Based on results from the first study, which found that young workers experienced workplace aggression and violence from different sources than those previously reported in past research and that aggression lead to higher levels of strain, the second study examined incidents of aggression and violence from start to finish. More specifically, it used critical incidents to collect qualitative information in regards to what lead up to the incident, how severe was the incident of aggression and violence, and did young victims of aggression and violence did in terms of activities to decrease their levels of strain. Past research has predominantly examined workplace aggression and violence via aggregated measures which may not always provide sufficient information on the severity of the incident, as well as how young adults recover from these experiences (Glomb, 2002). The second study contributes to fulfilling a gap in the literature, by collecting qualitative information to examine specific occurrences of workplace aggression and violence from start to finish, thus gathering information on how young adults recover from or cope with these experiences.

Based on results from the third study which found that young adults were more likely to talk to people after being victims of aggression and violence, the final study used a diary methodology to examine whether problem or emotion-focused coping strategies moderated the effects of workplace aggression and violence on their general well-being.

The final study contributes to a gap in the literature by examining if examining the type of coping strategies that young adults use over an extended period of time (i.e., three weeks).

Study 1

The purpose of the this study was to examine workplace aggression and violence amongst a sample consisting of young workers. Unfortunately, very little is known about workplace aggression and violence amongst young workers given that the majority of the existing research on this topic has been conducted on the general population (e.g., samples consisting of all age groups and white collar employment). The objective of this study was to examine whether results from a sample of young adults employed in the service sector job where there are more interactions with members of the public would be similar to past findings which were based on more general samples. Given that the majority of young adults work in the service sector which requires them to interact with customers on a regular basis (Zakocs et al., 1998) and that they have very little job experience to help them deal with aggression and violence (Barling, Dupré, & Kelloway, 2009), it was anticipated that some results may be different than those found with an adult sample who may have more work experience and work in jobs that require fewer interactions with customers.

Frequencies of Workplace Aggression and Violence

Although incidents of workplace violence has received significant media attention, incidents of physical violence at work have been far less common than aggression (Duhart, 2001). Previous estimates of workplace violence have ranged from just over 1% (Duhart, 2001) to 5% of the workforce (U.S. Postal Service Commission on a Safe and Secure Workplace, 2000). A recent study in the United States found that between 2002 to 2009 incidents of non-fatal workplace violence had declined by 35% from the period of

1993 to 2003 (Harrell, 2011). The study also notes that between 2005 and 2005, that about 28% of workplace homicides involved victims in sales and related occupations. With respect to fatal injuries, violence (e.g. shooting and stabbing) accounted for 17% of the 4 383 fatal work injuries that occurred in the United States (Bureau of Labor Statistics, 2012). In Canada, an older study conducted in 2002 found that out only 1.7% of 95 010 public-sector employees were victims of workplace violence (Public Service Commission, 2002). Overall, these statistics demonstrate that although workplace violence is an infrequent occurrence, it does happen and merits additional study as employers have a legal obligation to provide their employees with a safe and secure work environment.

In contrast to workplace violence, estimates of workplace aggression were found to be far more common in the workplace. Estimates of workplace aggression range from 9% (Einarsen & Skogstad, 1996) to 70% (Einarsen & Raknes, 1997). In the United States, 71% of public-sector employees reported being victims of workplace incivility. In Canada, 69% of public-sector employees experienced some form of verbal workplace aggression (Pizzino, 2002). Outside the public sector, Schat et al. (2006) found that 41.4% of a large sample of American workers reported being victims of workplace aggression. Furthermore, 13% of this sample reported experiencing workplace aggression on a weekly basis (Schat et al., 2006; Teed, Kelloway, & Barling, 2008).

In summary, past studies have consistently shown that incidents of aggression are far more common in the workplace than violence. Given that the majority of young adults work in the service or retail sector which is prone to high levels of workplace aggression

(Chappell & Di Martino, 2000), it is anticipated that they too will experience greater incidents of workplace aggression in contrast to workplace violence. In addition, it is anticipated that statistics within a sample of young adults who have been characterized as having less work experience, less training, and work in jobs that require high levels of interactions with members of the public (i.e., service and retail level jobs) may differ from a sample of older adults who have been characterized as having greater work experience, higher levels of training, and who work in jobs with lower levels of interactions with members of the public (i.e., white collar/office jobs).

Hypothesis 1: The frequency of workplace aggression will be higher than the frequency of workplace violence in a sample of young workers because their jobs (i.e., service sector) requires higher levels of interactions with customers

Perpetrators of Workplace Aggression and Violence

As noted in Schat et al. (2006), very little research has examined the prevalence of workplace aggression and violence from different sources (i.e., co-workers, supervisors, and members of the general public). They analyzed results from a national survey with more than 2,500 US workers. They found that the most common source of aggression and violence is members of the general public. These findings are important, as they counter what is commonly seen in media outlets, which have stated that the source of violence typically comes from disgruntled ex-employees. However, Teed et al. (2008), using the Public Employment Survey (Public Service Commission, 2002) which was completed by 95,010 public service employees from across Canada, found that aggression was more likely to originate from individuals within the organization whereas violence was more

likely to originate from people outside the organization. Although not examined their study, it is possible that employees who deal with one another on a day to day basis may have developed interpersonal conflict, which based on the incivility spiral A recent study also found that between 2005 and 2009, strangers committed the greatest proportion of workplace violence against males and females (Harrell, 2011).

Based on the previous research that exists, there is reason to suspect that young adults' experiences will be different from older age groups. Research has consistently shown that age is associated with the perpetration of aggression and violence (Feshbach, 1997). As individuals grow older, they develop the ability over time to understand the consequences of their behaviours. Instead of reacting with fits of rage or anger, most adults understand that those actions can be detrimental to themselves and others; consequently they have learned not to act out on their feelings of anger (Barling, et al., 2009). Most young adults have not been working long enough to gather this experience; yet, they are constantly faced with the same stressors (i.e., bad supervisors, unfavourable working hours, unpleasant customers) on the job as adults (Loughlin & Lang, 2005), which can lead to feelings of frustration and anger.

Furthermore, young adults may not have had the life experience to have prepared them to deal with these stressors, which may lead to greater incidents of aggression and violence amongst this age group (Barling et al., 2009; McCabe, Loughlin, Munteanu, Tucker, & Lum, 2008)). Yet, some studies have indicated that there is no significant correlation between age and aggression (Barling et al., 2009; Douglas & Martinko, 2001; Dupré & Barling, 2006; Greenberg & Barling, 1999). In addition, the incivility spiral

theory (Anderson & Pearson, 1999) has suggested that unpleasant exchanges between co-workers may lead to more serious behaviours. Thus, incivility from one individual can lead to an equivalent or more increasingly uncivil act from the second party. Given that young adults lack work experience, it was anticipated that they may have difficulties dealing with interpersonal conflict between their co-workers and supervisors, which based on the incivility spiral could lead to higher levels of aggression between members from within the organization. Based on Canadian data from 95, 010 federal employees, Teed et al. (2008) found that aggression was more common from members from within the organization.

Hypothesis 2a: Workplace aggression is more likely to be perpetrated by individuals within the organization than by customers or clients.

With respect to workplace violence, past research (Harrell, 2011; Schat et al., 2006; Teed et al., 2008) has found that violence (i.e., assault or robberies) is more likely to be perpetrated by outsiders. It was anticipated that young adults would experience violence from similar sources than those found in the past.

Hypothesis 2b: Workplace violence is more likely to be perpetrated by individuals external to the organization (customers or clients) than by individuals within the organization.

Consequences of Workplace Aggression and Violence

Both workplace aggression and violence have been related to adverse consequences for individual and organizational well-being. Victims of workplace aggression have experienced a variety of detrimental psychological consequences

including a decrease in self-esteem (Ashforth, 1997), life satisfaction (Tepper, 2000), overall emotional health (Jagatic & Keashly, 2000), and concentration (Brodksy, 1976). Victims have also noted an increase in depression (Tepper, 2000), anger (Ashforth, 1997) and anxiety (Keashly, et al., 1994). With respect to workplace violence, previous studies (Rogers & Kelloway, 1997; Schat & Kelloway, 2000) have found that victims of workplace violence experience lower levels of emotional well-being and lower levels of affective commitment to their organization.

Hypothesis 3a: Workplace aggression will predict participants level of strain.

Hypothesis 3b: Workplace violence will predict participants level of strain.

Study 1: Methods

Study 1: Participants

Prior to recruiting participants, the study was approved by Mount Allison's University Research Ethics Board as the study was done in conjunction with Dr. Jane Mullen, please refer to Appendix A. One hundred and ninety young adults (93 women) participated in this study. Participants reported a mean age of 18.93 years ($SD = 3.35$ years). Participants were employed at one of seven different movie theatre locations across Atlantic Canada. All theatres were part of a single organization. Participants worked, on average, 25.65 hours per week ($SD = 11.19$ hours). One hundred and fifty (82.9%) were employed at the front lines of the concession stand, while 31 supervised the concession stands. One hundred and fifty-six workers were employed on a part-time basis (83.9%).

Study 1: Procedures

Upper management from a chain of Atlantic Canadian movie theatres supported the study and agreed to allow a team of researchers to collect data from their employees. Researchers went to seven different movie theatre locations in New Brunswick and Nova Scotia during quarterly staff meetings. Researchers were presented to the audience by the district manager who provided the employees with a general overview of the study (see Appendix B) and stated the importance of completing the survey. Researchers then gave the audience a brief explanation of the study, provided and reviewed the informed consent protocol with employees and asked them to complete the questionnaire. Employees were told that the surveys would be completely anonymous (i.e., they were instructed not to indicate their names on the survey) and that all responses would remain confidential. At the end of the study, results would be presented to the company in summarized form (i.e., means and frequencies). Given that employees were being paid to attend the quarterly meetings and that it was supported by upper management, most employees opted to complete the study. Within all seven locations, only three candidates refused to complete the study. Participants were allocated 30 minutes to complete the study before the quarterly meeting continued. They were told to complete the surveys individually and quietly. Upon completing the survey, participants returned the survey to the research assistant in a drop off box placed at the front of the theater. Upon dropping their completed surveys in the box, the researcher then provided the participant with their feedback sheet.

Study 1: Measures

Participants completed a questionnaire consisting of demographic items, reports of workplace violence and aggression based on the source (i.e., supervisor, co-worker, and customer) and general health. For a full list of measures for study 1, please see Appendix C.

Physical violence at work. Physical violence at work was assessed with five items from Schat and Kelloway's (2000) scale. All five items were rated with respect to three different sources (i.e., supervisors, co-workers, and customers). Participants were asked how many times they experienced workplace violence over the last year by using a seven point Likert scale with higher scores indicating a greater frequency of violence. More specifically, the scale ranged from: one (never), two (infrequently - one or two times), three (sometimes - three or four times), four (somewhat frequently - five to seven times), five (often - eight to 10 times), six (very often - 10 to 15 times), and seven (extremely often - more than 15 times). Sample items include: "Have you been hit, kicked, grabbed, shoved or pushed" and "Have you had an object thrown at you". The scale had reliabilities of ($\alpha = .72$) for supervisor, ($\alpha = .70$) for co-workers, ($\alpha = .77$) and customers. The internal consistency for all three scales combined (i.e., 15 items consisting of all three sources: supervisors, co-workers, and customers) was $\alpha = .87$.

Psychological aggression at work. Psychological aggression at work was assessed using 13 items from Schat and Kelloway's (2000) scale. All 13 items were rated with respect to three different sources (i.e. supervisors, co-workers, and customers). Participants were asked how many times they experienced workplace aggression over the

last year by using a seven point Likert scale with higher scores indicating a greater frequency of aggression. More specifically, the scale ranged from: one (never), two (infrequently - one or two times), three (sometimes – three or four times), four (somewhat frequently – five to seven times), five (often – eight to 10 times), six (very often – 10 to 15 times), and seven(extremely often - more than 15 times). Sample items include: “Have you been shouted at” and “Have you been given the silent treatment”. Internal consistency of the 13 items rated with respect to supervisors was $\alpha = .94$, to co-workers $\alpha = .94$, and to customers $\alpha = .91$. The reliability for the entire scale (i.e., 39 items from all three sources: supervisor, co-workers, and customers) was $\alpha = .96$.

Strain. Strain was assessed using 11-items from the General Health Questionnaire (Banks, Clegg, Jackson, Kemp, Stafford, & Wall, 1980)¹. Participants responded to each item using a 7-point Likert scale ranging from 1 (not at all) to 7 (frequently). Sample items include: “Been able to enjoy day to day activity” and “Been able to face your problems”. High scores are reflective of greater general health. The internal consistency of the scale with 11-items was $\alpha = .75$.

Study 1: Results

Means, standard deviations, intercorrelations between variables, and sub-scale item correlations for dependent variables are presented in Table 1. Inspection of the correlation table suggested several significant associations demonstrating that aggression and violence did have negative impact on young adults well-being. Furthermore,

¹ Unfortunately an error was made was made during the collection of the General Health Questionnaire. Unfortunately one item was not incorporated in the scale (i.e., thinking of self as worthless).

9. General	4.73	1.02	-.20**	.16*	.01	-.14	-.30**	-.33**	-.27**	-.35**	(.75)
Health											

Note:. 1 = Physical violence at work – source supervisors (5 – items), 2 = Physical violence at work – source co-workers (5-items), 3 = Physical violence at work – source customer (5 – items), 4 = Violence from all sources (15 – items), 5 = Psychological aggression at work – source supervisor (13 – items), 6 = Psychological aggression at work – source co-workers (13-items), 7 = Psychological aggression at work – source customers (13-items), 8 = Psychological Aggression from all sources (39-items), 9 = General health questionnaire (11-items)

Note: Scale reliabilities are indicated in parentheses along the diagonal

Note: * $p < .05$, ** $p < .01$

Hypothesis 1

Hypothesis 1 proposed that frequencies of workplace aggression would be significantly higher than incidents of workplace violence. To verify this hypothesis a repeated measures ANOVA was performed. Rates of workplace aggression ($M = 75.55$; $SD = 3.04$) were significantly higher than workplace violence ($M = 18.29$, $SD = .51$) while controlling for gender and location, $F(1, 158) = 439$, $p = .000$. Based on these findings, young adults who participated in the study were more prone to be victims of workplace aggression than workplace violence, thus confirming hypothesis 1.

Hypothesis 2a

It was hypothesised that workplace aggression would more likely to be perpetrated by individuals within the organization (i.e., a supervisor or a co-worker) as opposed to someone external to the participant (i.e., a customer). To verify this hypothesis a repeated measures MANOVA was conducted where gender and locations were used as predictors of the source of aggression. Mauchly's test indicated that the assumption of sphericity

had been violated for the main effects of the source of aggression, $\chi^2(2) = 20.37, p = .000$; therefore degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .89$). A significant effect was found for sources of aggression between customers ($M = 26.78, SD = 1.13$), supervisors ($M = 24.21, SD = 1.14$), and co-workers ($M = 24.57, SD = 1.13$), $F(1.78, 281.72) = 5.09, p = .009$. A significant effect was also reported for the different sources of aggression and gender $F(1.78, 281.72) = 4.93, p = .010$.

As post hoc tests can not be conducted via a repeated measures MANOVA (Fields, 2009), a paired-sample t-test was conducted to examine whether workplace aggression was more likely to be perpetrated by individuals from within the organization (i.e., supervisors and co-workers) than from outside the organization (i.e., customers). In order to conduct this analysis, mean scores from supervisors and co-workers were tabulated for all aggression items. A pair sample t-test found a significant difference between aggression from internal sources ($M = 1.87, SD = 1.04$) and aggression from external sources ($M = 2.00, SD = 1.06$), $t(190) = -2.09, p = .038$. In other words, participants reported higher levels of aggression coming from customers as opposed to insiders (i.e., supervisors and co-workers).

Hypothesis 2b

Hypothesis 2b stated that workplace violence would more likely be perpetrated by individuals external to the organization (i.e., customer) as opposed to within the organization (i.e., supervisor or co-worker). To verify this hypothesis a repeated measures MANOVA was performed where gender and locations were used as predictors of the

source of violence. Mauchly's test indicated that the assumption of sphericity had been violated for the main effects of the source of violence, $\chi^2(2) = 20.74, p = .000$; therefore degrees of freedom were corrected using the Greenhouse-Geisser estimates of sphericity ($\epsilon = .90$). There was a significant main effect reported between the source of violence between customers ($M = 5.78, SD = .17$), supervisors ($M = 5.84, SD = .18$), and co-workers ($M = 6.85, SD = .23$), $F(1.80, 308.74) = 23.71, p = .000$.

Given that post hoc test are not recommended via repeated measures analysis (Fields, 2009), a paired-sample t-test was conducted to examine whether workplace violence was more likely to be perpetrated by outsiders (i.e., customers), as opposed to people from within the organization (i.e., supervisors and co-workers). In order to conduct this analysis, mean scores from supervisors and co-workers were tabulated for all violence items. A significant difference was reported between violence from internal sources ($M = 1.26, SD = .53$) and violence from external sources ($M = 1.14, SD = .44$), $t(190) = 3.49, p = .001$. These findings suggest that young workers were more likely to be victims of workplace violence from internal sources than customers, thus rejecting hypothesis 2B.

Hypothesis 3

It was hypothesized that workplace aggression and violence would negatively predict participants general health. To verify this hypothesis a mixed model analysis was conducted. A mixed model analysis was deemed appropriate as the data collected had a two level hierarchical structure. Level 1 would include data from individual participants;

whereas participants were nested within specific theatres, which were categorized as level 2 data.

Prior to conducting the mixed model analysis, the null model was tested as suggested by Heck, Thoman, and Tabata (2010). The intraclass correlation was calculated using the following formula $\rho = \sigma^2_B / (\sigma^2_B + \sigma^2_w)$, thus, $[0.041 / (0.041 + 0.990) = 0.041 / 1.031$ or 3.98%]. Suggesting a small effect of location on GHQ (3.98). The intercepts did not vary significantly across theatre locations (Wald $Z = .977$, $p = .328$). Given that the ICC found that only 3.97% of variability in the general health scores occurred across theatre locations and that the intercepts were not significant, a mixed model analysis was not deemed appropriate to examine the effects of workplace aggression and violence on general health. Multiple regression analysis was deemed more appropriate to verify the hypothesis.

Multiple regressions were conducted using SPSS 17 and three separate steps were examined. Step 1 included all control variables, thus age, gender, and hours worked. Step 2 included aggression and violence in addition to the previous variables. It should be noted that aggression and violence were centered using grand mean centering. Step 3 included interactions between violence and aggression as well as all previous variables.

Results of the multiple regression are presented in table 2. Aggression significantly predicted participants' general well-being, thus supporting hypothesis 3a which stated that workplace aggression will predict levels of strain. Workplace violence did not have any significant impact on participants level of strain, thus rejecting hypothesis 3b.

Table 2

Multiple Regressions for General Health Scores

Model	<i>B</i>	<i>SE B</i>	β
Step 1			
Constant	5.45	0.49	
Age	-0.03	0.03	-.08
Gender	-0.37	0.16	-.19*
Hours	0.00	0.01	-.02
Step 2			
Constant	5.41	0.48	
Age	-0.03	0.03	-.10
Gender	-0.36	0.15	-.18*
Hours	0.00	0.01	.04
Aggression Total	-0.01	0.00	-.34**
Violence Total	0.02	0.02	.10
Step 3			
Constant	5.45	0.47	
Age	-0.04	0.03	-.11
Gender	-0.36	0.15	-.18*
Hours	0.00	0.01	.04
Aggression Total	-0.01	0.00	-.33**
Violence Total	-0.02	0.02	-.10

Agg. * Viol.	0.00	0.00	.24
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Note: Aggression Total = Psychological aggression at work from all sources (supervisors, co-workers, and customers; 39-items), Violence Total = Physical violence at work from all sources (supervisors, co-workers, and customers; 15 items), and Agg. *Viol.= Interaction between aggression total and violence total

Note : * $p < 0.05$, ** $p < 0.01$

Note: $R^2 = .05$ for Step 1, $\Delta R^2 = .08$ for Step 2 ($p < .01$), and $\Delta R^2 = .02$ for Step 3

Study 1: Discussion

This study is unique in that it examined workplace aggression and violence in a service sector job consisting of nothing but young adults ($M = 18.93$; $SD = 3.35$).

Unfortunately, very few studies have used a sample consisting solely of young adults.

The objective of the first study was to determine whether frequencies rates of workplace aggression and violence presented in previous research would be consistent with a sample of young adults. The study was also interested in examining how who perpetrated the incidents and how workplace aggression and violence had an impact on participants level of strain.

The results found that participants reported higher frequencies of workplace aggression than violence. This finding support hypothesis 1 and also support a body of existing research (Schat et al., 2006; Pizzino, 2002; Einarsen & Raknes, 1997; Duhart, 2001). As previously noted, young adults employed in retail and service industries are more susceptible to being victims of workplace aggression (Chappell & Di Martino, 2000), given that they have high levels of interactions with customers (Zakocs et al., 1998).

Participants were also more likely to be aggressed against by outsiders (i.e., customers) as opposed to insiders (i.e., co-workers and supervisors). These results did not support hypothesis 2a which stated that workplace aggression would be more likely to be perpetrated by individuals from within the organization which may reflect the nature of employment in the service industry (Grandey et al., 2004).

Service sector employees are required to directly deal with members of the general public; whereas many public service employees may be required to deal with colleagues more frequently than members of the general public. One possible distinction, is that service sector employees are often expected to tolerate aggressive behaviours from members of the general public based on the dictum that the “client is always right” (Grandey et al., 2004). This could possibly explain why young adults have a tendency to experience higher levels of workplace aggression from members of the general public. In a study that examined the construction industry, McCabe et al. (2008) found very few conflicts between co-workers and managers. Again, this is an important distinction from previous research done with a larger sample and within a different industry. The results of the current study demonstrates that young adults may experience workplace aggression differently than adults employed in non-retail and service industries.

Participants also reported higher rates of workplace violence from insiders as opposed to outsiders. These results do not support hypothesis 2b which stated that workplace violence is more likely to be perpetrated by individuals external to the organization. This finding was striking given that it contradicts previous research which has for the most part consistently found that violence amongst co-workers is quite rare

(Barling et al., 2009). One possible explanation for the current finding is based on the fact that there were fewer “older” adults who were employed in the organization. In fact, most of the front line staff within the organization were young workers. Thus, in this context there were young adults working with, and for, other young adults and this may have altered the climate of the workplace in regards to workplace violence. It is possible that young workers who were being led by people of the same age group (i.e., lack of leadership skills and lack of knowledge and skills) may have led to higher levels of interpersonal conflict which in return could have escalated to incidents of violence.

Also many young adults lack work experience and are thus still in the process of developing their professional skills (Barling et al., 2009; McCabe, 2008). Many of them are inexperienced in dealing with stressful work situations, be it an angry customer or an annoying co-worker. In a study examining young workers’ job self-efficacy and affect, Lubbers, Loughlin, and Zweig (2005) found that young adults were indeed impacted by interpersonal conflict at work and noted, as did Bartkus (2001), that young adults not properly trained on social skills in their academic curriculum and consequently may not be well prepared to deal with interpersonal conflicts in their working environment. Thus, when faced in situations of anger or frustration, it is possible that some young adults may act out on these impulses as opposed of doing what would be expected in a work environment – suppressing any emotional physical reaction. Based on the incivility spiral (Anderson & Pearson, 1999), young adults who physically act out their emotions of anger and frustration may be more prone to end up in a situation where their perpetrator reacts in a similar fashion. Similar to hypothesis 2a, these results indicate that young adults do

experience violence differently than a sample of adult employees working in a professional sector. It is possible that these findings are due to the nature of the working environment within the organization that was surveyed; however, it is also possible that these findings could be replicated in other working environments with the service and retail sector that's workforce is composed mainly of young adults (Zakocs et al., 1998). These results support the need for additional research on workplace aggression and violence within a sample of young adults in the retail/service industry so that retail and service organizations can have a better understanding of what are the sources of aggression and violence.

Aggression and gender were significant predictors of participants general health, thus confirming hypothesis 3a which stated that workplace aggression will predict participants level of strain. Based on the job-demands recourse theory, it is possible that participants who experienced higher frequencies of workplace aggression also experience higher pressures, expectations and conflicting requirements at work, thus leading to higher levels of stress and exhaustion (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). These findings support the notion that workplace aggression does have a negative impact on individuals general well-being (i.e., strain). Additional research is warranted to examine how workplace aggression impacts specific aspects of an individual's health.

Workplace violence did not negatively predict participants level of strain, thus not supporting hypothesis 3b which was previously documented in the literature (Rogers & Kelloway, 1997; Schat & Kelloway, 2000). Given that this study used aggregated measures of aggression and violence, it is possible that it does not accurately represent the

true impact that workplace violence had on participants. As hypothesis 1 confirmed, participants were more prone to experience workplace aggression than workplace violence. These high rates of workplace aggression may overlook the impact that workplace violence has on participants level of strain. For example, although participants did not report high levels of workplace violence, the frequency rates do not account for how severely participants may have rated these individual incidents. Glomb (2002) noted that aggregated measures of workplace aggression and violence do not fully account for the severity, the nature of the individual encounters, or the timeline of these encounters. In addition, it is not clear, for example, whether the measure would allow respondents to distinguish between a violent assault and rough play between two young co-workers. If two young adults are accustomed to rough housing one another (e.g., play fitting or kicking) by definition of the survey this would be defined as a violent act; however, given that the actions are playful in nature, they may not lead to higher levels of strain. Unfortunately, the aggregated measure used for the current study does not provide any information on the nature of the violence that was experienced. Based on Glomb's suggestions, examining workplace violence via qualitative data on a case by case basis may provide valuable insight on the nature of workplace violence and how it may be linked to strain.

As noted in table 1, significant positive correlations were reported between sources of aggression (i.e., supervisors, co-workers, and customers) and sources of violence. These findings could suggest that participants are eliciting these types of responses from their working environment. For example, employees who perceive that

they are the victim of workplace aggression and violence, may not fully realize or understand that their previous behaviours towards their co-workers (e.g., being rude towards a co-workers in the past) may have elicited a rude response from their co-workers, thus causing them to be a victim of workplace aggression and violence.

Study 1: Implications for Future Research

Young adults did not necessarily experience workplace aggression and violence the same way as reported by adults in previous research. Consistent with adult works, young adults did report higher levels of workplace aggression than workplace violence. However, young adults reported different sources or perpetrators of workplace aggression and violence than what has been reported in previous research (i.e., sample with a higher mean age). Specifically, young workers reported experiencing physical violence from coworkers – rather than customers and aggression from customers rather than coworkers. These findings suggest that there are unique aspects of young workers' employment that bear further investigation.

Workplace aggression predicted participants general level of strain. These findings could be associated with the job-demands recourse theory. It is possible that young adults who experienced higher frequencies of workplace aggression may also have experienced higher pressures or expectations, without proper workplace training, work experience, or resources to deal with these incidents (Barling et al, 2009), participants may have faced higher levels of stress and exhaustion (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Although this study examined the impact of workplace aggression and violence on participants' level of strain, it did not examine what type of resources young adults used

to recover or cope with these experiences. These resources would be important to examine as they may moderate the effects of workplace aggression and violence on young adults general well-being.

Although workplace violence did not negatively predict participants well-being, there is a possibility that the current study overlooked the actual severity of workplace violence which could have a direct impact on the participants' general well-being. The current study used aggregated measures of workplace aggression and violence. As Glomb (2002) suggested aggregated measures of workplace aggression and violence may not accurately depict the effects of these incidents, as they do not take into account levels of severity, the impact of individual encounters and the timeline of these encounters. The level of severity is an important aspect that warrants further examination. Based on the job-demands resource theory, incidents rated more severely than others may place additional demands on the individual which could lead to greater levels of stress and exhaustion without the proper resources. For example, one severe incident may have more of an impact than 10 separate minor incidents.

The second study will examine workplace aggression and violence from a different perspective by examining how severely young adults rate incidents of workplace aggression and violence and what type of activities young adults do to help them recover or cope from these experiences. The critical incident methodology will be used to examine these questions as it can provide detailed and specific information on how young adults experience and recover workplace aggression and violence.

Study 1: Implications for Practice

Results from this study confirmed that young adults were more prone to experience workplace aggression from customers and to a lesser extent workplace violence from co-workers. These findings emphasize the need for human resource managers in the service and retail sectors to develop policies to help young adults deal with workplace aggression and violence.

As discussed earlier, many young adults lack proper job experience and consequently don't always know how to act or react when placed in highly stressful situation (Barling et al, 2009). With respect to occupational health and safety, research has indicated that many young adults are not fully aware of their rights. For example, many young adults are not aware that they have the right to refuse work activities that could jeopardize their safety. These policies could focus on helping young adults identify predictors of workplace aggression and violence, so that they can possibly prevent these incidents from even happening. The National Institute of Occupational Safety and Health as well as the Canadian Centre for Occupational Health and Safety both provide guides to assist human resource managers in developing workplace aggression and violence policies.

Study 1: Limitations

As with any other study there are strengths and weaknesses. As this study examined young adults employed in a movie theatre setting, it is possible that its results may not be generalized to other sectors of employment. Accordingly, it would be

important to examine rates of workplace aggression and violence from different service and retail sectors in different geographical locations throughout North America.

Study 1: Conclusion

The objective of the this study was to examine workplace aggression and violence amongst a sample consisting uniquely of young workers. Past studies on workplace aggression and violence have predominately been examined via a sample of working adults. Given that the majority of young adults work in the service sector which requires them to interact with customers on a regular basis (Zakocs et al., 1998) and that they have very little job experience to help them deal with aggression and violence (Barling et al, 2009), it was anticipated that some results may be different than those found with an adult sample.

In comparison to results reported in Teed et al. (2008) based on a sample of 95, 010 federal employees with a mode age between 40 and 49 years of age, young adults appeared to experience workplace aggression and violence from different sources. For example, young adults were more likely to experience workplace aggression from an outsider and workplace violence from an insider.

Workplace aggression also negatively predicted participants general well-being. Based on the job-demands resource model, this may have placed a greater demands on young adults, thus leading to higher levels of stress and exhaustion (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). These findings demonstrate the impact that workplace aggression can have on young adults, but more importantly these findings support the

need for additional research to examine what type of resource young adults use to recover or cope from these demands.

Study 2

Given that the first study found that workplace aggression significantly predicted levels of strain, the second study examined how severely participants rated their experiences of workplace aggression and violence. In addition, this study examined what young adults did to help them cope or recover from their experiences. Much of the past research on workplace aggression and violence has focused on frequency counts, sources of aggression and violence, and the consequences of being a victim of workplace aggression and violence; very few studies, if any, have examined what happens between the experiencing workplace aggression and violence from an individual to experiencing it's outcome. More specifically, what do victims of workplace aggression and violence do after experiencing these incidents and are any of their activities helping them deal with what they just experienced.

As Glomb (2002) noted, research on workplace aggression and violence has generally relied on aggregated measures in which exposure is seen as the total sum of a set of individual experiences. Models based on aggregated measures may not have fully accounted for the severity, the nature of the individual encounters, or the timeline of these encounters. Consequently, Glomb has specifically advocated for a focus on individual incidents/encounters as a means of studying workplace aggression and violence. Based on Glomb's suggestions and given that very little is known about how young adults experience, recover, and/or cope from workplace aggression and violence, the current study collected both qualitative and quantitative information in order to provide more valuable information on these experiences.

For the current study, the critical incident technique (Flanagan, 1954) was used for collecting direct observations of human behaviour related to workplace aggression and violence from the participants. It was anticipated that the critical incident technique would provide more detailed information on how young adults recover from experiencing workplace aggression and violence, which may have otherwise been overlooked by using a survey with specific measures. Using the critical incidents technique, participants described how they recovered from workplace aggression and violence from their perspective and with their own words. It was expected that this rich data would provide greater insight into how young adults recovered from these experiences. In addition, participants were asked to report how severely they perceived their incident of workplace aggression and violence and how effective their activities were in helping them recover or cope from their experiences.

Job Demands-Resources Theory

The consequences of workplace aggression and violence can be interpreted as an example of the job demands-resources theory. Based on this theory, workplace aggression and violence can be defined as stressors because they place greater demands on young adults. As many young adults have accumulated little work experience, they may not have sufficient resources to help them deal with these stressors, thus leading to greater levels of anxiety and burnout.

Almost half of all young workers are employed in the retail or service sector, placing young adult in situations where they must interact directly with customers on a regular basis (Zakocs, et al., 1998). Interestingly, jobs in the human sectors have often

been associated with high levels of burnout (Maslach & Schaufeli, 1993). Traditionally, these human service jobs were defined as social work, health care, and teaching (Maslach & Schaufeli, 1993); however, based on the job demands-resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), incidents of burnout could also be extended to other human service sector jobs that require high levels of interactions with customers (e.g., retail and service sector jobs).

Job demands can be defined as work activities that have been associated with high levels of pressure, high expectations, and conflicting requirements that provoke high levels of stress and burnout. High levels of demands requires the individual to sustain additional energy to either accommodate or endure these difficulties. The additional energy required to meet these demands depletes the individuals' energy reserve and consequently leads to exhaustion (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004).

In accordance with the characteristics of job demands, it is reasonable to assume that workplace aggression and violence may lead to high levels of pressure. As noted earlier, past research has found negative repercussions for victims of workplace aggression, which included increased levels of depression (Tepper, 2000), anxiety (Ashforth, 1997), and anxiety (Keashly, 1994); whereas workplace violence was also associated with decreased levels of emotional well-being (Rogers & Kelloway, 1997; Schat & Kelloway, 2000). Thus indicating that victims of workplace aggression and violence would require additional efforts to deal with these demands. Given that a large percentage of young adults who are employed in the service sector (Zakocs et al., 1998),

which is reputed as an industry where employees are often expected to tolerate aggressive behaviours based on the dictum that the “client is always right” (Grandey et al., 2004).

Young adults with little work experience may be placed in situations where they have to tolerate uncivil customers or rude customers who are trying to get what they want or who are simply displacing their day to day frustrations on young employees who are perceived as a safe target. Again, this can place additional pressure on young adults who are inexperienced in dealing with such incivility that consequently places greater emotional demands on them.

Another factor that may have an impact on job demands is the relationship that young adults have with their supervisors and co-workers. Interpersonal conflict between these individuals may arise if an employee or a group of employees is preventing another from achieving its objective (Johns & Saks, 2014.). Interpersonal conflict can be caused a variety of factors including differences in power (e.g., supervisor and subordinates), status (e.g., new waiter giving orders to a more senior and experienced chef), ambiguity (e.g., a young employee not knowing how to deal with a difficult and demanding customer) all of which could potentially occur within a working environment (Johns & Saks, 2014). As Frone (2000) noted, young workers aged between 16 to 19 years of age, reported interpersonal conflict with their supervisors lead to lower levels of job satisfaction and organizational commitment and higher levels of turnover intent; whereas conflict between young workers and their co-workers lead to greater levels of depression and lower levels of self-esteem. Furthermore, Hershcovis et al. (2007) noted that interpersonal conflict was a significant predictor of workplace aggression. In addition,

Brenninkmeijer, Demerouti, le Blanc, and van Emmerik (2010) found that when individuals focused their energy on interpersonal conflict with colleagues, they were more likely to experience greater levels of exhaustion. All of the above research demonstrates that workplace aggression can lead to higher levels of strain and exhaustion places greater emotional demands on individuals.

On-the-job resources, such as autonomy, support, and feedback, may also decrease the adverse consequences associated with high levels of job demands. Research has shown that on-the-job resources can encourage work goals and constrain job demands (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). For example, young employees who may have struggled in dealing with difficult customers may receive feedback or support from their supervisor; consequently, the next time they have deal with difficult customers, they may feel more prepared which can in return decrease their level of strain. On the other hand, young adults who do not receive feedback or support on dealing with difficult customers may experience greater levels of strain.

Past research has shown that young adults may actually lack on the on-the-job resources. For example, Barling et al. (2009) noted that young workers do not have much work experience to help them deal with difficult situations at work. Past studies have also found that young adults do not always receive sufficient on the job training. For example, despite legal requirement throughout Canadian provinces, many employers have not provided health and safety training to their employees. In fact, based on the Workplace Employee Survey, Smith and Mustard (2007) found that over 75% of young adults did not receive any form of health of safety training in their first 12 months of employment.

Furthermore, young workers may experience a leader who is more abusive than supportive. For example, Starratt and Grandy (2010) found that young workers with abusive leaders (e.g., hostile, non-friendly, intimidating, displeasing verbal and non-verbal behaviours) over an extended period of time experienced feelings of hopelessness, humiliation, and anxiety. These lack of resources, paired with the strain associated with workplace aggression and violence (i.e., high job demands), could consequently lead to higher levels of stress for young workers. Thus, workplace violence and aggression are stressors that have a negative impact on individual health and well-being.

Although workplace aggression and violence have both been associated to negative individual repercussions, study 1 found that only workplace aggression was associated with greater levels of strain. One possible explanation for this was that there were fewer incidents of workplace violence and that using an aggregated measure did not fully capture the effects of workplace violence. It was anticipated that by examining incidents of aggression and violence via critical incident technique using a mixture of qualitative (i.e., describe the incident) and quantitative data (i.e. using a likert-scale to rate the severity of the incident) will provide additional information on the severity of aggression and violence. Given that workplace violence occurs less frequently than workplace aggression and that it is intended to cause physical harm to someone which can take a greater length of time to recover from, it was anticipated that victims of workplace violence will require additional physical and psychological efforts to recover from their experiences, thus placing greater demands on young workers, many of whom may have insufficient resources (i.e., training or work experience) to properly deal with this stress

Hypothesis 4: Workplace violence will be perceived as being more severe than aggression.

How do Young Adults Recover from Workplace Aggression and Violence?

Given the negative outcomes associated with workplace aggression and violence, it is surprising that very little research has been done to examine how individuals actually recover from these incidents. Although no research examines this question directly, existing research in the areas of recovery and coping may be able to provide some insight into how young adults recover from these experiences. Recovery can be considered as the type or qualities of activities that are done after work on a day to day basis (Sonnentag, 2001; Sonnentag & Fritz, 2007). Some of these activities can help decrease stress levels that are related to that working day (e.g., exercise) as opposed to others that can increase them (e.g., work related activities). Coping on the other hand are an individual's efforts that are directed towards solving or rectifying a problem in the hopes of decreasing stress levels (Lazarus & Folkman, 1984).

The Recovery Process. Although not directly associated with incidents of workplace aggression and violence, the last decade saw an increase in the amount of research examining how people recover from work (De Croon, Sluiter, & Frings-Dresen, 2006). This increase is partially due to the recognition that the inability to recover from work is often associated with poor working conditions, such as long working hours (Jansen, Kant, van Amelsvoort, Nijhuis, E van den Brandt, 2003), high job demands, and low job control (Sluiter, De Croon, Meijman, & Frings-Dresen, 2003).

Job stressors have consistently been associated with negative consequences on well-being and health. Research has highlighted the importance of the recovery process in increasing individuals' well-being (Etzion, Eden, & Lapidot, 1998; Westman & Eden, 1997; Westman & Etzion, 2001) and work-engagement and proactive work behaviours (Sonnentag, 2003). As several researchers have noted, a lack of recovery from one's day to day activities can lead to poor well-being and health problems (Geurts, Kompier, Roxburgh, & Houtman, 2003; Meijman & Mulder, 1998, Sluiter, van der Beek, & Frings-Dresden, 1999). An individual's need for recovery (i.e., an individual's desire to be temporarily relieved from workplace stressors so he or she may re-energize themselves) is a strong predictor of impaired well-being (Sluiter et al, 1999) and increased turnover (de Croon, Sluiter, Blonk, Broersen, Frings-Dresen, 2004).

It can be very difficult for some individuals to separate work and personal lives (Crouter, 1984; Ford, Heinen, & Langkamer, 2007; Heller & Watson, 2005). Unfortunately, many job stressors and job demands often accompany individuals home in the evening, which can have an impact on their recovery (de Croon et al, 2004; Sluiter, Frings-Dresen, van der Beek, & Meijman, 2001; Sluiter et al., 1999). For example, high job demands (i.e., time pressure, role ambiguity, situational constraints, and long working hours), low job control, and unfavourable off the job activities predict high needs for recovery, with high need for recovery being associated with lower levels of individual well-being (Sonntag & Zijlstra, 2006).

The need for recovery is an emotional state when individuals acknowledge that they no longer want to continue working nor do they want to take on any additional

demands. Ideally, these individuals want a break from any demands or at the bare minimum they want to complete task that require minimum levels of energy (Craig & Cooper, 1992). This break is essential in allowing the system to recover, thus allowing individuals to accept new demands in the future. The need for recovery has been noted as one of the first stages in a long-term strain process of prolonged fatigue and psychological distress (Sonnetag & Zijlstra, 2006; Jansen, Kant, & van den Brandt, 2002). It should be noted that although similar, both fatigue and recovery, are two separate constructs (Jansen et al., 2002). The need for recovery typically refers to feelings of wanting to be left at peace for a period of time (Sluiter et al., 2001) or the need to “recharge the batteries” (Sonnetag & Zijlstra, 2006). Stated otherwise, individuals need to have opportunities to take-time off from their current demands at some point during the day so that they may re-energize themselves in order to complete their present and future demands.

It is possible that the most likely time for recovery would be during the evenings. When individuals are off the job, they can take the time to escape from the daily demands by relaxing or participating in leisurely activities that will allow them to take their mind off their work. Unfortunately, for many individuals it is becoming more difficult to find opportunities to take time-off and recover from their daily demands. Individuals with high job demands and low job control are often still thinking about work if not working during their off the job hours; consequently decreasing their opportunity to recover from work and negatively impacting their well-being (Sonnetag & Zijlstra, 2006). For the following study, two existing theories related to the recovery process were examined: the type of off

the job activities and the quality of the recovery experiences. Both of these theories are related to the type of activities that young adults do after their working hours.

Type of Off the Job Activities. Besides job characteristics, off the job activities can have an effect on individuals need for recovery. The type and quality of the activity will determine whether or not it has a positive effect on an individual's need for recovery and well-being. Outside of work, individuals can choose from a variety of activities, unfortunately not all of these are leisurely and not all promote recovery. People often leave their job demands at work only to come home to life demands. For example, it is possible that young workers upon completing shifts return to their apartments to do various chores (e.g, clean the dishes or do a load of laundry). On top of taking time for daily personal maintenance (i.e., eating, sleeping, and personal hygiene), many young adults are also attending high school or university while they are employed on a part-time basis, consequently they may be required to do assignments, study, or work on papers during their non-working hours. Sonnentag (2001) examined the recovery process of school teachers. In her study, she differentiated between various off-the job activities including 1) job related and other job related task, 2) household and child-care activities, and 3) leisure activities, comprising of low-level activities, social activities, and physical activities. Several of these activities could be done by young adults after their work shift has ended.

Job related and other job-related are activities. These activities require individuals to basically complete their job demands during off the job hours. Although not directly related to their work, young adults could also participate in such activities.

For example, young adults could be working on a presentation for one of their classes for the following day. Other job-related tasks are administrative duties related to an individual's personal life. For example, young adults may have to spend part of their evenings administering their finances (e.g., paying their credit cards or managing their car payments). Both types of activities are similar to job demands, in that they take time and energy away from the recuperation process (Craig & Cooper, 1992), thus increasing an individual's need for recovery.

Household and child care activities. These activities also require time and energy. Although most adults probably don't have children, some may still be required to complete household activities. Young adults arriving home from work may be faced with a variety of activities that are not directly related to an individual's recovery process. For example, cleaning their apartment, doing laundry, getting groceries, are all activities that young adults may have to do on a weekly basis during their non-working hours. Unfortunately, these activities do not help individuals recover from their daily activities, consequently these types of activities may increase an individual's need for recovery.

Leisure activities. These activities include low-level activities, social activities, and physical activities. Low-level activities include taking a warm bath, watching tv, and taking very few demands. Since these activities require very little effort, they tend to decrease an individual's need for recovery. Social activities allow individuals to socially interact with others, these activities can include going out for coffee with a friend or going for a walk. During social activities individuals' are provided with an opportunity to discuss their frustrations and acquire social support. Social support plays an important

role in helping individuals restore their resources (Hobfoll, 1998). Although physical activities require additional effort, they are not the same as the efforts that are used to accomplish job demands. Leisurely activities can have a positive impact on the recovery process and an individual's well-being (Sonnentag, 2001; Fritz & Sonnentag, 2005). This is not surprising given the well documented benefits of physical exercise on increasing an individual's physical and psychological well-being.

Existing studies on off the job activities have examined what type of activities adults do in their spare time, very little research if any has examined what type of activities young adults engage in after their working hours. Obviously there will be similarities in the type of activities that adults and young adults do in their off the job hours, but there is also a possibility that young workers may do different types of activities that have not been accounted for in previous studies. For example, results from the 1994/1995 National Population Health Survey found that teenagers were more likely than adults to engage in risky behaviours including binge drinking (Galambos & Tilton-Weaver, 1998). As alcohol is a depressant, used over time binge drinking may be a hindrance for young adults recovery process.

Quality of the Recovery Experiences. The previous section discussed the type of activities individuals can do during their time off-work. Although research has found that leisurely activities are associated with increased individual well-being in contrast to work and household related activities (Sonnett, 2001; Fritz & Sonnett, 2005), this research overlooked the quality of the off the job activities. For example, although gardening could be perceived as a household chore, many individuals enjoy gardening as

a pastime, which would actually decrease their need for recovery and increase their general well-being.

Sonnentag and Fritz (2007) used the term recovery experiences to describe attributes that are associated with off the job activities. Recovery experiences are closely related to affect-regulation strategies (Parkinson & Totterdell, 1999; Thayer, Newman, & McClain, 1994). Individuals can experience a variety of affective states following off-the job activities. For the sake of this study, positive and negative activation will be examined, as well as fatigue and serenity. Positive activation can be defined as high positive affect and arousal, which can lead to moments where individuals feel active, strong and delighted. Negative activation on the other hand can be defined as high negative affect and arousal. Negative activation can lead to feelings of tension, distress, and anger. Fatigue can be described by feelings of tiredness and exhaustion. Fatigue is associated with negative affect such as displeasure (Russell, 1980; Russell & Carroll, 1999). Serenity refers to states of calmness relaxation and ease. Consequently, serenity can be perceived as positive activation, as it is characterized by positive affect (i.e., pleasure: Russell, 1980; Russell & Carroll, 1999), but with lower levels of arousal.

Sonnentag and Fritz (2007) classified recovery experiences into four categories: 1) psychological detachment from work, 2) relaxation, 3) experience of mastery, and 4) control during leisure time. As the current study examines how young adults perceive the quality of their off the job activities, it is important to recognize the possibility of different or other classification schemes.

Psychological detachment from work. This can be described as an individual feeling that he or she is away from their working situation (Etzion, et al., 1998). Psychological detachment not only implies being physically away from work it also means to be in a state of mind where you are not required to think about work related issues or problems (Sonnentag & Bayer, 2005). While at work, individuals are often faced with job stressors which can lead to negative affect and fatigue (Zohar, Tzischinski, & Epstein, 2003). As some jobs can be quite stressful it is not uncommon for individuals to work or think about work during their off the job hours, consequently leading to feelings of negative affect and fatigue; hence, the importance in psychological detachment during off the job hours. Psychological detachment allows individuals to take a break from their work demands by distancing themselves from their work related issues or problems, thus allowing them to benefit from their time-off to “recharge their batteries”. Individuals who for some reason are unable to psychologically detach themselves from their work for an extended period of time will not be able to recover from their daily work demands (Meijman & Mulder, 1998), consequently leading to greater negative activation and fatigue (Watson, 1988). Employees who are capable of detaching themselves from their work are more prone to decrease their psychological (Fritz & Sonnentag, 2006; Sonnentag & Fritz, 2007) and physiological (Brosschott, Gerin, & Thayer, 2006) strain symptoms. A daily study of recovery experiences found that individuals who are capable of psychologically detaching themselves from their work are also less fatigued at bed time (Sonnentag & Bayer, 2005).

Relaxation. This is a state of being where the body witnesses a decrease in heart rate and muscle tension (Benson, 1975). Relaxation is also associated with positive affect (Frederickson, 2000; Stone, Kennedy-Moore, & Neale, 1995). Deep relaxation, both physical and psychological, can be achieved by a variety of techniques including: meditation (Grossman, Niemann, Schmidt, & Walach, 2004) and progressive muscle relaxation (Jacobson, 1938). Other daily activities, such as light walks in a park (Hartig, Evans, Jamner, Davis, & Gärling, 2003) or listening to calming music (Pelletier, 2004) have also been found to help individuals relax. Relaxation is a positive experience, both physically and psychologically, and is associated with positive affect (Fredrickson, 2000). Relaxation is an effective stress intervention technique; over time it can help decrease tension (i.e. negative affect) and increase positive well-being (Van de Klink, Blonk, Schene, & Van Dijk., 2001). Practicing relaxation techniques on a daily basis is often immediately followed by a positive affective state (Stone et al., 1995). Sonnentag, Binnewies, & Mojza (2008) found that relaxation was associated with feelings of serenity.

Mastery experiences. These are opportunities that present challenges to individuals. They are opportunities that enable an individual to acquire new skills and can allow the individual to experience feelings of success. Feelings of mastery can result from a variety of activities, including learning a new sport, a hobby, or even volunteering one's time (Fritz & Sonnentag, 2006; Ruderman, Ohlott, Panzer, & King, 2002). It is important to note that although mastery experiences are challenging to individuals, in no way are they overbearing. In fact, accomplishing these experiences is often associated with

positive affectivity and serenity. Unlike relaxation which promotes recovery by reducing the demands on individuals, thus allowing them to rest, mastery experiences requires individuals to exert some energy on other activities while still having an impact on the recovery process (Sonnentag, et al., 2008). In fact, Sonnentag and Fritz (2007) found that mastery experiences were related to feelings of well-being and life satisfaction. In other studies, mastery experiences related to physical activities improved positive affect (Sonnentag, 2001; Watson, 1988).

Control of leisure activities. This can be characterized as determining what activity to do during one's leisure time and when to do it (Kelley, 1971). Burger (1989) found that higher levels of control were associated with positive reactions. Additional research found that perceptions of control over one's activities was associated with lower distress and higher psychological well-being (Lazarus, 1966) and levels of happiness (Larson, 1989). In contrast, lower levels of control have been associated with higher levels of psychological distress such as increased anxiety and depression (Rosenfield, 1989). Sonnentag and Fritz (2007) found that control was negatively associated with health complaints, emotional exhaustion, depressive symptoms, need for recovery, and sleep problems. Although the type and quality off the job activities have been linked to the recovery process, research has yet to determine whether these activities will help young adults recover from being victims of workplace aggression and violence. Other possible influences on how young people recover from workplace aggression and violence are coping mechanisms.

Coping Mechanisms. Coping is used to help individuals deal with stress and strain in the hopes of increasing their health and general well-being. While coping may help individuals recover from stressful events, it is still somewhat different from the recovery experiences depicted above. Lazarus and colleagues (Lazarus, 1974; Lazarus & Folkman, 1984) identified two categories: problem-focused coping and emotion-focused coping.

Problem-focused coping are strategies that deal with the stressor or problem directly. For example, in a situation where an employee has an unrealistic schedule, he or she may talk to their manager who creates the schedule. Emotion-focused coping are strategies designed to make individuals feel better. For example, when faced with a stressful situation, the individual may practice deep breathing or muscle relaxation techniques. Based on existing research, Cohen (1987) found that problem-focused (e.g., gathering information, planning, seeking advice from others, and confronting others) tends to be more effective than emotion-focused coping (e.g., venting to others, praying, or distracting oneself).

Over the years, other coping categories have also been suggested. For example, in cognitive coping individuals try to change the way they perceive their situation (Moos & Schaefer, 1993). Dysfunction or maladaptation is another coping strategy that has been suggested, in which individuals tend to vent their problems, disengage themselves from the situation, or just develop a sense of helplessness (Carver, Scheier, & Weintraub, 1989).

Although coping and recovery may appear to be conceptually identical, Sonnentag and Fritz (2007) found that the statistical relationships between both variables were rather weak. The authors examined the relationship between their four recovery experiences (i.e., psychological detachment, relaxation, mastery, control) and subscales from the German version of Carver et al.'s (1989) Cope scale (Vollrath & Torgersen, 2000). The authors found that only 10 out of the 36 relationships were significant; however it should be noted that these correlations only had low to moderate levels of significance.

Given that very little research has examined how young adults recover from experiencing workplace aggression and violence, it is important to note that the recovery process (e.g. type of off the job activity and quality of the activities) and coping mechanisms may not necessarily help young adults recover. It is also possible that young adults may revert to different mechanisms to help them recover from their experiences that have not been covered in this section. This study will examine more general research questions as opposed to specific hypotheses in regards to what activities young adults do to help them recover from incidents of workplace aggression and violence.

Research Question 1: What type of activities will young adults do to recover from incidents of workplace aggression and violence?

Upon identifying the types of activities young adults used to recover from workplace aggression and violence, the following research question will examine whether certain activities were more effective in helping young adults recover from their experiences of workplace aggression and violence. Again, given that specific activities

have yet to be identified, a broad research question is more appropriate than a specific hypothesis.

Research Question 2: Will certain activities, at work or during non-working hours, be more effective in helping young adults recover from experiencing workplace aggression and violence?

Study 2: Methods

Study 2: Participants

Prior to recruiting participants, the study was approved by Saint Mary's Research Ethics Board, please refer to Appendix D. Participants were invited to participate in the study via in-class announcements at Saint Mary's University or via an email invitation. In all 107 critical incidents were collected from forty-one young adults (28 women). Participants reported a mean age of 21.44 years ($SD = 1.64$ years). The majority of the participants were white (35 or 85.4%). Participants were employed in the Food Industry (10 or 24.4%), Service Industry (14 or 34.1%), Retail Sector (11 or 26.8%), and Administration (6 or 14.6%). The majority of participants were employed on a part-time basis (24 or 58.5%), and were paid on average \$10.42 per hour ($SD = 2.15$), and worked an average of 26.97 hours per week ($SD = 10.77$). Participants reported spending an average of 75.94% ($SD = 26.98$) of their time interacting with customers. The majority of participants interacted with clients in a face to face setting (29 or 70.7%), while others interacted with a mixture of face to face and phone (7 or 17.1%) or just via phone (3 or 7.3%).

Study 2: Procedures

This study collected data using two different methods, focus groups and on-line data collection. For both methods, participants had to have been the target of workplace violence (e.g., hit, punched, kicked, pushed, or threatened), and/or workplace aggression (e.g., sworn at, insulted, ignored, etc.) by a supervisor, co-worker, subordinate, or customer within the last 6 months. Participants also had to be young adults aged between 16 to 25 years in age.

Focus Groups. The first method consisted of inviting young adults to participate in small focus groups (5 to 6 people) directly at Saint Mary's University. Participants were recruited using a variety of techniques, some of which were directed at on-campus students and others directed at off-campus young adults. Students were recruited via in-class announcements and poster-sign-up sheets. Off-campus participants were recruited by the researcher through a "grassroots" technique, where a script was used to approach friends, family members, and co-workers to invite individuals to participate in the study.

Upon arriving at the focus groups, participants were briefly given a short description of the study and were asked to read and sign an informed consent form. Upon agreeing to participate in the study, participants were then given a standardized presentation containing brief definitions of workplace aggression and workplace violence. Afterwards, they were given instructions on how to complete critical incidents. Participants were asked to complete as many critical incidents as possible (up to 5) individually on a computer using a standardized electronic form. Upon completing the

study, participants received a feedback sheet and were each awarded \$10 for participating in the study. Eighteen participants completed the study in-person at Saint Mary's.

On-Line Data Collection. To increase the size of the sample and to develop a more accurate representation of young workers, a second method was used to collect data. The second method consisted of putting the study online so that young workers who did not have direct access to Saint Mary's University would be able to participate in the study. Participants were recruited by the researcher through a "grassroots" technique, where a standardized script was used to approach friends, family members, and co-workers to invite individuals to participate in the study via email. Unlike the first method, participants were informed that one participant would have the opportunity to win a \$250 gift certificate from Visa for completing the study. Participant who agreed to participate in the study, were sent an email with a link to the study's website and a raffle code. Upon arriving at the website, participants were required to read an informed consent form before proceeding to the study. All data collected for this method was done via LimeSurvey Version 1.85+ (LimeSurvey, 2009). Upon agreeing to participate, participants were shown the same instructions that were used in the in-person study and were then asked to complete as many critical incidents as possible (up to 5) using the same electronic forms as described in the previous method. Upon completing the study, participants were shown the feedback sheet. Ten participants completed the study online.

Study 2: Measures

For both methods, participants were required to complete demographic information (i.e., age, sex, and ethnicity), some work related questions (i.e., type of

organization that you work for, current position, working status, how many hours worked a week, percentage interacting with customers, and the context of the interaction), and series of standardized questions (i.e., critical incidents) pertaining to the incident of workplace aggression and/or violence (see table 3). For a full list of measures for study 2, please refer to Appendix E.

Table 3

Standardized Critical Incident Questions

-
- 1 *What circumstances or events led up to the incident of workplace aggression or violence? Who was involved in the circumstances?*
 - 2 *Describe the incident of workplace aggression or violence. Describe the behaviours of both parties.*
 - 3 *On a scale from 1(not at all severe) to 7 (very severe) how severe would you rate this incident?*
 - 4 *What was the outcome of the incident of workplace aggression or violence? Describe your behaviours, mental, and physical state?*
 - 5 *What did you do immediately following the incident?*
 - 6 *After experiencing this incident, what did you do when you got home?*
 - 7 *Did any of these activities, either at work or at home, help you deal with the incident or make you feel better?*
 - 8 *On a scale from 1 (not at all effective) to 7 (very effective), how much did this activity make you feel better?*
-

Method of Data Analysis

One hundred and seven critical incidents were collected from 41 participants. On average, participants completed 2.61 critical incidents each ($SD = 1.45$). All incidents were coded using an inductive-deductive technique as described below.

Incident coding - preliminary coding index. Before this study was administered to participants, the main researcher developed a preliminary coding index based on existing research (see Appendix F). The preliminary coding index had seven sections: 1) Type of incident, 2) Source or perpetrator of the incident, 3) What led up to the incident, 4) Outcome of the incident, 5) Actions immediately following the incident, 6) Type of off-the job activities, and 7) Most helpful activity. Each section had options/categories that the rater could pick to simplify the rating. The type of incident was coded into the two separate categories, workplace aggression or workplace violence, based on the definitions of both concepts. Workplace aggression was defined as “behaviour 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 content” (Schat & Kelloway, 2005, p. 191). Examples of workplace aggression included insulted, ignoring, being uncivil, rude, condescending, non-verbal expressions, and screaming. Workplace violence was defined as a physical act intended to inflict physical harm on the other individual (Schat et al., 2006). Examples of workplace violence included hitting, punching, pushing, and shoving. For the purpose of this study, threats of physical violence were also considered as acts of violence. This definition was based on the fact

that physical threats of acts of violence correspond with provincial legislation, as well as with existing research (LeBlanc & Kelloway, 2002).

The source or perpetrator of workplace aggression or violence was coded into 2 categories based on Schat et al. (2006) findings. The perpetrator was either coded as someone from within the organization (i.e., supervisor, co-workers, or subordinate) or someone from outside the organization (i.e., customer).

What led up to the incident was coded into 5 different categories. Some the categories (e.g., alcohol intake and working alone) were based on Schat et al. (2006) findings. The other categories were based on problems often found the retail industry (e.g., unsatisfied with service, denied a service, and incivility).

The outcomes of the incident were coded into three separate categories: psychological (e.g., depression, mood, stress, anxiety), physical (i.e., shaking and increased heart rate), and behavioural (i.e., decrease in performance, counterproductive work behaviour, absenteeism).

The actions immediately following the incident were coded into 6 separate categories. It was anticipated that the victim of workplace aggression or violence would either have 1) talked to their supervisor about the incident, 2) talked to a co-worker about the incident, 3) contacted their HR representative to talk about the incident, 4) talked to a friend or family member about the incident, 5) talked to no one about the incident, or 6) other. Unfortunately, very few studies have examined what happens immediately following an incident of workplace aggression and violence. However, it was anticipated that the victim would either choose to talk to someone, either within or outside the

organization or opt to remain silent. That being said, the preliminary coding index was somewhat exploratory and it was anticipated that different categories may have emerged during the coding procedure.

Off the job activities were coded into 4 separate categories. Three categories were based on Sonnentag's (2001) research and included: 1) job related or other work related activities, 2) household and childcare activities, 3) leisure activities (i.e., low effort activities, social activities, and physical activities). The fourth category, "other", was used to identify various types of off-the job activities that young adults may partake in which were not identified in previous studies, as previous studies were targeted towards adults. As young adults can participate in different forms of activities (i.e. binge drinking, drug use, practicing unsafe sex, practicing sex with multiple partners) that can have an impact on their need for recovery and their general health. There was a possibility that the 4 types of categories would have to be modified. For example, binge drinking could be categorized as a leisure activity, unfortunately this type of activity is likely to be detrimental to an individuals' health and need for recovery.

The most helpful activities were coded into two different sections, activities at work and off-the job activities. Categories for both of these sections are identical to the ones presented above. It was anticipated that the preliminary index would have to be revised upon reviewing completed critical incidents from the second study.

Incident coding - revised coding index. First, all 107 critical incidents were read by the principal researcher, following which the preliminary coding index was slightly refined. Taking the responses to each prompt question as the unit of analysis, the principal

researcher inductively developed a revised coding scheme reflecting the themes inherent in the answers. The themes were reviewed and refined to develop a revised coding index that served as the basis for subsequent analysis. It should be noted that all definitions presented in preliminary coding scheme (e.g., violence and aggression) remained consistent within the revised coding scheme; however, the revised coding scheme incorporated additional sections and added options/categories for each section to facilitate coding between raters. For a detailed list of the revised coding index, please refer to Appendix G. The revised coding scheme was then tested by randomly selecting 10 critical incident which were coded by the principal researcher and a research assistant. Areas of agreement and disagreement across the two raters were identified and a final coding scheme that resolved disagreements was developed. The final coding scheme consisted of 17 different sections (see Table 4). For each section, there was an “other” option. This permitted raters to add comments that were not presented in the options/categories for each section.

Table 4

Critical Incident Coding Scheme

Coding Sections	
1	Who was the perpetrator of the incident – Insider
2	Who was the perpetrator of the incident – Outside
3	Additional information on the perpetrator
4	What led up to the incident – Outsider (i.e., worker and customer)
5	What led up to the incident – Insider (i.e., workers and co-worker/supervisor)

- 6 How did the perpetrator react during the incident: Non-Verbal
 - 7 How did the perpetrator react during the incident: Verbal
 - 8 How did the perpetrator react during the incident: Violence
 - 9 How did the victim respond during the incident
 - 10 How did the victim respond during the incident – escalation
 - 11 What type of incident was it – Aggression or Violence
 - 12 Victim’s reaction immediately following the incident at work– Psychologically
 - 13 Victim’s reaction immediately following the incident at work – Physically
 - 14 Victim’s reaction immediately following the incident at work - Behavioural
 - 15 What did the victim do at home following the incident
 - 16 Most helpful activity at work
 - 17 Most helpful activity at home
-

After completing the coding scheme, the principal researcher and a research assistant convened to code the first 57 critical incidents. Before commencing the official coding, a calibration exercise ensured that both coders were using the coding scheme in the same way. Five hypothetical (i.e., 5 created incidents) were used as a training tool, and each of the five critical incidents were coded by both the principal researcher and the research assistant. Throughout the coding process, comments from both the principal researcher and research assistants were recorded as field notes and added to the database. Unfortunately, a new research assistant had to be hired due to unforeseen circumstance

(i.e., original research assistant moved for another job). The same procedures and guidelines were followed for the new research assistant.

To assess the reliability of the coding, Cohen's kappa was calculated using SPSS 17. Kappa is a measure of interrater agreement. It is a more robust measure than simple percent agreement calculation since it takes into account the agreements which can occur by chance (Smeeton, 1985). It is generally accepted that kappa values greater than .80 indicate an acceptable level of interrater reliability (Landis & Koch, 1977).

For the current study, three variables out of 262 variables (i.e. each variable was an option that a coder could check while coding the critical incidents), reported kappa values below .80. These variables were perpetrators reaction during the incident – condescending (.492), victims activities at home – thought of looking for other work (.662), and most helpful activity at work – talking to HR (.662). In each of these cases the two coders revised the critical incidents in question and openly discussed how each coder perceived the meaning of actions described in the critical incident. Through open discussion the coding ambiguities were resolved, and re-coded to result in a final coding that would be used in the subsequent analysis. After rectifying this problem, all kappa's were above .80 (see Appendix H).

Table 5 presents a summary of the Kappa values (i.e., options, average kappa value, and ranges) for all 17 coding sections. For example, for section (1) Who was the perpetrator – inside the company: This section consisted of 3 variables/options (i.e., co-worker, subordinate, and supervisor) and the average kappa value was 1.00.

Table 5

Kappa Values – Complete Breakdown

Sections	Options	Average Kappa	Range	
			Min	Max
1) Who was the perpetrator (insider)	3	1.00	1.00	1.00
2) Who was the perpetrator (outside)	4	1.00	1.00	1.00
3) Additional information about incident	2	0.9895	0.979	1.00
4) What led up to the incident (outsider)	12	0.994	0.928	1.00
5) What led up to the incident (insider)	16	1.00	1.00	1.00
6) Perpetrator's reaction during – non-verbal	8	1.00	1.00	1.00
7) Perpetrator's reaction during – verbal	35	0.9955	0.97	1.00
8) Perpetrator's reaction during – behavioural	8	0.984	0.936	1.00
9) Victim's response	16	0.9797	0.935	1.00
10) Victim's response – escalation	7	1.00	1.00	1.00
11) Type of incident	3	0.959	0.904	1.00
12) Victim's reaction – psychological	44	0.9977	0.947	1.00
13) Victim's reaction – physical	8	1.00	1.00	1.00
14) Victim's behaviour after incident – at work	19	1.00	1.00	1.00
15) Victim's behaviour after incident – at	42	0.9883	0.878	1.00

home				
16) Victim's most helpful activity – at	9	0.9936	0.942	1.00
work				
17) Victim's most helpful activity – at	18	0.9837	0.852	1.00
home				

Although two research assistants were hired to code critical incidents for the following study, it is important to note that they never coded the same incident. Research assistant 1 coded critical incidents 1 through 57 which was then compared to the coding of the principal researcher; whereas research assistant 2 coded incidents 58 through 107 to those of the principal research. Given that both research assistants coded completely different critical incidents/responses, it is rather difficult to compare if their coding techniques were similar or different. Based on a frequency count, research assistant 1 coded 54 incidents of workplace aggression and 10 incidents of workplace violence; whereas research assistant 2 coded 46 incidents of workplace aggression and 18 incidents of workplace violence. For the data reported, a chi-square analysis was conducted and found no significant differences between the two coders, $\chi^2(1, N=107), 2.93, p > .05$.

Study 2: Results

Although coding mechanisms were explained for all 6 critical incident questions, only certain items will be examined in the results sections. Given that the critical incident technique provided an abundance of information, much of which was not directly related to the study's main hypothesis and research questions, only the items that pertain to the

main hypothesis and research questions of this study were examined. More specifically, these items include: A) The type of incident, B) Victims behaviour response following the incident at work , C) Type of off-the job activities, and D) Most helpful activities.

Summary of Critical Incidents

A) Frequency rates of aggression and violence. Out of 107 critical incidents, 101 (94.4%) reported being victims of workplace aggression, whereas 30 (28.1%) reported being victims of workplace violence, and 3 (2.8%) stated that they were victims of sexual harassment. It should be noted that 24 participants experienced both aggression and violence simultaneously.

B) Victims reactions following the incident at work. Respondents behavioural reactions immediately following the incident of aggression and/or violence at work (e.g., victim talked to someone, victim took a break, victim just kept working, and victim filed a formal complaint) were described in 96 incidents. Eleven incidents did not describe behavioural reactions, but psychological ones (e.g., fear) and were thus not included in the analysis. It should also be noted that participants could have reported more than one type of behavioural reaction. For example, a participant could have described taking a break after the incident and talking to someone. Out of 96 incidents, 12 different types of behavioural reactions were reported; however, many had relatively low frequencies in comparison to others. To facilitate the summarization process, only the top 4 reactions are presented in table 6. As can be seen, the highest rated activity was talking to someone (53.1%).

Table 6

Frequencies – Victims' Behavioural Reactions at Work

Type of Behaviour (Total N=96)	N	%
Talked to someone	51	53.1%
Kept working	38	39.6%
Took a break	28	29.2%
Filed a complaint	16	16.7%

Given that the majority of participants reported talking to someone after the incident (N = 51), additional frequency analysis were conducted to examine who the victims spoke to. Participants described speaking to 8 different types of people (e.g., supervisor, co-worker, human resources, partner, family, friends, work security, and police). As noted earlier, it is possible that participants provided more than one response. For example, participants could have spoken to their manager and to one of their coworkers. The majority of participants talked to their supervisors (n = 24; 47.1%) and co-workers (n = 21; 41.2%). It is interesting to note that some participants also approached security at work (n = 6; 11.8%) or called their partners (n = 6; 11.8%); however, only a small percentage of participants contacted their HR representative (n = 1; 2.0%).

C) Activities the victim did after his/her work day. Respondents after work activities (i.e., activities done once their shift was finished) were described in 102 incidents. Five incidents were not analysed as the information used to describe their after

work activities were not included (i.e., they didn't write anything). It should also be noted that participants could have described more than one after work activity. For example, a participant could have described 3 types of activities: making supper, speaking to his/her parents, and going out with friends.

All 102 incidents were originally coded into 25 different categories, many of which were only reported on a few occasions. To facilitate the summarization only the top 4 activities are presented in table 7. The most common activities were talking to someone (n = 67; 65.7%) and went on about the evening (n= 40; 39.2%).

Table 7

Frequencies – Victims' After Work Activities

Type of Activity (Total N = 102)	N	%
Talked to someone	67	65.7%
Went on with evening	40	39.2%
Ruminated	13	12.7%
Watching TV	10	9.8%

Given that the majority of participants reported talking to someone after work (N = 67), additional frequency analysis were conducted to examine who participants spoke to (i.e., family member, partner, friend, co-worker, and supervisor). Participants were more likely to talk to family members (n = 39; 58.2%) and friends (n = 19; 28.4%).

An additional frequency analysis was performed to examine what the victims' actually talked about after work or put more specifically what was the purpose of their discussion (see table 8). Out of 67 incidents, participants described 8 different purposes for talking to others (i.e., empathy, reassurance, venting, disliking their jobs, laughing, understanding, support, and talk to boss to gather information), but some had relatively low frequencies, consequently only the top 4 purposes of discussion are reported (see table 8). The two most commonly reported purposes of discussion were looking for understanding (n = 23; 34.3%) and looking for support (n = 22; 32.8%).

Table 8

Frequencies – Victims' Purpose of Discussion

Type of Purposes (Total N = 67)	N	%
Looked for understanding (e.g., trying to understand events)	23	34.3%
Looked for support for their decisions/actions	22	32.8%
Venting	16	23.4%
Looking for empathy (e.g., discussing feelings)	12	17.9%

D) Activities that were the most helpful. Participants described which activities were the most helpful in assisting them recover or cope from experiencing workplace aggression and/or violence at work in 31 incidents. Out of these 31 incidents, participants identified 3 work activities that helped them deal with their experience of workplace

aggression and violence: talking to someone (n = 21; 67.7%) ,taking a break (n = 10; 35.3%) and physical activities (n = 2; 6.5%).

An additional frequency analysis was completed to examine which activities participants identified as helpful for the type of incidents that they encountered (see table 9). It should be noted that participants could have been victims of workplace aggression and violence simultaneously. In addition, participants may have selected more than one response. For example, participants could have reported taking a break and talking to someone. For aggression, which accounted for 30 of the 31 cases, participants reported talking to someone (n = 19; 63.3%), which was followed by taking a break (n =10; 33.3%). For violence, which accounted for 10 of the 31 incidents described, participants reported talking to someone (n = 5; 50.0%) and taking a break (n = 6; 60%).

Table 9

Frequencies – Type of Incident and Most Helpful Activities at Work

Type of Incident and Activity	N	%
Workplace Aggression (Total N = 30)		
Talking to someone	19	63.3%
Taking a break	10	33.3%
Physical activity	2	6.7%
Workplace Violence (Total N = 10)		
Talking to someone	5	50.0%
Taking a break	6	60.0%

For the most effective after work activities, participants described 91 incidents, which were originally categorized into 24 different types of activities (e.g., talking to someone, playing sports, completing chores, going out, etc.). Again, many of the activities that were reported only had a few frequencies (e.g., playing video games, $n = 1$) and some had zero (e.g., participating in sexual activities), consequently only the activities with the highest frequencies were reported (see table 10). Almost half of the participants reported that talking to others was the most helpful ($n = 47$; 51.6%) and many participants found that nothing helped them recover ($n = 16$; 17.6%).

Table 10

Frequencies – Victims' Most Helpful Activities After Work

Type of Activity (Total N =91)	N	%
Talking to someone	47	51.6%
Nothing helped	16	17.6%
Going out with friends	6	6.6%
Didn't let it bother me	6	6.6%
Playing sports	5	5.5%

Hypothesis 4

It was hypothesised that workplace violence would be perceived more severely than workplace aggression. To verify this hypothesis a mixed model analysis was conducted. The mixed model analysis examined if any significant relationships existed in regards to the severity of how participants rated their experience in relation to the type of

incident that they experienced (i.e., workplace violence and workplace aggression).

Mixed model analysis was deemed appropriate to verify this hypothesis given that participants could describe more than one experience of aggression or violence. It should be noted that for this analysis, gender, age, and hours worked were included as covariates.

For the type of incident, violence predicted the level of severity $F(1, 98.78) = 8.17, p < 0.05$; whereas, aggression did not predict the level of severity $F(1, 88.71) = 1.56, p = 0.22$, and $ICC = 0.22$. Additional results, including estimates can be found in table 11. Participants rated workplace violence more severely than workplace aggression thus supporting hypothesis 4.

Table 11

Estimates of Covariance Parameters for Level of Severity and Type of Incident

Variable	Estimate	Std. Error	95% (CI)
Intercept	4.71	0.42	3.86, 5.55
Gender	0.52	0.45	-0.39, 1.44
Aggression	-0.84	0.67	-2.18, 0.50
Violence	-1.09	0.38*	-1.85, -0.33
Age	-0.15	0.13	-0.41, 0.10
Hours	0.03	0.02	-0.01, 0.06

- 2LL = 387.47

Note: * = $p < 0.05$

Research Question 1

To examine what type of activities young adults did to recover or cope from workplace aggression and violence, answers to specific critical questions (i.e., activities the victim did after his/her work day and most helpful activities) were examined and categorized based on existing theories pertaining to the recovery process (i.e., after work activities and quality of activities) and coping mechanisms. The categorization was done via the aid of a research assistant.

A) Activities the victim did after his/her work day. Given that participants provided several responses which were not directly aligned with one sole recovery or coping strategy, several participants provided multiple responses were re-categorized to represent key elements from both Sonnentag's (2001) and Carver et al.'s (1989) terminology when possible. To assess the reliability, Cohen's kappa was again calculated using SPSS 17. Out of 185 described activities (note some participants described multiple after work activities), the 25 variables/categories which were originally coded by the principal research and a research assistant were transformed into 12 new categories. It should be noted that 3 of the 25 originally defined categories (i.e., doing school work, doing chores, and participating in sexual activities) were not included in any of the 12 new categories as they did not receive any responses. The new 12 categories are represented in table 12. Kappa values were all greater than .80.

Table 12

Re-Categorization of Victims' After Work Activities

New Category	Old Variables	N	%
(Total N = 185)			
Social	Talked to someone, Went out with friends	67	36.2%
Active Coping	Went on with evening & Cried	44	23.8%
Normal Evening	Ate supper, Showered or took bath, Slept	16	8.6%
Low Effort	Went online, Relaxed, Played video games, Watched TV	14	7.6%
Refraining – Negative	Ruminated	13	7.0%
Refraining – Positive	Rationalized	7	3.8%
Substance	Drank & Took prescribed medication	7	3.8%
Acceptance	Desensitized to customers reactions & Reflected on day events with pride	6	3.2%
Physical	Playing sports	5	2.7%
Planning	Looking for another job, Looked for other options	4	2.2%

Household	Cooked a meal	2	1.1%
Religion	Praying	1	0.5%

The frequencies of these re-coded variables continue to demonstrate that participants were more likely to do social activities after work (n = 67; 36.2%). Participants were also more likely to use active coping (n = 44, 23.8%), followed by just going on with their normal evenings (n = 16; 8.6%). Additional frequency analysis were calculated to examine whether certain of new re-coded activities were more common for the type of incidents (see table 13). Social and active coping were reported the most frequently for both types of incidents.

Table 13

Frequencies – Type of Incident and After Work Activities

Type of Incident and Activity	N	%
<hr/> Workplace Aggression (Total N = 93)		
Social	59	63.4%
Active Coping	39	41.9%
Normal Evening	15	16.1%
Low Effort	12	12.9%
Refraining – Negative	11	11.8%
Substance	7	7.5%
Refraining – Positive	6	6.5%
Acceptance	6	6.5%

Planning	4	4.3%
Physical	3	3.2%
Household	2	2.2%
Religion	0	-----
Workplace Violence (Total N = 29)		
Social	16	55.2%
Active Coping	10	34.5%
Refraining – Positive	2	6.9%
Planning	2	6.9%
Acceptance	2	6.9%
Low Effort	2	6.9%
Normal Evening	2	6.9%
Physical	1	3.5%
Refraining - Negative	1	3.5%
Religion	1	3.5%

B) Activities that were the most helpful. Participants reported different types of activities that were helpful and not all activities were perfectly aligned with one single theory. Consequently, participants responses for the most helpful activities that they did at home were recoded while using Sonnentag's (2001) off the job activities and Carver's Brief COPE (Carver, 1997) mechanisms. To assess the reliability, Cohen's kappa was again calculated using SPSS 17. Kappa values were all greater than .80. In all, 24

variables were coded by the principal research and a research assistant, into 14 new or renamed categories represented in table 14. It should be noted that out of the 24 variables, 3 were removed (i.e., doing chores, doing school work, and participating in sexual activities) as they received zero frequencies; consequently, only 21 variables were examined during the re-categorization. The table also demonstrates how the old variables were related to the new ones and also includes frequencies for the new variables based out of 91 responses. As previously noted, some participants provided more than one answer for which activities were the most helpful. For example, a participant could have noted that humour in a social setting was very helpful. Frequencies showed that social activities was the most commonly reported ($n = 51$; 56.0%) followed by nothing helped ($n = 16$; 17.6%)

Table 14

Frequencies - New Categories for Most Helpful Activities at After Work

New Variable	Old Variable	N	%
(Total N = 91)			
Social	Talking to someone & Going out with friends	51	56.0%
Nothing helped	Nothing helped	16	17.6%
Acceptance	Didn't let it bother me	6	6.6%
Low Effort	Watching a movie, doing nothing, playing video games, listening to music	6	6.6%

Normal evening	Showered/took bath, eating, sleep, normal evening	6	6.6%
Refraining negative	Ruminated	5	5.5%
Physical	Playing sports	5	5.5%
Refraining positive	Rationalized	4	4.4%
Substance	Drinking	3	3.3%
Household	Cooking	2	2.2%
Humour	Joking	2	2.2%
Apology	Apology	1	1.1%
Planning	Looked for a new job	1	1.1%
Praying	Praying	1	1.1%

Additional frequency analyses were calculated to examine whether certain activities were more prone to violence or aggression (see table 15). Both social activities and nothing helped were the most commonly reported activities regardless of the type of incident.

Table 15

Type of Incident and the Most Helpful After Work Activity Re-Coded

Type of Incident and Recoded Activity	N	%
Workplace Aggression (Total N = 84)		
Social	47	60.0%
Nothing helped	13	15.5%

Normal evening	6	7.1%
Refraining – negative	4	4.8%
Low effort	4	4.8%
Acceptance	4	6.0%
Physical	3	3.6%
Refraining – positive	4	4.8%
Substance	3	3.6%
Household	2	2.4%
Humour	2	2.4%
Apology	1	1.2%
Workplace Violence (Total N = 24)		
Social	9	37.5%
Nothing helped	7	29.2%
Acceptance	2	8.33%
Low effort	1	4.2%
Physical	1	4.2%
Praying	1	4.2%
Refraining negative	1	4.2%
Refraining positive	1	4.2%

Research Question 2

Research question 2 was interested in examining whether any activities, at work or during non-working hours, were effective in helping young adults recover from or cope with incidents of workplace aggression and violence. Mixed model analyses were conducted to examine this research question as the data collected had a 2-level hierarchical data structure. Level 1 consisted of individual critical incidents that were reported; whereas level 2 represented individuals participants (e.g., participants could report up to 5 critical incidents). Two mixed model analyses were conducted, one examining activities done immediately following the incident at work and the other examining after work activities. For both mixed model analyses, gender, age, and hours worked were included as covariates.

A) Immediately following the incident at work. For activities done at work immediately following the incident of violence or aggression, social activities (i.e., talking to someone), $F(1, 96.40) = 1.97, p = 0.16$, low effort activities (i.e., taking a break), $F(1, 98.00) = 2.65, p = 0.11$, and physical activities, $F(1, 97.37) = .61, p = 0.44$ did not predict effectiveness. The ICC for this model was 0.36, additional results, including estimates can be found in table 16.

Table 16

Estimates for Level of Effectiveness and Activities at Work

Variable	Estimate	Std. Error	95% (CI)
Intercept	4.64	1.66	1.35, 7.93
Gender	.98	.61	-.24, 2.21

Social	-.67	.47	-1.61, .28
Low effort	-1.15	.71	-2.55, .25
Physical	1.24	1.58	-1.90, 4.38
Age	.11	.17	-.23, .46
Hours	.01	.02	-.03, .06
2LL = 422.85			

B) After Work Activities. For activities done after work, nothing helped, $F(1, 69.52) = 31.63, p < .05$, and acceptance, $F(1, 69.20) = 4.02, p < .05$, significantly predicted level of effectiveness; none of the other activities were significant. Oddly “nothing helped” would not be perceived as being an effective after work activity to help people recover from workplace aggression and violence. A few potential explanations for this finding will be presented in the discussion section. The ICC for this model was 0.49. Additional results, including estimates can be found in table 17.

Table 17

Estimates of Covariance Parameters for Level of Effectiveness and After Work Activities

Variable	Estimate	Std. Error	95% (CI)
Intercept	6.73	4.44	-2.09, 15.56
Gender	.65	.60	-.56, 1.86
Social	-.68	.37	-1.43, .06
Nothing	2.69	.48*	1.73, 3.64
Acceptance	-1.32	.66*	-2.63, -.01

Apology	.46	1.44	-2.41, 3.33
Household	-.18	1.13	-2.44, 2.07
Humour	-1.31	.97	-3.24, .62
Low effort	-.29	.77	-1.82, 1.25
Normal evening	-.52	.72	-1.95, .91
Physical	-.12	1.00	-2.13, 1.88
Planning	.90	1.39	-1.87, 3.68
Praying	-1.10	1.39	-3.87, 1.68
Negative Reflection	.16	1.42	-2.68, 2.99
Positive Reflection	.27	1.63	-2.98, 3.53
Substance	-1.23	.89	-3.00, .53
Age	-.04	.16	-.37, .28
Hours	.01	.02	-.03, .06

2LL = 355.76

Note: * = $p < 0.05$

Study 2: Discussion

The purpose of the second study was to examine how young adults experience and recover from workplace aggression and violence. More specifically, this study examined how severely young adults rated incidents of aggression and violence and whether any activities they did after the incident help them recover from their experiences.

Young adults rated workplace violence more severely than workplace aggression, thus confirming hypothesis 4. Based on the job demands resource theory, it is possible

that workplace violence was rated more severely than aggression as it could have placed greater demands on the victims, given that violence is less common than workplace aggression (Schat et al., 2006; Teed, et al., 2008). Victims who were unaccustomed to dealing with violence may also have felt higher levels of pressure, expectations or demands to deal with these incidents. Consequently, these victims may have been more prone to experience higher levels of stress and fatigue (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). One aspect that could have helped moderate these demands were the resources available to victims of workplace violence. For example, victims of workplace violence with fewer resources (e.g., lack of support, lack of work experience, and/or lack of training) may have felt an increased level of burden their demands; whereas additional resources (e.g., good support, greater work experience, and proper training) may have led to decreased demands and thus greater levels of general well-being. For example, Schat and Kelloway (2003) found that organizational support moderated the effects of physical violence and psychological aggression on emotional well-being.

Research question 1 examined what type of activities young adults did to help them recover or cope from their experiences of workplace aggression and violence. Participants reported a variety of activities they did after work. It was anticipated that participants would either report activities that could be categorized under Sonnentag's (2001) after work activities (i.e., work related, household, and leisurely); Sonnentag and Fritz's (2007) quality of activities (i.e., psychological detachment from work, relaxation,

mastery, and control); or Lazarus and Folkman's (1987) coping mechanisms (i.e., problem-focused and emotion focused).

The most commonly reported activity following the incidents of aggression and violence at work and after work was talking to other people. It should be noted that none of these activities were directly aligned with one sole theory on recovery or coping. Based on Sonnentag's after work activities, talking to others and going on with your evening would represent leisurely activities (e.g. social activities and low level activities); unfortunately the other two categories (i.e., job related/other job related tasks and household/child care activities) were poorly represented. These results may be an indication that Sonnentag's three types of off the job activities do not properly encapsulate how young workers recover from being victims of workplace aggression and violence. Nor did the most commonly reported activity (i.e., talking to others) accurately correspond with Sonnentag's and Fritz's (2007) four types of recovery experiences. Although there is a possibility that participants spoke to other people to help them detach from work or try to control their situation.

Based on responses from the critical incidents, many participants described their after work activities in greater detail than originally anticipated. For example, many participants described the purpose of their conversation with the other individuals (e.g., looking for empathy, looking for understanding, looking for support for their decisions, venting, and looking for empathy). This detailed information is not properly represented in both of Sonnentag's models; however, Sonnentag's (2001) and Sonnentag and Fritz's (2007) categorization schemes were predominately based on a sample of employed

adults, who most likely had different experiences, resources, and training than young adults who predominately work in service and retail sector jobs.

Participant responses appeared to reflect coping mechanisms to help them deal with their experiences of workplace aggression and violence. Participants more detailed responses describing what they spoke about to other people were somewhat similar to Carver's coping strategy framework (Carver, Scheier, & Weintraub, 1989; & Carver, 1997). Carver's model is based on the Lazarus's measure called Ways of Coping (Folkman & Lazarus, 1985). The Ways of Coping scale examines how people think or act when they are under stress. The scale is based on the Transactional Model of Stress and Coping (Lazarus & Cohen, 1977). For example, Carver's (1987) COPE-brief scale consist of 14 facets of coping (i.e., active coping, planning, positive refraining, acceptance, humour, religion, emotional support, instrumental support, self-distraction, denial, venting, substance, behaviour disagreement, and self-blame) which appear to be more aligned with participants responses. This model provides a theoretical framework that evaluates the process of how individuals cope with stressful events. Stressful experiences are characterized as transactions between an individuals and their environment. For example, within this environment, individuals' can face external stressors that can have an effect on their physical and psychological well-being. The type of stressor will have an impact on the transaction between the individual and his or her environment. This impact can be mediated by the individuals' appraisal of the stressor and their accessibility to social and cultural resources (Lazarus & Cohen, 1977; Antonovsky & Kats, 1967; Cohen, 1984).

Research question 2 examined what type of activities were the most helpful immediately following the incident while at work and after work. While at work, results indicated that not one single activity (i.e., social, low effort, and physical) was effective in helping young adults recover or cope from experiencing workplace aggression and violence; however, talking to someone was the highest reported response. Given that young adults reported that they had a tendency to talk to people at work after experiencing these incidents at work, this finding demonstrates that there could potentially be a need to train managers, as well as human resource professionals, in the retail and service industry in how to provide support for victims of workplace aggression and violence. That way, should young victims of workplace aggression and violence approach their managers, they will be properly trained in how to handle the situations.

During non-working hours, only “nothing helped” and acceptance were effective in helping young adults recover from workplace aggression and violence. “Nothing helped” was characterized by individuals who reported that they had tried multiple activities but that none of them helped or they simply stated nothing worked. A few participants even expressed their dissidence with their current situation. For example, when asked if anything helped, one participant stated: “Not really, but I feel more confident and able to handle confrontation in any given situation now. I don’t feel as passive or submissive as I did before”. Although “nothing helped” seems like an odd effective coping mechanism, it is possible that some participants may just have learned to accept their situations, but albeit they clearly did not like their situation, but for some reason over time they have become desensitized to the situation or they have just learned

to deal with it over time. One could also argue that some young adults may not know with 100% certainty that nothing helped them. Although consciously some participants stated that “nothing helped”, subconsciously some of their activities may have had a latent positive effect on them. For example, a young victim of workplace violence may have described the situation to a friend who listened attentively to him but was unable to provide any solutions to rectify the victim’s situation. The fact that his friend cared enough to listen may have had a latent positive effect on him.

The other after work activity that participants reported as being significantly effective in helping them recover from their experiences was acceptance. “Acceptance” was characterized by participants who just learned to accept their situation. Unlike nothing helped, these individuals did not express negative feelings towards their situation. For example, when asked if anything helped, when participated stated: “Not really, by the time I got home I decided that event had passed, I would deal with stuff the next day now was the time to relax.” Folkman and Lazarus (1980) identified accepting responsibility or blame as an emotion-focused coping strategy. This type of strategy is generally focused on changing one’s reaction to the general stressor.

Overall, these findings suggest that leisurely after work activities or problem focused coping strategies, which were previously found to be helpful in the recovery or coping literature, were not effective within this sample. It is possible that certain after work recovery activities, may help young adults recover from their regular day to day experiences, but may not be helpful to recover from incidents of workplace aggression and violence. It is also possible that problem focused strategies, which are aimed at

removing a problem in their working environment to decrease levels of stress, were not effective because in certain situations the stressor can not be removed from the working environment (e.g., customers).

Based on the job resource model, these findings demonstrate that young adults do not have the appropriate resources to help them meet the demands of workplace aggression and violence. For example, although many participants reported that they spoke to their supervisor, it did nothing to help them recover from their experiences. It is possible that young adults employed in the service or retail sector have had poor supervision (Loughlin & Lang, 2005), thus they did not receive the proper support from their supervisors' to help them deal with these circumstances.

While at home, participants also reported that they talked to other people and this was also not found to be effective in helping them deal with workplace aggression and violence. Again, this could be due to the fact that participants were trying to resolve or fix a problem that can not be fixed. In other words, if the source of aggression and violence was from a customer then there is very little that talking to others can do to help them. The majority of young adults spoke to family members or friends who both may not have the proper resources to help these young adults cope with what they are experiencing or possibly may not have been victims of workplace aggression themselves and thus can not relate to these young victims.

In summary, this study didn't identify any positive activities that helped young adults recover or cope from incidents of workplace aggression and violence, it did however demonstrate that the vast majority of young adults were more likely to talk to

other individuals about their experiences. Talking to others could have been classified as Sonnentag's (2001) leisurely activities under social, but respondents provided much more detailed information on what they talked about (i.e., seeking understanding, seeking support, and venting). Based on these responses, it appeared as though young adults were talking to others in order to deal with the problems that they were facing, which would be a form of coping.

Study 2: Implications for Future Research

Based on results of the study, there are three areas that could be examined in the future research. The first area would be to use a coping scale to examine how young adults cope with the stress of workplace aggression and violence. Although the critical incident technique identified that young adults were most likely to talk to someone about their incident, not all participants identified what coping mechanisms they used. It would be beneficial for future research to examine whether or not specific coping mechanisms moderate the effects of workplace aggression and violence on participants general well-being. Although past research has noted coping mechanisms can moderate the effects of workplace bullying on job burnout and well-being (Lee & Brotheridge, (2006), very few studies have examined if coping mechanisms within a sample of young workers with littler experience will have similar effects.

The second area would be to study why some young workers felt like no matter what type of activity they did, nothing actually helped them recover from their experiences of workplace aggression and violence. It is possible that some participants may have developed a sense of learned helplessness (Seligman, 1975) over time given

that they had little control over the frequency or source (i.e., external customers) of their incidents; consequently participants could have potentially developed depressive like symptoms. Future research could examine the effects of learned helplessness by investigating the extent that young workers, who may lack work experience and on-the-job training, feel that they have control over incidents of workplace aggression and violence and whether or not it has an impact on participants' general well-being. Schat and Kelloway (2000) found that perceptions of control was directly associated with emotional well-being. In addition, the authors found that training targets of workplace violence on perceptions of control was related to enhanced perceptions of control. Future research could also examine if personality variables or thought processes had an impact on why these individuals felt that nothing helped. For example, people who can tolerate higher levels of stress (e.g., resilience or tenacity) may be more capable than others of "bouncing back" from incidents of workplace aggression and violence. Another avenue that could warrant examination is whether or not employees received realistic job previews informing them that they would be dealing with workplace aggression and violence on a regular basis or if they have received any form of training in how to deal with these incidents. Research on realistic job previews and training programs may prove valuable for organizations in retail and service sectors where employees may be faced with high levels of aggression and violence.

Future studies could benefit from using additional qualitative methods (e.g., interviews or critical incidents) to examine the antecedents, coping processes, and outcomes of workplace aggression and violence. Although the current study only focused

on 1 hypothesis and 2 research questions, there was an abundance of rich data that could be examined for future studies. For example, one critical incident response that was not examined within the context of this study was “What circumstances or events led up to the incident of workplace aggression or violence?” Participants provided numerous responses to what lead up to the incident between themselves and customers (e.g., reasonable complaint, unreasonable complaint, and denied a service) and also between themselves and co-workers (e.g., high job demands, person was difficult to work with, and did not listen to directives). Given the rich body of responses, this study could lead to the examination of other research questions or hypotheses not examined in this dissertation.

Finally, future research could also benefit from examining workplace aggression and violence by using a Diary Survey Methodology. The diary method asks participants to describe their daily experiences, through a systematic reconstruction conducted at the end of each day (Kahneman, Krueger, Schkade, Schwartz, & Stone, 2004). Given that “nothing helped” was found to predict levels of effectiveness for recovering from workplace aggression and violence, the Diary Survey Method may provide some insight into how long does it take for victims of workplace aggression and violence to develop this sense of helplessness.

Study 2: Implications for Practice

There were several findings that could be applied within professional settings. First, the majority of participants reported that after experiencing workplace aggression and violence that they talked to someone at work about it; however, talking to someone at

work was not found to help participants recover from their experiences. It is possible that victims felt that they were not provided with an immediate solution to their problem or that they were not properly listened to (i.e., active listening) or that they did not receive sufficient social support. Lee and Ashforth (1996) found that human service providers who lacked social support from supervisors and co-workers were associated with high rates of emotional exhaustion. Although not examined in this study, one reason that could explain why talking to either supervisors or co-workers was not successful is that these individuals may not be trained in dealing with victims of workplace aggression and violence or that the organization has a poor culture of social support. Schat and Kelloway's (2003) noted that organizational support moderated the effects of workplace violence and aggression on emotional well-being and somatic health. Organizations could benefit from training managers in dealing with victims of workplace aggression and violence and by training the organization in increasing their social support mechanisms (e.g., active listening.).

As previously noted, although participants stated that talking to someone at work did not help them, it might be more accurate to state that they "*did not think*" talking to someone helped them. More specifically, victims who talked about their experiences of workplace aggression and violence to their supervisors or co-workers may not have received an immediate solution to their issue, but subconsciously the fact that someone may have actively listened to them may have helped them a little without them being aware of it.

Second, after experiencing workplace aggression and violence, very few participants opted to talk to an HR representative at work. Although participants did not clearly indicate why they did not report their issues to an HR representative, this could be due to the fact that several participants worked in the retail or service industry may not necessarily always have an HR representative on hand. If this is the case, it may be beneficial for HR representative from the service and retail industries to develop awareness campaigns directed towards young adults who have been victims of workplace aggression and violence. These campaigns could provide young adults with a directory of people to contact should they have become victims of workplace aggression and violence (i.e., perhaps an HR representative or an Employee Assistance Program contact number). Having these support mechanisms in place and making young employees aware of them could help young adults deal with the aftermath of being victims of workplace aggression and violence. These support mechanisms could also help employees who noted that they felt like nothing helped them deal with workplace aggression and violence.

Finally, several participants noted that accepting their circumstances helped them recover from their experiences. Although participants did not directly report why they accepted their circumstances, one possible explanation for this finding could be that these participants received a realistic job preview prior to accepting their position. Realistic job previews have been found to reduce inflated expectations of what happens on the job (Phillips, 1998). Thus before agreeing to work at their current jobs, these participants already had the expectancy that their working environment would likely involve workplace aggression and violence. For HR representatives within the retail and service

industries, it may be beneficial to provide job candidates with a realistic job preview. Those who feel that they do not want to work within that type of environment can simply self-select themselves out of the position; whereas, those who do not mind to work in such environment can accept the position with accurate expectations of what to expect at work. These accurate expectancies may help them be more accepting of incidents of workplace aggression and violence when they arise.

Study 2: Limitations

There were a few limitations to this study. Only 41 participants completed the study; however it is important to note that in all 107 critical incidents were analyzed. Ideally, it would have been preferable to have a larger sample.

Second, participants were asked to complete critical incidents of experiences of workplace aggression and violence within the last 6 months. Although critical incidents provided an enormous amount of information on how young adults experience workplace aggression and violence, they are still considered a self-report measure. Self-report measures are vulnerable to such methodological problems as memory biases (Scollon, Kim-Prieto, & Diener, 2003; Smyth & Stone, 2003). Thus it is possible that some of the responses were not completely accurate. In addition, the majority of the respondents noted that they talked to other people after experiencing incidents of workplace aggression and violence; however, many participants did not list the purpose of their conversations (e.g., to seek empathy, to look for alternatives) while others did. This information could provide additional insight into how young adults recover from workplace aggression and violence.

Finally, several participants reported using more than one activity to help them recover from incidents of workplace aggression and violence. Given that they reported more than response, it is difficult to determine causality of what actually helped participants recover from being victims of workplace aggression and violence. Although may be perceived as a limitation to some, it may in fact represent the reality of victims of workplace aggression and violence. They may not simply recover by doing one activity, it may in fact be a multitude of activities that help them recover from their experiences.

Study 2: Conclusion

Whereas the first study examined frequencies, sources, and strain related to workplace aggression and violence within a sample consisting mainly of young workers; the second study was more focused on what happens between the start of the incident (i.e., counts of aggression and violence and the perpetrator) and the end of the incident (i.e., impact on the victims general wellbeing) to provide a more accurate representation of how young workers experience workplace aggression and violence. The study had two main objectives, examining how severely participants rated their experience of workplace violence and aggression and examining whether any activities done immediately after the incident (i.e., at work or after work) helped alleviate the effects of aggression and violence.

Contrary to study 1 which found that violence did not significantly predict general well-being, in study 2, participants rated acts of workplace violence more severely than workplace aggression. Thus demonstrating that although violence does not happen as

frequently as workplace aggression, they can still have a profound impact on participants perception.

The other objective of the study was to examine what activities participants did to recover from workplace aggression and violence. Very few studies have meticulously examined this question. It was anticipated that participants would have participated in either Sonnentag's (2001) after work activities, or Sonnentag and Fritz's (2007) quality of activities, or that they would use some type of coping mechanism to help them recover. Results indicated that participants were more likely to talk to other people after being victims of workplace aggression and violence. Unlike day to day social activities that were described by Sonnentag and Fritz (2007), participants described that they were talking to others for specific reasons (e.g., understanding, support, and empathy) which demonstrate that they are actively trying to cope with a difficult situation to decrease their levels of stress. These results suggest that models of coping may provide a better understanding of how young workers deal with acts of aggression and violence.

Although prevalent, young adults did not see talking to other people as an effective aid in helping them to deal with workplace aggression and violence. Participants actually reported that "nothing helped" and "acceptance" were the only two effective techniques in helping them recover from their experiences. Unfortunately, participants did not fully describe in their responses why these activities did not help them or why they accepted them. One possible explanation could be that participants just became to desensitized to these incidents over an extended period of time or they may have possibly

felt like they had little control over their situation, thus nothing could really make them feel better.

These results demonstrate that additional research is warranted to examine if other type of coping activities are more efficient in helping young adults deal with their experiences of workplace aggression and violence. The current study examined critical incidents, which may have been non linear in regards to time (i.e., sporadic incidents over an extended period of time). Future studies could benefit from examining how young workers cope with workplace aggression and violence longitudinally (i.e., in the same job and over an extended time frame).

Study 3

The third study used the diary method to examine whether coping mechanisms moderated the effects of workplace aggression and violence on participants general well-being over an extended period of time. Most of the research on workplace aggression and violence has relied on single-time, self-report measures that have been found to be vulnerable to methodological problems, such as memory biases (Scollon, et al., 2003; Smyth & Stone, 2003). The diary method offers the potential to overcome these difficulties. The diary method asks participants to describe the experiences they have had on a given day, through a systematic reconstruction conducted at the end of each day (Kahneman, et al., 2004). This method has been found to have distinct advantages over laboratory assessments, global surveys, or observer ratings. By asking participants to recount their experiences daily, they are more likely to remember specific, recent memories, thus reducing errors and recall biases.

Based on the results from study 2, young adults who were victims of workplace aggression and violence appeared to refer to coping mechanisms (i.e., talking to others) to help them deal with their experiences, as opposed to off-the job activities or the quality of the recovery experience. Although study 2 found that victims reported “nothing helped” and “accepted” significantly helped them recover from their experiences, these results were determined via a critical incident technique which may not have examined coping mechanism used with the same context (i.e., same job) and over an extended period of time (e.g., a month).

There have been over a hundred different coping strategies that have been developed over the past 20 years (Carver & Connor-Smith, 2010). Unfortunately, there has been little consensus within the scientific community as to how all of these coping strategies should be categorized/organized within a framework (Weiten & Loyd, 2008). Difficulties in categorizing coping strategies could reflect the contingencies surrounding the coping process. As Lazarus (1999) noted, there is not one universally effective or ineffective coping strategy, given that efficiency of the coping mechanism will depend on the type of person, the type of threat, the stressfulness of the encounter, and the individual's well-being.

Lazarus and Folkman (1984) highlight the complexity of coping: “..constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 178). The authors really emphasize that coping is an actual process and not a trait. More specifically, coping is more concerned with what a person actually thinks or does when he or she is faced with a stressful situation or context.

Fundamentally, Folkman and Lazarus (1980) noted that coping has two distinct functions: it is either directed at managing or altering the problem that is causing the stress (problem-focused coping) or it is either directed at managing the emotional responses to the problem (emotion-focused coping). Lazarus and Folkman (1984) characterized problem-focused coping as a cognitive process of identifying/defining a problem, developing various strategies to resolve the problem, weighing the pros and cons of each strategy, choosing a strategy and applying the strategy. They noted that

emotion-focused coping was characterized as a cognitive process aimed at decreasing emotional distress (e.g., avoidance, minimization, positive comparisons), increasing emotional distress (e.g., self-blame or self-punishment) – some people need to feel worse before they can actually get better, reappraisal (e.g., change the way a situation is viewed without changing the objective/facts of the situation), and behavioural strategies (e.g., exercise, meditating, drinking, venting, seeking support). Although there are hundreds of different coping strategies, these two major functions of coping have been well documented in the coping literature for over 30 years (Weiten & Loyd, 2008).

In a separate study, Folkman and Lazarus (1985) found that problem-focused coping strategies were more likely to occur when individuals' perceived that they had a certain control over the stressor in their external environment; whereas emotion-focused coping strategies were more likely to appear when individuals' perceived that they could do nothing to modify or change their harmful or stressful external environment.

Based on existing research, problem-focused coping strategies appear to receive greater support than emotion focused strategies. For example, Cohen (1987) found that problem-focused coping strategies (e.g., gathering information, planning, seeking advice from others, and confronting others) were more effective than emotion-focused strategies (e.g., venting to others, praying, or distracting oneself). Schwartz and Stone (1993) examined how 112 employees coped with issues at work; Schwartz and Stone noted that work problems were approached more aggressively (i.e., participants actively sought out solutions) as opposed to getting overly distracted with their issues. These results suggest that problem-focused coping is more effective in a working environment. In a study of

100 middle-aged community residents, Folkman and Lazarus (1980) found that participants used both problem and emotion-focused strategies, but workers seemed to elicit more problem-focused strategies. It is not surprising that problem-focused strategies would be more effective than emotion-focused strategies, given that they are aimed at removing the stressor that causes the stress, but in certain circumstances it may be impossible to remove the stressor. Both problem and emotion focused strategies could be used in a retail environment. For example, problem-focused strategies could be described by employees who have zero tolerance for dealing with aggressive customers. In these situations, when confronted with a difficult customer, workers could remove the stressor by following their training and telling the aggressor that their company does not tolerate workplace aggression and walking away from the client. On the other hand, emotion-focused strategies could be described by a young worker employed at a late night convenience store who is being robbed at gun point. In this situation, it would be impossible for the worker to remove the stressor.

Coping strategies have also been associated with an individuals' well-being. More specifically, problem-focused coping strategies have been associated with higher levels of general well-being in comparison to emotion-focused strategies (Semmer, 2003). Mosley et al. (1994) found that third year medical students who used problem-focused coping strategies (e.g., problem-solving and social support) reported fewer depressive symptoms in comparison to those who used disengagement strategies (e.g., avoidance of the stressor and wishful thinking). In another study that examined violence with young urban adults, Hassan, Mallozzi, Dhingra, and Haden (2011) found that women reported greater use of

emotion-focused coping strategies and higher levels of depression than males. The study also noted that women who reported higher levels of problem-focused coping also reported lower levels of depression.

Although several studies have examined the coping and well-being within a sample of adults, very few studies have examined how a sample of predominately young adults cope with workplace aggression and violence, it was expected that victims of workplace aggression and violence who used problem-focused strategies (i.e., participants who seek out solutions) over an extended period of time (i.e., 2 surveys a week for a 3 week period) would report lower levels of anxiety and negative affectivity in comparison to those who used emotion-focused strategies (e.g., venting to others and distracting oneself).

Hypothesis 5a: Victims of workplace aggression who use problem-focused coping strategies over an extended period of time will report higher levels of general well-being.

Hypothesis 5b: Victims of workplace violence who use problem-focused coping strategies over an extended period of time will report higher levels of general well-being.

Hypothesis 6a: Victims of workplace aggression who use emotion-focused coping strategies over an extended period of time will report lower levels of general well-being.

Hypothesis 6b: Victims of workplace violence who use emotion-focused coping strategies over an extended period of time will report lower levels of general well-being.

Study 3: Methodology

Study 3: Participants

Prior to recruiting participants, the study was approved by Saint Mary's University and Bishop's University Research Ethics Boards, please refer to Appendix I. Young adults were invited to participate in the study via email. The email was sent out via a snowball technique and informed individuals of the main requirements to participate in the study. Participants had to be young adults (aged between 16 to 25), who were employed in the service or retail sector. The email also informed individuals that they would have to complete six online surveys at different time points. The email invitations were distributed via a university mailing list (i.e., approximately 2 100 students) and were also distributed to professionals and friends. Individuals who received the email were also invited to forward the email to anyone else who met the criteria of the study. Participants were also recruited on campus via in-class announcements and flyers placed throughout campus).

Thirty-three participants responded to the survey at time 1, yet only 28 participants completed all 6 time points. This represents an attrition rate of 15.5%. Participants were asked to complete the survey twice a week for three weeks, once at the start of the working week (i.e., Monday) and the other at the end of the working week

(i.e., Friday). A breakdown of how many participants completed each survey on a weekly basis, including their mean age, hours, and sex can be found in table 18.

Table 18

Frequencies of Participants per Measure

Time	N	Age	Hours	Sex
Week 1	33	21.63 (1.98)	5.85 (2.17)	F = 24
Week 2	32	21.58 (2.00)	5.93 (2.15)	F = 23
Week 3	28	21.59 (1.87)	5.68 (1.94)	F = 19

Demographics were calculated for participants at week 3 (i.e., the participants who completed all weekly surveys). Participants were asked to report on a scale ranging from 0 to 100 what percentage of their time was spent interacting with customers ($M = 75.35$; $SD = 20.94$) and with co-workers ($M = 58.89$; $SD = 34.62$). Participants were also asked to report their salary ($M = \$11/\text{hour}$; $SD = 2.42$). The majority of participants were white (70.4%), were students (66.7%), and worked on a part-time basis (81.5%). Although participants were employed in many different industries, the two most common ones were food (22.2%) and retail (22.2%). Participants had many different job titles, but the three most frequently reported were waiter (21.4%), customer service representative (14.3%), and sales associate (14.3%). Frequency responses for week 1 and week 3 are presented in table 19 to demonstrate how the sample looked prior to attrition.

Table 19

Frequencies for Demographic Items - Week 1 and Week 3

Item		Week 1 (Total N = 33)		Week 3 (Total N = 28)	
		N	%	N	%
Ethnicity	White	30	90.9	26	92.9
	Hispanic	1	3.0	--	--
	Other	1	3.0	1	3.6
Student	Yes	23	69.7	18	64.3
	No	9	27.3	9	32.1
Work	Part-time	26	78.8	22	78.6
	Full-time	6	18.2	5	17.9
Industry	Food	7	21.2	6	21.4
	Retail	7	21.2	6	21.4
Position	Waiter	7	21.2	6	21.4
	Customer Service	4	12.1	4	14.3
	Sales	4	12.1	4	14.3

Study 3: Procedures

Data for all 6 time points were collected electronically via LimeSurvey Version 1.85+ (LimeSurvey, 2009). Individuals who received the email invitation to participate in the study were asked to contact the main researcher at a Gmail account created

specifically for this study. Participants were then provided with a link with the informed consent. Upon agreeing to the informed consent, participants were then asked to complete two surveys a week for the following three weeks (i.e., 6 diary surveys in all) The surveys had to be completed on working days and participants received an email twice a week reminding them to complete their surveys. These emails contained the links to the appropriate surveys for that week. Participants who did not complete the surveys for that week were not contacted again.

All participants were entered in a draw to win one of three prizes (i.e., 1st prize - \$500 Visa gift certificate, 2nd prize - \$250 Visa gift certificate, and 3rd prize - \$250 Visa gift certificate. The prizes were awarded via a draw. For completing each diary survey, participants received 1 raffle ticket. For completing all 6 surveys, participants received an additional 5 raffle tickets.

In order to track participants progress, participants were required to email their 6 digit study code to the main researcher. This code consisted of the first 2 letters of the participant's name, their date of birth, and the first 2 letters of their mother's name. This code was only used to manage the raffle draw.

Study 3: Measures

Participants responded to a daily diary survey twice a week for 3 consecutive weeks. Participants were asked to complete each survey at the end of their work day prior to going to bed. The surveys collected general information regarding the participants' work day, their experiences of workplace aggression and/or violence, how they coped with these incidents, and how the impact that their experiences of workplace aggression

and violence had on their well-being. In addition to these items, participants were also asked to respond to demographic questions at time 1 and time 6. For more a complete list of items for each survey, please refer to Appendix J.

Demographics. Demographic items included, age, sex, ethnicity, student status, job title, hourly salary, name of the company and length that the position was held. Questions were also asked regarding the percentage of time that participants interacted with customers and co-workers. As previously noted, questions pertaining to demographics were only asked at time 1 and time 6.

Daily Working Information. Participants were asked whether or not they worked that day. Given that most young adults work part-time jobs, it was anticipated that they would not be working every day. Participants were asked to report the length of their shift as well as whether they were working in the daytime or evening given that evening shifts in certain sectors (e.g., convenience store clerk) tend to be related to higher rates of workplace aggression and violence (Schat et al., 2006).

Workplace Aggression and Violence. Workplace aggression and violence were measured separately as they have been identified as two separate constructs. Although they were measured separately, participants were asked the same series of questions which examined: 1) whether or not participants experienced incidents of workplace violence and aggression today; 2) how many incidents they experienced; 3) how severely they rated the incident on a Likert scale ranging from 1 (not severe) to 7 (very severe); (4) who was the perpetrator of the incident (i.e., supervisor, co-worker, or customer); 5) how did they feel immediately following the incident on a Likert scale ranging from 1

(very bad) to 7 (very good). Should participants have noted more than one experience, they were asked to focus on the most severe incident while responding to the items.

Coping. Coping was assessed using the COPE-brief scale developed by Carver (1997) the scale consisted of 28-items that measured 14 facets of coping: active coping, planning, positive refraining, acceptance, humour, religion, emotional support, instrumental support, self-distraction, denial, venting, substance, behaviour disagreement, and self-blame). Response items were rated on a 4-point Likert scale, ranging from 1 (I usually don't do this at all) to 4 (I usually do this a lot). Carver (1997) reported that the internal reliabilities for the 14 subscales ranged from $\alpha = .57$ to $.90$. For the current scale, internal consistency for all 14 subsets ranged from $\alpha = .17$ to $.97$. Based on existing research (Macdonald, 2011) who used the COPE-brief scale to measure problem and emotion-focused coping, items 1, 2, 8, 15, 16, and 22 were classified as problem-based coping (i.e., active coping, planning, and instrumental coping) and the rest of the items were related to emotion-based coping (i.e., positive refraining, acceptance, humour, religion, emotional support, self-distracting, denial, venting, substance, behavioural disagreement, and self-blame). Over the course of three weeks, internal reliabilities for problem-based coping ranged from $\alpha = .83$ to $.93$; whereas emotion-based coping ranged from $\alpha = .66$ to $.87$. Internal consistencies for these scales (week 1 to week 3) are presented in table 20.

Well-Being. Well-being was assessed by measuring negative mood and anxiety. *Negative mood* was measured by using 10 negatively worded items (e.g., distressed) from Watson, Clark, and Tellegen's (1988) positive and negative affect schedule (PANAS).

Participants were asked to respond to each item on a scale ranging from 1 (very slightly or not at all) to 5 (extremely). Over the course of three weeks, internal consistencies for negative moods ranged from $\alpha = .70$ to $.92$. *Anxiety* was measured using a modified version of Spitzer, Kroenke, and Williams' (2006) 7-item anxiety scale (e.g., feeling nervous, anxious, or on edge). Participants were asked to respond to each question on a scale ranging from 1 (very slightly or not at all) to 7 (quite a bit). The scale originally measured anxiety over a period of 2 weeks, but was modified to measure anxiety on a daily basis. Over the course of three weeks, internal consistencies for anxiety ranged from $\alpha = .86$ to $.92$. Internal reliabilities for both of these scales on a weekly basis are presented in table 20.

Table 20

Internal Reliabilities for All Scales

Variable/Time	Week 1	Week 2	Week 3
Anxiety	.90	.86	.92
Negative Affectivity	.70	.86	.92
Emotion Focused Coping	.66	.87	.83
Problem Focused Coping	.83	.92	.93

Study 3 – Results**Descriptive Statistics**

Rates of aggression and violence were tabulated over the course of 3 weeks. As can be seen in table 21, participants were more likely to experience workplace aggression (n=35) than workplace violence (n=7) across the entire three weeks that the study took

place. Table 21 breaks down the frequencies of aggression and violence per week. The percentages represent the percentage of aggression and violence in that given week based on the total number of participants. Some participants reported experiencing violence and aggression on more than one occasion.

Table 21

Frequencies for Workplace Aggression and Violence by Time

Time Period	Aggression		Violence	
	N	%	N	%
Week 1 (Total N = 33)	16	48.5	1	3.0
Week 2 (Total N = 32)	4	12.5	1	3.1
Week 3 (Total N = 28)	15	53.6	5	17.9

In regards to the source of aggression and violence, the main source of aggression was from outsiders (n=13), followed by supervisors (n=5), and co-workers (n=3). The main source of violence was from supervisors (n=2), followed by co-workers (n=1) and outsiders (n=1). It is possible that participants may have experienced aggression and violence from the same source on more than one occasion. Table 22 presents frequency rates of the source of aggression and violence over the three weeks of the study.

Table 22

Frequencies – Source of Workplace Aggression and Violence by Time

Time	Agg. Sup.	Agg. Co.	Agg. Out.	Viol. Sup.	Viol. Co.	Viol. Out.
Week 1	1	3	6	1	0	0
Week 2	0	0	3	0	1	0
Week 3	4	0	4	1	0	1

Note. Agg. Sup. = Aggression from Supervisor, Agg. Cow. = Aggression from Co-Worker, Agg. Out. = Aggression from Outsider, Viol. Sup. = Violence from Supervisor, Viol. Co. = Violence from Co-Worker, Viol. Out. = Violence from Outsider.

Additional frequency analyses were done to examine participants who were victims of workplace violence. Out of all 32 participants, only three experienced workplace violence. One of the three experienced violence on two separate occasions (i.e., week 1 and week 3). In addition, one participant could be deemed as an outlier, as he experienced 4 acts of violence during one shift. This participant in particular worked as a security guard and was involved in a brawl with several clients. Two out of the three participants also experienced workplace aggression as well.

Table 23 presents correlations that were reported between all measures used for the current study. Significant positive correlations were found between problem and emotion focused coping techniques which could suggest that participants were using both coping techniques.

Table 23

Correlation Matrix for Study 3 Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Anxiety (Week 1)	1											
2. Anxiety (Week 2)	.70**	1										
3. Anxiety (Week 3)	.55**	.51**	1									
4. N.A. (Week 1)	.39*	.09	.45*	1								
5. N.A. (Week 2)	.17	.36*	-.01	.34	1							
6. N.A. (Week 3)	.36	.18	.80**	.61**	-.05	1						
7. E.F.C. (Week 1)	.29	.09	.17	.05	-.06	.11	1					
8. E.F.C. (Week 2)	.19	.02	-.26	-.09	-.04	-.30	.74**	1				
9. E.F.C. (Week 3)	.16	.03	-.10	.00	-.01	-.05	.78**	.85**	1			
10. P.F.C. (Week 1)	-.11	-.15	-.40*	-.25	-.09	-.35	.28	.37*	.45*	1		
11. P.F.C. (Week 2)	-.12	-.17	-.58**	-.29	-.19	-.49**	.17	.58**	.45*	.75**	1	
12. P.F.C. (Week 3)	-.07	-.18	-.57**	-.30	-.10	-.53**	.22	.52**	.48**	.85*	.92**	1

Note: N.A. = Negative Affective; E.F.C. = Emotion Focused Coping; PFC = Problem Focused Coping

Note: * $p < 0.05$ (two-tailed), ** $p < 0.01$ (two-tailed)

Mixed Model Analysis

It was hypothesized that victims of workplace aggression and violence who use problem-focused coping strategies over an extended period of time would report higher

levels of general well-being (i.e., hypothesis 5a and 5b); whereas participants who resorted to using emotion-focused coping strategies over an extended period of time would report lower levels of general well-being (hypothesis 6a and 6b).

Mixed model analysis were deemed appropriate to verify these hypotheses as the data for this study had two levels. Individual responses to repeated measures (i.e. week 1, week 2, and week 3) represented level 1 and participants themselves represented level 2. Hierarchical or multilevel data sets have often been associated with problems related to the assumption of homogeneity of regression. This assumption states that when using analysis of covariance one needs to assume that the relationship between covariates and the outcome is the same across different groups. Mixed model analysis corrects for this by accounting for variability in regression slopes between groups (Field, 2009). In addition, hierarchical data sets may also have issues with the assumption of independence. Given that repeated measures were used for this study it is fair to assume that not all observations were completely independent. Multilevel analysis is specifically designed to control for the relationships between observations (Field, 2009).

Mixed model analyses were conducted to examine whether any significant relationships existed between two outcomes (i.e., negative affectivity and anxiety) and the frequency rates of violence and aggression, and the 2 coping mechanisms (i.e. emotion-focused and problem-focused), as well as interactions between the 2 coping mechanisms and weekly frequency rates of violence and aggression. In addition, age, gender, weekly working hours were entered as control variables. Four different models were analyzed (see table 24) using SPSS 17.

Table 24

Summary of Models for Mixed Model Analysis

Model	Variables
Model 1	Gender, age, working hours, and time
Model 2	Gender, age, working hours, time, aggression, and violence
Model 3	Gender, age, working hours, time, aggression, violence, emotion-focused coping, and problem-focused coping
Model 4	Gender, age working hours, time, aggression, violence, emotion-focused coping, problem focused coping, aggression*emotion-focused coping, aggression*problem-focused coping, violence*emotion-focused coping, and violence*problem-focused coping

For all 4 models all continuous predictor variables were centered to provide more stable results and allow the estimates to be treated more or less independently from each other (Field, 2009). In addition, for each model, all variables were entered as fixed variables and the subjects were entered as a random variables.

Model 1. For levels of anxiety no significant relationships were reported. Age did not predict anxiety $F(1, 32.62) = 0.64, p = .43$; nor did gender $F(1, 31.37) = 0.22, p = .64$; nor did weekly hours worked $F(1, 87.95) = .68, p = .41$; and nor did time $F(1, 59.32) = 0.10, p = .75$. Thus, none of these control variables appear to have a significant impact on levels of anxiety. Additional results, including estimates and standard errors of fixed effects can be found in table 25.

For levels of negative affectivity no significant relationships were reported. Age did not predict negative affectivity $F(1, 33.05) = 0.13, p = .73$; nor did gender $F(1, 30.61) = .52, p = .48$; nor did weekly hours worked $F(1, 76.20) = 0.04, p = .84$; and nor did time $F(1, 59.91) = 0.02, p = .88$. None of the control variables had a significant impact on negative affectivity. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

Model 2. For levels of anxiety, the only significant relationship reported was weekly aggression frequencies $F(1, 83.64) = 23.99, p < .001$. Non-significant relationships were reported for age $F(1, 32.02) = 0.61, p = .44$; gender $F(1, 31.27) = 0.72, p = .40$; weekly work hours $F(1, 88.26) = 2.40, p = .13$; time $F(1, 58.80) = 0.20, p = .89$; and violence frequencies $F(1, 65.06) = 0.05, p = .82$. Aggression significantly predicts anxiety, $b = 0.41, t(83.64) = 4.90, p < .001$. Adding aggression and violence to the model resulted in a significantly better fitting equation $X^2_{\text{Change}}(2) = 22.33, p < .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

For levels of negative affectivity, the only significant relationship reported was weekly aggression frequencies $F(1, 89.69) = 28.32, p < .001$. Non-significant relationships were reported for age $F(1, 33.89) = 0.41, p = .53$; gender $F(1, 31.59) = 2.32, p = .14$; weekly work hours $F(1, 71.99) = 0.43, p = .51$; time $F(1, 60.84) = 0.00, p = .98$; and weekly violence frequencies $F(1, 74.72) = 0.90, p = .36$; These results show that aggression significantly predicts negative affectivity, $b = 0.36, t(89.68) = 5.32, p < .001$. Adding aggression and violence to the model resulted in a significantly better fitting

equation $X^2_{\text{Change}}(2) = 30.76, p < .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

Model 3. For levels of anxiety, the only significant relationship reported was weekly aggression frequencies $F(1, 85.49) = 20.10, p < .001$. Non-significant-relationships were reported for age $F(1, 33.48) = 0.92, p = .35$; gender $F(1, 35.16) = 2.36, p = .13$; weekly work hours $F(1, 85.56) = 2.51, p = .12$; time $F(1, 59.04) = 0.01, p = .93$; weekly violence frequencies $F(1, 64.74) = 0.03, p = .87$; emotion-focused coping $F(1, 71.59) = 0.01, p = .93$; and problem-focused coping $F(1, 60.41) = 3.77, p = .06$. These results show that aggression significantly predicts anxiety, $b = 0.38, t(85.49) = 4.48, p < .001$. Adding problem and emotion-focused coping to the model did not significantly improve the fit of the equation $X^2_{\text{Change}}(2) = 44.88, p > .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

For levels of negative affectivity, significant relationships were reported for gender $F(1, 30.69) = 9.87, p < .01$; weekly aggression frequencies $F(1, 82.95) = 26.15, p < .001$; and problem-focused coping $F(1, 39.16) = 11.14, p < .01$. Non-significant relationships were reported for age $F(1, 32.60) = 0.10, p = .75$; weekly work hours $F(1, 59.90) = 1.14, p = .29$; time $F(1, 58.61) = 0.01, p = .93$; weekly violence frequencies $F(1, 76.65) = 1.13, p = .29$; and emotion-focused coping $F(1, 46.91) = 0.10, p = .76$; and problem-focused coping $F(1, 60.41) = 3.77, p = .06$. These results show that three variables significantly predict negative affectivity: gender, $b = -0.22, t(30.69) = -3.14, p < .05$; aggression, $b = 0.33, t(82.95) = 5.11, p < .001$; and problem-focused coping, $b = -0.18, t(39.16) = -3.34, p < .05$. Adding problem and emotion-focused coping to the

model resulted in a significantly better fitting equation $X^2_{\text{Change}}(2) = -7.32, p < .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

Model 4. For levels of anxiety, significant relationships were reported for gender $F(1, 35.67) = 4.26, p < .05$; weekly aggression frequencies $F(1, 75.59) = 7.89, p < .01$; interactions between emotion-focused coping and aggression $F(1, 86.00) = 8.30, p < .01$; and interactions between problem-focused coping and aggression $F(1, 66.99) = 13.62, p < .01$. Non-significant relationships were reported for age $F(1, 32.86) = 3.80, p = .06$; weekly work hours $F(1, 88.85) = 3.85, p = .05$; time $F(1, 58.40) = 0.01, p = .94$; weekly violence frequencies $F(1, 59.96) = 0.07, p = .79$; emotion-focused coping $F(1, 79.73) = 1.50, p = .23$; problem-focused coping $F(1, 76.39) = 1.72, p = .19$; interaction between violence and emotion-focused $F(1, 60.09) = 0.00, p = .96$; interaction between violence and problem-focused coping $F(1, 59.74) = 0.00, p = .96$. Four variables significantly predicted anxiety : gender, $b = -0.28, t(35.68) = -2.06, p < .05$; aggression, $b = 0.23, t(75.59) = 2.81, p < .05$; interactions between aggression and emotion-focused coping, $b = 0.88, t(86.00) = 2.88, p < .05$; (see figure 1) and interactions between aggression and problem-focused coping, $b = -0.52, t(66.99) = -3.69, p < .001$ (see figure 2). Adding interactions between the coping strategies and workplace aggression and violence to the model resulted in a significantly better fitting equation $X^2_{\text{Change}}(4) = 19.77, p < .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

For levels of negative affectivity, significant relationships were reported for gender $F(1, 36.11) = 6.10, p < .05$; age $F(1, 34.09) = 4.26, p < .05$; weekly aggression frequencies $F(1, 87.98) = 6.97, p < .05$; problem-based coping $F(1, 63.61) = 8.80, p < .05$; and interactions between aggression and problem-focused coping $F(1, 75.47) = 19.97, p < .01$. Non-significant relationships were reported for weekly work hours $F(1, 73.93) = 1.14, p = .29$; time $F(1, 61.29) = 0.56, p = .46$; weekly violence frequencies $F(1, 64.94) = 1.20, p = .28$; emotion-focused coping $F(1, 67.61) = 0.04, p = .84$; interactions between aggression and emotion-focused coping $F(1, 89.94) = 0.21, p = .65$; interactions between violence and emotion-focused coping $F(1, 64.85) = 1.52, p = .22$; interactions between violence and problem-focused coping $F(1, 63.87) = 2.78, p < .10$.

Five variables significantly predicted negative affectivity: gender, $b = -0.17, t(36.11) = -2.47, p < .05$; age, $b = 0.03, t(34.09) = 2.06, p < .05$; aggression, $b = 0.15, t(87.98) = 2.64, p < .05$; problem-focused coping, $b = -0.16, t(63.61) = -2.97, p < .01$; interactions between aggression and problem-focused coping, $b = -0.45, t(75.47) = -4.47, p < .01$. Adding interactions between the coping strategies and workplace aggression and violence to the model resulted in a significantly better fitting equation $X^2_{\text{Change}}(4) = 49.86, p < .01$. Table 25 presents these and other results, including estimates and standard errors of fixed effects.

Table 25

Mixed Model Analyses with Anxiety and Negative Affectivity as Outcomes

Model	Anxiety			Negative Affectivity		
	b	SE b	95% CI	b	SE b	95% CI
Model 1						
Gender	-0.07	0.14	-0.47, 0.22	-0.07	0.10	-0.27, 0.13
Age	0.03	0.03	-0.04, 0.09	-0.01	0.02	-0.05, 0.04
Working Hours	-0.02	0.02	-0.06, 0.03	0.00	0.02	-0.03, 0.04
Time	-0.01	0.04	-0.09, 0.06	-0.01	0.03	-0.07, 0.06
2LL	71.83			40.61		
Model 2						
Gender	-0.11	0.13	-0.37, 0.15	-0.12	0.08	-0.28, 0.04
Age	0.02	0.03	-0.04, 0.08	-0.01	0.02	-0.05, 0.02
Working Hours	-0.03	0.02	-0.07, 0.01	-0.01	0.01	-0.04, 0.02
Time	-0.01	0.03	-0.07, 0.06	0.00	0.03	-0.06, 0.06
Violence	-0.03	0.14	-0.32, 0.25	0.12	0.13	-0.13, 0.38
Aggression	0.41**	0.08	0.24, 0.57	0.36**	0.07	0.23, 0.50
2LL	49.48			9.84		
Model 3						
Gender	-0.20	0.13	-0.46, 0.06	-0.22**	0.07	-0.36, -0.08
Age	0.03	0.03	-0.03, 0.08	0.00	0.01	-0.04, 0.03
Working Hours	-0.03	0.02	-0.07, 0.01	0.00	0.01	-0.04, 0.01

Time	0.00	0.03	-0.07, 0.06	0.00	0.03	-0.06, 0.06
Violence	-0.02	0.14	-0.31, 0.26	0.13	0.13	-0.12, 0.39
Aggression	0.38**	0.09	0.21, 0.55	0.33**	0.07	0.20, 0.46
Emotion Coping	0.02	0.19	-0.35, 0.39	-0.04	0.12	-0.27, 0.20
Problem Coping	-0.18	0.09	-0.36, 0.01	-0.18**	0.05	-0.29, -0.07
2LL	44.81			-2.53		

Model 4

Gender	-0.28*	0.13	-0.55, -0.01	-0.17*	0.07	-0.31, -0.03
Age	0.06	0.03	0.00, 0.12	0.03*	0.15	0.00, 0.06
Working Hours	-0.03	0.02	-0.07, 0.00	-0.01	0.01	-0.03, 0.01
Time	0.00	0.04	-0.08, 0.09	-0.02	0.03	-0.08, 0.04
Violence	-0.20	0.74	-1.69, 1.29	-0.60	0.55	-1.69, 0.49
Aggression	0.23**	0.08	0.07, 0.40	0.15*	0.06	0.04, 0.26
Emotion Coping	-0.23	0.19	-0.60, 0.14	-0.02	0.11	-0.25, 0.20
Problem Coping	-0.12	0.09	-0.31, 0.06	-0.16**	0.06	-0.27, -0.05
Emotion * Agg	0.88**	0.30	0.27, 1.48	0.09	0.20	-0.31, 0.49
Emotion * Viol	0.07	1.36	-2.66, 2.79	1.23	1.00	-0.76, 3.23
Problem * Agg	-0.52**	0.14	-0.80, -0.24	-0.45**	0.10	-0.65, -0.25
Problem * Viol	-0.05	1.06	-2.17, 2.06	-1.29	0.78	-2.84, 0.26
2LL	25.14			-52.39		

Note: Emotion Coping = Emotion-focused coping, Problem Coping = Problem-focused coping, Emotion * Agg = Interaction between emotion-focused coping and aggression, Emotion * Viol = Interaction between emotion-focused coping and aggression, Problem *

Agg = Interaction between problem-focused coping and aggression, Problem * Viol = Interaction between problem-focused coping and violence

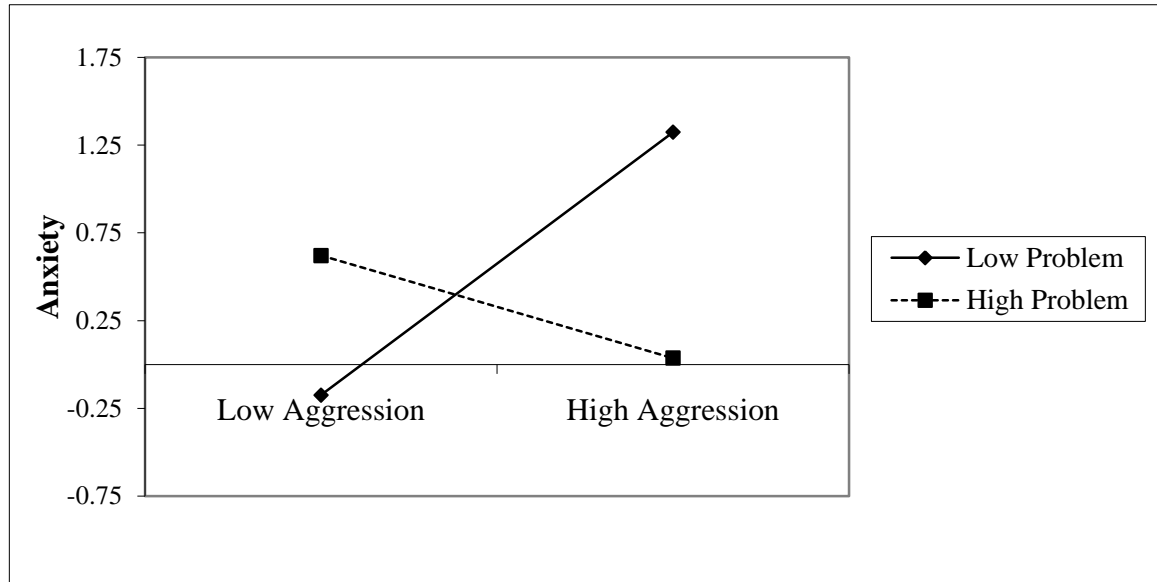
Note: * $p < 0.05$, ** $p < 0.01$

Hypotheses 5a and 5b

Results from the mixed model analyses supported hypothesis 5a (i.e., victims of workplace aggression who use problem-focused coping strategies over an extended period of time will report higher levels of general well-being), however, hypothesis 5b (i.e., victims of workplace violence who use problem-focused coping strategies over an extended period of time will report higher levels of general well-being) was not supported.

Two significant two-way interactions provided support for hypothesis 5a. Both interactions and all predicting variables were standardized using group mean centering. The first significant two-way interaction was between aggression and problem-focused coping on anxiety, $b = -0.52$, $t(66.99) = -3.69$, $p < .001$. As shown in Figure 1, participants who reported low levels of workplace aggression and used high levels of problem-focused coping reported lower levels of general well-being (i.e. higher levels of anxiety) in comparison to those who used lower levels of problem-focused coping; whereas, those who experienced high levels of workplace aggression and used high levels of problem-focused coping reported higher levels of general well-being (i.e., lower levels of anxiety) in comparison to those who used lower levels of problem-focused coping, thus confirming hypothesis 5a.

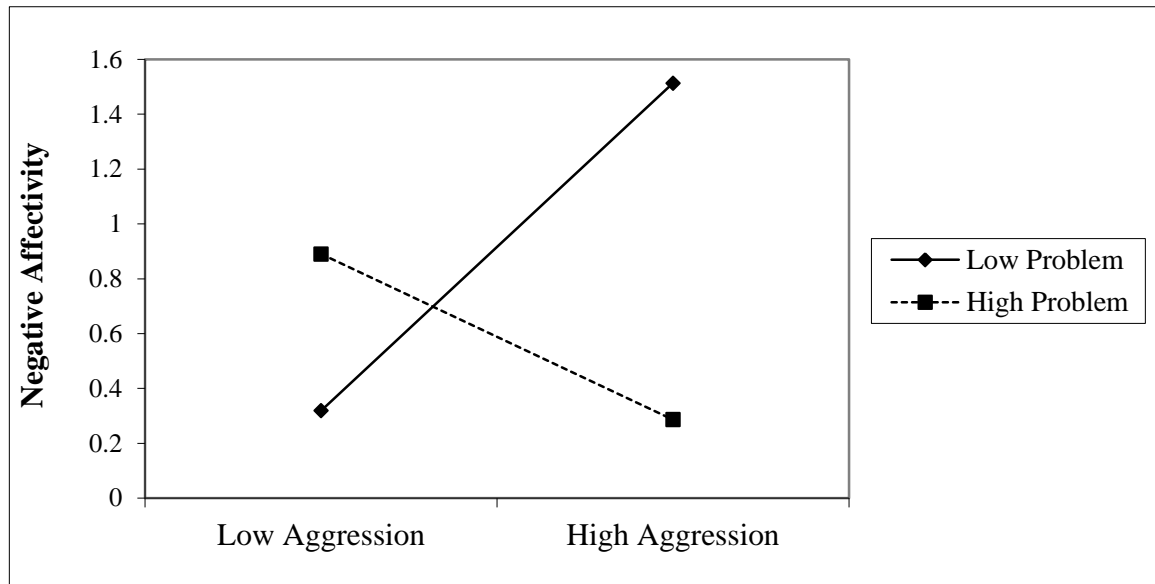
Figure 1: Effects of Aggression and Problem-Focused Coping on Anxiety



Note: Problem = Problem-Focused Coping Strategies

The second significant interaction was between aggression and problem-focused coping on negative affectivity, $b = -0.45$, $t(75.47) = -4.47$, $p < .01$. As shown in Figure 2, participants who reported low levels of aggression and used high levels of problem-focused coping reported lower levels of general well-being (i.e., higher levels of negative affectivity) in comparison to those who used low levels of problem-focused coping; whereas participants who experienced high levels of workplace aggression and used high levels of problem-focused coping reported higher levels of general well-being (i.e., lower levels of negative affectivity) in comparison to those who used lower levels of problem-focused coping, thus confirming hypothesis 5a.

Figure 2 – Effects of Aggression and Problem-Focused Coping on Negative Affectivity



Note: Problem = Problem-Focused Coping Strategies

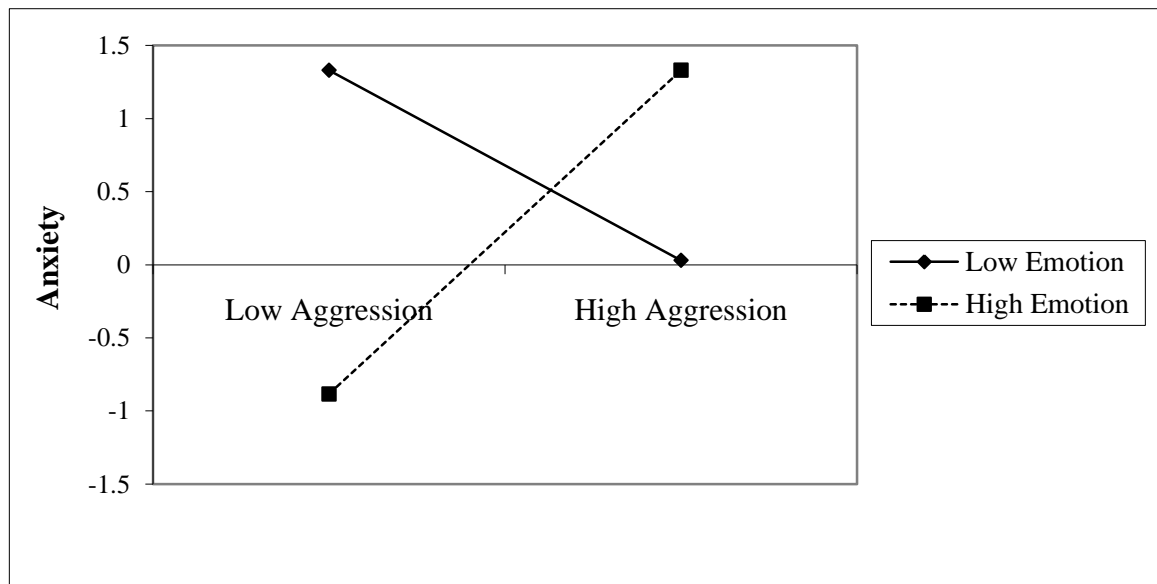
Hypotheses 6a and 6b

Results from mixed model analysis supported hypothesis 6a (i.e., victims of workplace aggression who use emotion-focused coping strategies over an extended period of time will report lower levels of general well-being); however, hypothesis 6b (i.e., victims of workplace violence who use emotion-focused coping strategies over an extended period of time will lower higher levels of general well-being) was not confirmed.

A significant two-way interaction supported hypothesis 6a. For this interaction all predicting variables were standardized using group mean centering. The significant two-way interaction was between aggression and emotion-focused coping on levels of anxiety, $b = 0.88$, $t(86.00) = 2.88$, $p < .05$. As shown in Figure 3, participants who experienced low levels of workplace aggression and used high levels of emotion-focused coping

reported higher levels of general well-being (i.e., lower levels of anxiety) in comparison to those who used low levels of emotion-focused coping; whereas participants who experienced high levels of workplace aggression and used high levels of emotion coping reported lower levels of general well-being (i.e., higher levels of anxiety), thus confirming hypothesis 6a.

Figure 3: Effects of Aggression and Emotion-Focused Coping on Anxiety



Note: Emotion = Emotion Focused Coping Strategies

Exploratory Analysis

As previously noted, positive significant correlations (both at $p < 0.01$ and $p < 0.05$) were reported between emotion-focused and problem-focused strategies at times 2 and 3 (see table 23). Given that Lazarus (1999) noted that problem and emotion-focused strategies are seldom separated, a mixed model analysis was used to examine whether using both problem and emotion-focused coping strategies simultaneously moderated the

effects of workplace aggression and violence on an individual's general well-being (i.e., levels of anxiety and negative affectivity).

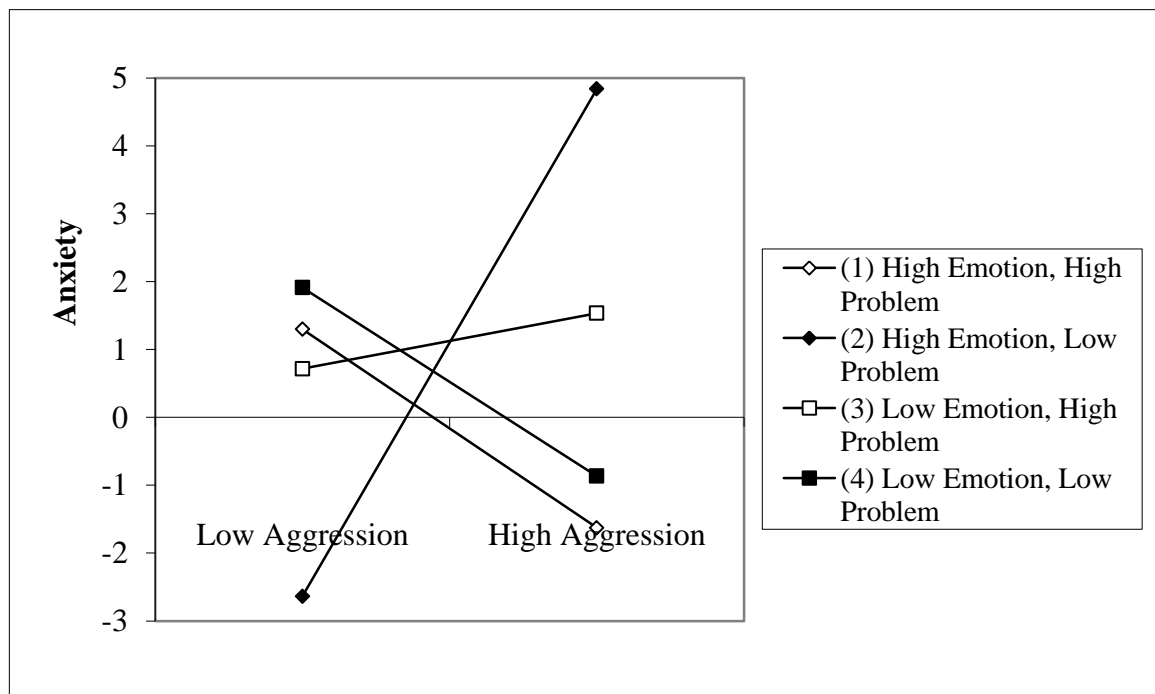
Mixed model analyses were conducted to examine these questions. Age, gender, weekly working hours were entered as control variables. In addition, time violence, aggression, emotion-focused coping strategies, problem-focused coping strategies, 5 two-way interactions (i.e., emotion-focused coping and aggression, emotion-focused coping and violence, problem-focused and aggression, problem-focused coping and violence, and problem-focused coping and emotion focused coping), and 2 three-way interactions (i.e., problem-focused coping, emotion-focused coping, and aggression and problem-focused coping, emotion-focused coping, and violence) were entered into the analysis.

All analyses were conducted using SPSS. In addition, all continuous predictor variables were centered to provide more stable results and allow the estimates to be treated more or less independently from each other (Field, 2009). In addition, for each model, all variables were entered as fixed variables and the subjects were entered as a random variables. The purpose of these analyses was to examine the impact of three way interactions and consequently only results associated with the three way interactions will be reported. Two significant three way interactions were reported, but both were related to how problem and emotion focused coping simultaneously moderated the effects of workplace aggression on participant's level of anxiety and negative affectivity.

For levels of anxiety, a significant relationship was reported for the three way interaction between problem-focused coping, emotion-focused coping, and aggression $F(1, 67.46) = 9.01, p < .01; b = -1.75, t(67.46) = -3.00, p < .01$. Although other significant

relationships were reported, they will not be discussed in this section as the main objective was to examine the impact of the three way interactions on anxiety. These results suggest that using problem and emotion-focused coping strategies simultaneously will moderate the effects of workplace aggression on anxiety. As shown in Figure 4, participants who reported high levels of aggression and used high levels of problem and emotion-focused coping simultaneously reported lower levels of anxiety than any other group (i.e., high emotion-focused coping and low problem-focused coping, low emotion-focused coping and high problem-focused coping, and low emotion focused and low-problem focused coping).

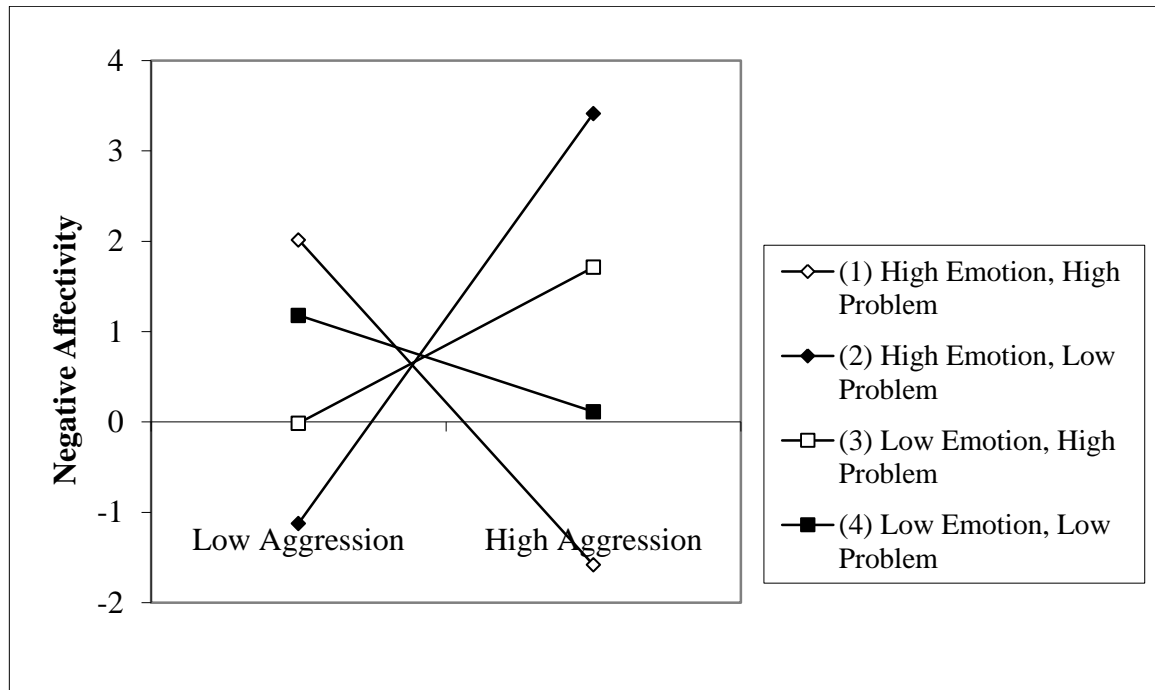
Figure 4: Effects of Problem-Focused Coping, Emotion-Focused Coping, and Aggression on Anxiety



Note: Emotion = Emotion-focused coping, Problem = Problem-focused coping

For levels of negative affectivity, a significant relationship was reported for the three way interaction between problem-focused coping, emotion-focused coping, and aggression $F(1, 71.80) = 11.30, p < .01; b = -1.37, t(71.80) = -3.36, p < .01$. Although other significant relationships were reported, they will not be discussed in this section as the main objective was to examine the impact of the three way interactions on negative affectivity. These results suggest that using problem and emotion-focused coping strategies simultaneously will moderate the effects of workplace aggression on negative affectivity. As shown in Figure 5, participants who reported high levels of aggression and used high levels of problem and emotion-focused coping simultaneously reported lower levels of negative affectivity than any other group (i.e., high emotion-focused coping and low problem-focused coping, low emotion-focused coping and high problem-focused coping, and low emotion focused and low-problem focused coping).

Figure 5: Effects of Problem-Focused Coping, Emotion-Focused Coping, and Aggression on Negative Affectivity



Note: Emotion = Emotion-focused coping, and Problem = Problem-focused coping

Study 3: Discussion

The purpose of the third study was to examine whether problem-focused and emotion-focused coping strategies moderated the effects of workplace aggression and violence on victims' general well-being. Based on previous research on coping strategies (Cohen, 1987; Folkman and Lazarus, 1980), problem-focused coping was expected to positively moderate the effects of workplace aggression and violence on a victims' general well-being. Previous studies which examined workplace aggression and violence have had a tendency to use cross-sections research designs, which may not be the best suited for examining workplace violence given its low frequency rate. Consequently, this diary study had participants complete a survey 6 times over the course of three weeks. By

asking participants to complete a diary survey multiple times provided a more accurate representation of coping with workplace aggression and violence.

Both problem-focused coping and emotion-focused coping significantly moderated the effects of workplace aggression on a participants general well-being. These findings demonstrate the young adults will most likely use whatever coping mechanisms is at their disposition. As stated by Lazarus (1999), problem and emotion-focused coping are seldom separated; they are both part of the coping effort and can actually facilitate one another. In addition, Lazarus also noted that problem-focused coping seems to be the most useful strategy, whereas emotion-coping, under certain circumstances, can be detrimental to an individual's well-being. Results from this study supported this position.

Participants who were victims of workplace aggression and used high levels of problem-focused coping strategies reported higher levels of general well-being (i.e., lower levels of anxiety and negative affectivity). These results replicate previous findings highlighting the benefits of problem focused coping. For example, Heppner & Lee (2005) found that problem-focused coping strategies were related to lower levels of depression, reduced alcohol use, and fewer health complaints. It is interesting to note that in certain circumstances, young workers who were victims of workplace aggression felt like they could actively do something to resolve their issue and minimize their level of strain.

One aspect of problem-focused coping is to seek support. Seeking support can help buffer the negative effects of stress, and just the act of reaching out to someone can itself produce positive effects on its own (Taylor, 2007; Wills & Fegan, 2001). Young victims of workplace aggression who are not accustomed to dealing with such

experiences may seek support from co-workers or friends to help them develop a strategy to deal with these incident should they happen in the future, thus possibly alleviating the effects of the violence or aggression. In other words, they may feel like they actually have a strategy for dealing with this issue should it arise again.

Karlsen, Dybdahl, and Vitterson (2006) reported that problem-focused coping was related to such positive outcomes as emotional growth in times of stress. The same could be said in regards to young adults with little working experience, over time they will learn how to deal with situations of workplace violence. Once they have learned how to deal with these incidents, they may not be as stressed when realizing there is a probability that aggressive situations may arise again in the work environment. Weiten, Dunn, and Hammer (2011) found that employees could be successfully trained on how to use problem-focused coping strategies within a working context.

Although this study found that problem-focused coping strategies positively moderated the effects of aggression on participants general well-being, the results did not support the same effects for victims of workplace violence. Unfortunately, problem-focused coping did not have any significant effect for victims of workplace violence and their levels of general well-being. A possible explanation for this could be that the few incidents of violence ($n = 7$) may have had an impact on the analysis (e.g., too little variance to pick up on any statistically significant differences). As noted in Schat, et al. (2006) incidents of workplace violence are far less common in the workforce in comparison to workplace aggression.

Another possible explanation that could explain why problem-focused coping strategies were not effective in mediating the effects of workplace violence is that victims of workplace violence may have felt like they had little or no control over the situation. For example, young adults may be more accustomed to dealing with incidents of aggression; however, a young victim of workplace violence who has never been faced with having to deal with a threatening or violent customer/co-worker might not have been trained on these rare and intense situations and consequently does not know what to do in that moment, or the victims may also feel they do not have sufficient time or resources to find an appropriate solution. In these circumstances, Folkman and Lazarus (1985) noted that individuals are more likely to refer to emotion-focused coping to help them deal with their stressful encounters. As previously noted, there is no right or wrong coping strategy; many of the coping strategies selected will depend on the person, the type of threat, the stage of the stressful encounter, the work context, and individual's general well-being (Lazarus, 1999).

With respects to emotion-focused coping, participants who were victims of workplace aggression and used high levels of emotion-focused coping strategies reported lower levels of general well-being (i.e., higher levels of anxiety). This finding supports previous research which found that under certain conditions, emotion-focused coping can be detrimental to an individuals' health and general well-being (Collins, Baum, & Singer, 1983; Solomon, Mikulincer, & Flum, 1988; Strentz & Auberback, 1988). Weiten et al. (2011) noted that coping strategies may take time to work before negative emotions actually subside. Consequently, some young adults may not fully understand or know

how to manage their emotions after experiencing workplace aggression and violence and it may take them some time to realistically learn how to cope with these experiences, thus causing greater levels of stress.

Weiten et al. (2011) related emotion-focused coping strategies to emotional intelligence. Emotional intelligence was formulated by Salovey and Mayer (1990) and consist of the ability to perceive and express emotions, use emotions to facilitate thoughts, understand and reason with emotion, and regulate emotions. Emotional intelligence has been found to be a key factor in being resilient when faced with stressful situations (Slaski & Cartwright, 2003). That being said, people can have high or low levels of emotional intelligence. Pashang and Singh (2008) found that individuals with high levels of emotional intelligence were more apt to deal with anxiety, whereas those with lower levels of emotional intelligence were more likely to resort to distraction and denial. Also, low levels of emotional intelligence have also been found to be associated with increased worrying and avoidance (Matthews et al., 2006). Although not directly examined in this study, it is possible that some young workers with a lack of experience may had lower levels of emotional intelligence, also causing their levels of anxiety to increase.

Although this study found that emotion-focused coping strategies negatively moderated the effects of aggression on participants level of anxiety, results did not support the same effects for victims of workplace violence. As described earlier, it is possible that there were not enough incidents of violence reported to find a significant effect. Although not directly examined in this study, but based on the discussions from

results found in study 2, it is also possible that the victim's reached out for emotional support, but were not capable of finding someone who was able to fully help them. As Lazarus (1999) noted, people who are in a position of emotional support, be it a supervisor, co-worker, family member, or friend, have to be able to understand the problems that the recipient is facing. He also notes that not only does the person in the position of support have to be able to provide valuable information, but that the recipient (i.e., victim) also has to be willing to accept the support gracefully. Another factor is that victims of workplace violence may not actually be comfortable in approaching somebody else for help. Depending on their disposition and their work environment some may feel embarrassed to openly discuss the fact that they were a victim of workplace violence and that they are struggling in dealing with it. For example, young workers who experience abuse from their direct supervisors might not be comfortable approaching others to discuss the matter for fear of vindication.

Based on significantly positive correlations found between problem coping and emotion-focused coping strategies at time 1 and time 2, exploratory analysis were completed to examine whether or not using both problem and emotion focused simultaneously moderate the effects of workplace aggression and violence on an individual's general well-being. Lazarus (1999) noted that workplace problem and emotion-focused coping strategies are rarely separated, they are both part of the coping effort and complement one another. On that note, given that young workers may be inexperienced with dealing with workplace aggression and violence, it is possible that they would use whatever coping mechanism was at their disposition. Results showed

significant three-way interactions for participants who used high levels of problem and high levels of emotion-focused coping significantly moderated the effects of workplace aggression on the participant's levels of anxiety and negative affectivity. Lazarus noted that in certain circumstances, emotion-focused coping could be detrimental to an individual's general well-being. In this circumstance, it appears to have the opposite effect. Although not examined directly in this study, a possible explanation could have been that if participants who experienced aggression from sources outside of the company (i.e., customers) could have felt like they had very little control over the situation and consequently could not use any form of sanctions or strategies to deal with the situation. These victims could have perceived their situation as unsolvable, therefore in order for their coping to be effective, they would have had to manage their emotions. These findings support the principle that using a mix of high problem and high emotion-focused strategies might be the most successful in helping young adults cope with their experiences of workplace aggression.

Results also showed that certain combinations of problem and emotion-focused strategies can be detrimental. For example, participants who reported high levels of emotion-focused coping strategies and low problem-focused strategies reported the highest levels of anxiety and negative affectivity. Although not examined directly, it is possible that young adults tried to use what minimum levels of problem-focused coping strategies that they had at their disposal, but fundamentally given that had very little control over their environment, they resorted to higher levels of emotion-focused coping strategies to help them deal with their circumstances. These results support existing

research which has noted that emotion-focused coping strategies can be detrimental to an individual's well-being (Lazarus, 1999).

Results showed that using both problem and emotion-focused coping strategies simultaneously did not significantly moderate the effects of workplace violence on both anxiety and negative affectivity. Similar to results reported for two-interactions, nothing seemed to help young adults cope with workplace violence. It is possible that there were too few incidents of workplace violence (i.e., N=7) to identify any significant findings. Although not fully examined, another possibility could be that participants who were victims of workplace violence simply accepted that they had little control over their situation and did not have to resort to using problem or emotion focused strategies.

Study 3: Implications for Future Research

Although this study found that problem-focused coping strategies positively moderated the effects of workplace aggression on young worker's well-being and emotion-focused coping had the opposing effect. The taxonomies of problem and emotion-focused strategies may be too broad to really examine if any specific behaviours (e.g., humour) are more effective in helping individuals recover from workplace aggression than others (e.g. praying). Future studies could benefit from using measures, such as the Ways of Coping Questionnaire (Folkman and Lazarus, 1998) or the COPE-brief scale (Carver, 1997) that examine these specific behaviours. Although this current study found that emotion-focused coping negatively moderated the effects of workplace aggression on a victim's general well-being (i.e., higher levels of anxiety), past research has found that emotion focused strategies have been related to positive outcomes in

certain circumstances. For example, Collins et al. (1983) found that when individuals used problem-focused coping strategies over a period of time to change situations that could not realistically be changed, these individuals experienced greater negative outcomes in comparison to those who developed emotion-focus coping strategies at earlier stages. Furthermore, past research has found that certain aspects of emotion-focused can be related to positive outcomes. For example, over the last 25 years a body of research has demonstrated that humour can help moderate the impact of stress (Lefcourt, 2005). In certain situations where there is nothing that people can do, denial processes have been found to decrease an individuals' stress level momentarily (Lazarus & Folkman, 1984). Positive reinterpretation has also been linked to helping people calm themselves, thus decreasing their stress levels without the necessity of distorting the reality of the situation (Aldwin, 2007). Although the current study did use the COPE-brief scale, the sample size was too small to examine whether or not the 14 factors (i.e., 28-items) of the COPE-brief were psychometrically sound. Examining the different facets might provide more specific and valuable information on how young adults recover from workplace aggression. It may also be interesting to examine if combinations of emotion and problem focused coping strategies are more successful in moderating the effects of workplace aggression and violence.

Given that so many young adults work in the retail and service sectors (Zakocs et al., 1998) and that they have been frequently found to be the target of workplace aggression than older age groups (Chappell & Di Martino, 2000), understanding how they cope with these negative experiences could help organizations provide them greater level

of supports. For example, perhaps organizations could provide training on effective problem-focused strategies, thus making young adults feel like they have a certain amount of control over their working environment. In addition, young adults who start working are acquiring tacit knowledge (i.e., knowledge that they can only learn through work experience). Understanding how they successfully cope with these experiences could help them learn to deal with future experiences of aggression and violence more successfully.

Self-report measures may not be sufficient to fully capture the process of coping that is to say how victims analyze stressful encounters, how they respond to those events, and how the consequences of their coping actions (Oakland & Ostell, 1996; O'Driscoll & Cooper, 1994). O'Driscoll and Copper (1996) suggested using a combination of self-reports and open ended questions. In study 2, critical incidents provided an abundance of information on how young adults experience workplace aggression and violence, many of which were not presented in the current dissertation. For example, participants also reported qualitative data on what type of behaviours (i.e., verbal and non-verbal led up to the incident). Future research on coping should consider a combination of quantitative and qualitative measures used with a longitudinal research design which will provide researchers with more comprehensive information about the coping process itself. For example, in addition to a self-reporting scale, short interviews could provide insight on the process of how individuals select certain coping strategies over others based on the situation that they are in. In addition, interview questions could examine how an individual's coping strategies could change over time. A study could focus on, for

example, examining how new hires (i.e., people on the first week of their job) cope with incidents of workplace aggression and violence for the first time and how they cope with similar incidents after being in the organization for three months or a year. In other words, research could examine if participants alter their coping strategies via their tacit knowledge (i.e., knowledge that is learned on the job).

Future studies could also examine if the organizational culture or leadership can have an impact on the type of coping strategies that an individual uses. For example, should an organization value their employees they may provide them with training in how to deal with customers who are aggressive or violent. Providing this type of information to employee prior to them experiencing workplace aggression and violence may actually help them develop problem-focused coping strategies to help them deal with incidents of workplace aggression or violence. Lazarus (1999) briefly noted that people may not necessarily choose the most appropriate/natural coping strategy to solve a problem, but they may instead choose a strategy that will most likely be socially desirable within their environment. Including measures of organizational culture or even leadership styles could provide some insight on whether or not social desirability impacts to the choice of coping strategies.

Finally future studies could examine if emotional intelligence moderates the effects of workplace aggression and violence. As previously noted, high levels of emotional intelligence have been associated with resiliency in stressful situations (Slaski & Cartwright, 2003) and better abilities to adapt to stressful situations (Pashang & Singh, 2008). Future research could examine whether victims of workplace aggression and

violence with higher levels of emotional intelligence have lower levels of anxiety after their experiences in comparison to victims with lower levels of emotional intelligence.

Study 3: Implications for Practice

Results from this study can have implications on human resource practices within industries that have high levels of workplace aggression and violence. Should the source of workplace aggression or violence come from within the organization, it may be beneficial to provide employees with training problem-focused coping strategies.

Heppner and Lee (2005) have suggested that problem-solving coping strategies can be developed via training. Weiten et al. (2011) provided a synthesis of some key problem-focused training programs. These programs include: clarifying the problem, generating alternative courses of action, evaluating alternative courses of action, and selecting a course of action.

In other working environments, the source of workplace aggression and violence may be coming from external sources (i.e., customers or clients), employees may have very little control over these types of situations. In these circumstances, employees may have little choice but to refer to using emotion-focused coping strategies. If employees are victims of workplace aggression or violence, providing them with post-violence or aggression resources may help alleviate some of the stress. Although results from this Study 3 found that emotion-focused coping actually increased levels of anxiety for victims of workplace aggression, it is possible that these victims did not approach properly trained individuals who have received proper training on helping individuals cope with their stressful experiences. As noted by Lazarus (1999) the type of support an

individual receives can have drastic positive or negative side effects on their psychological well-being. McLean (1979) found that interpersonal trust, liking a supervisor, and having strong group cohesion are related to lower levels of job strain and better health. It may be beneficial for organizations to develop an open organization where issues of workplace aggression and violence are openly discussed. It may also be beneficial for organizations to provide training for their leaders so that they may be able to support employees who have been victims of workplace aggression and violence. Organizations could also hire and advertise employee assistance programs so that employees may have access to individuals with the proper training to provide support for victims of workplace aggression and violence.

Study 3: Limitations

The main limitations revolved around the methodological design of a longitudinal study amongst a sample young adults, the psychometric properties of the COPE-brief scale, and the low frequency rates that were reported for workplace violence. With respects to the research design, it was challenging to recruit a large sample of young adults to complete a survey at 6 different time points over the course of 3 weeks. In addition to snowballing techniques and in-class announcements, 2 separate emails were distributed to a student population of 2 100 students. Local businesses were approached, but given that the location of the study took place in a primary French speaking environment it made them less likely to participate and sadly at the time there was no French translation of the COPE-brief that had been validated. Unfortunately out of all these recruitment efforts, only 60 individuals choose to participate in the study. Based on

informal discussions with people who did not want to participate in the study, the general response was that they did not feel that they had enough time over the course of 3 weeks to fill out a survey on 6 different occasions. It is also possible that participants felt that the incentives (i.e. 3 raffle draws) were not sufficient to entice their interest. In addition, upon reading the email invitation to the study, many potential candidates may have opted not to participate in the study given that they did not meet the criteria of the study. For example, it is possible that many students were unemployed during the time of the study (e.g. it might have been challenging for unilingual Anglophone students to find a job during their academic semester in a predominately French environment) or participants may have had jobs that did not require daily interactions with customers and co-workers. Although it could be considered a low response rate to some, it does not necessarily mean that the results are biased. It is anticipated that those that filled out the survey did so accordingly and their responses accurately represent the way they felt.

Attrition is a common issue with longitudinal data. As noted by Loeber and Farrington (1994), selective attrition (i.e., refusal of individuals to participate in the study for various reasons) tends to increase as the duration of the longitudinal study increases. High attrition rates can have detrimental effects on the sample size available for longitudinal analysis. For the current study, analyses were conducted on data from week 1 (N = 32), week 2 (N = 31) and week 3 (N = 28). Ideally a larger sample would have been preferred to mitigate attrition issues across longitudinal studies.

The psychometric properties of the COPE-brief scale (Carver, 1997) were not ideal, to say the least. The COPE-brief scale was selected given that its items resembled

responses taken from study 2 and that it was a short (i.e., 28-items) in comparison to thus not being very time consuming for participants to complete. The 14 factors presented in the scale were expected to provide greater insight into how participants cope or deal with issues of workplace aggression and violence, in comparison to just examining the broad taxonomies of problem and emotion-focused coping. Cronbach's alphas were calculated for each of the 14 facets; unfortunately some were below the recommended level of .70 (Tabachnick & Fidell, 2007). More specifically, low Cronbach's alphas were reported for the following factors: active $\alpha = .60$, planning $\alpha = .57$, acceptance $\alpha = .26$, self-distracting $\alpha = .17$, venting $\alpha = .68$, behavioural-disagreement $\alpha = .58$. Some of these reliabilities were too low to run analysis; a factor analysis could not be conducted given the small sample (i.e., 60 participants at the pre-post measure). Tabachnick & Fidell (2007) recommend a minimum of 300 cases to conduct a factor analysis. Instead of omitting certain factors from the survey, the factors were combined to measure problem-focused (i.e., active, planning, and instrumental support) and emotion-focused strategies (i.e., positive refraining, acceptance, humour, religion, emotional support, self-distracting, denial, venting, substance, behavioural disagreement, and self-blame). Previously, Macdonald (2011) has used the COPE-brief to examine problem and emotion-focused coping strategies. A larger sample size would have been ideal as it may have increased the reliabilities for the original COPE-brief factors and also it would have permitted the verification of its factor structure via a factor analysis.

Neither problem or emotion-focused coping moderated the effects of workplace violence on an individual's well-being. Although this may be true, it should be

emphasized that only 7 incidents of workplace violence were reported within this study in comparison to 35 incidents of workplace aggression. These results replicate past findings that found that workplace aggression was a more common occurrence than workplace violence (Schat et al., 2006). In reality, workplace violence has been shown to occur less frequently than workplace aggression; however, 7 incidents may not be sufficient to demonstrate whether or not problem or emotion-focused coping are truly effective in helping participants cope with their experiences. Consequently, results of coping strategies on workplace violence from the current study should not be generalized to other situations or contexts. Additional research with higher frequencies of workplace violence would be required to fully examine how victims of workplace violence cope with their experiences.

Study 3: Conclusion

The third study examined how young victims of workplace aggression and violence cope after experiencing incidents of workplace aggression and violence over an extended period of time. Results from the current study found that problem-focused coping (i.e., active coping, planning, and instrumental coping) moderated the effects of workplace aggression on an individual's well-being (i.e. decrease in levels of anxiety and negative affectivity). These findings replicate findings from previous studies demonstrating the positive outcomes of problem-focused coping (Cohen, 1987; Folkman and Lazarus, 1980). For organizations where employees have control over their working environment, it may be beneficial for them to provide their employees with training to increase their problem-focused coping strategies.

Emotion-focused coping strategies had the opposite effect of problem-focused strategies. Results indicated that victims of workplace-aggression who used high levels of emotion-focused coping were more likely to experience lower levels of general health (i.e., higher levels of anxiety) in comparison to those who used lower levels of emotion-focused coping. Again, this finding replicates previous studies which found that emotion-focused coping can have a negative impact on an individual's well-being (Collins et al., 1983; Solomon et al., 1988; Strentz & Auberback, 1988). These results demonstrate that emotion-coping may be necessary to help the individual get through the situation; however, fundamentally it does not change the situation or the context for the individual hence the high levels of anxiety. For these types of working environments, it may be important to create a culture where victims of workplace aggression can feel comfortable speaking about their issues or they could also train managers in providing effective support for victims of workplace aggression. Another possibility would be for organizations with high levels of workplace aggression to provide Employee Assistance Programs to their employees to help them cope.

Unfortunately results for the current study indicated that neither problem-focused coping nor emotion-focused coping moderated the effects of workplace violence on an individual's levels of well-being. It is possible that there were just too few incidents of workplace violence to properly demonstrate any significant statistic. Future research could examine specific cultures with high levels of workplace violence to examine coping within higher frequencies of violence.

In conclusion, this study demonstrates the benefits of problem-focused coping strategies; however, the reality of the situation is that not all victims of workplace aggression will have the ability to use problem-focused strategies. The type of strategy that an individual and its effectiveness will pick will depend on numerous factors including: the type of person, the type of stress, the stage of the stressful encounter, the potential outcomes, and the general well-being of the victim (Lazarus, 1999). In addition, Folkman and Lazarus (1980) found that during any single stressful encounter, people would be more likely to use all coping strategies that they had available to them. Although problem-focused coping strategies have been related to positive outcomes, it is important to investigate the impact of emotion-focused strategies on an individual's general well-being given that some people may have no other alternative but to rely on them. As Lazarus (1999) noted, problem and emotion-focus coping strategies are rarely separated. Both are essential in the coping process and ideally they both facilitate one another.

General Discussion

The objective of all three studies was to examine how young adults experience and recover from workplace aggression and violence. Results from all three studies provided some valuable insight in regards to how young adults cope with incidents of workplace violence. A brief summary of the results of all three studies will be provided followed by a section that will examine how the results from all three studies affect what we know about workplace aggression and violence and coping.

Overall Results Summary

Study 1 examined frequency rates and the source of workplace aggression and violence. Unlike previous studies which focused on working environments consisting mostly of an adult sample, study 1 focused uniquely on a working environment with young adults ($M = 18.93$; $SD = 3.35$). Similar to research with older adults, young adults experienced higher levels of workplace aggression in comparison to workplace violence. Young adults were also more likely to experience workplace aggression from an outsider (Schat et al., 2006). However, in this study, unlike previous findings (Schat et al. 2006; Teed et al., 2008), participants were more likely to experience workplace violence from an insider. These findings could be attributed to the fact that participants were so young ($M=18.93$, $SD = 3.35$) and in certain circumstances young adults were managing other young adults. Aggression was also found to significantly predict participants' general well-being.

Study 2 examined severity levels of workplace aggression and violence and the type of activities that victims did, at work and at home, to help them recover from these incidents. Participants rated workplace violence more severely than workplace aggression. After experiencing workplace aggression and violence, the majority of the participants reported talking to other people. Unfortunately, none of the activities done at work following the incidents helped young adults recover from their experiences; however, some significant findings were reported for after work activities. Surprisingly participants reported that “nothing helped” and “accepting the incident” significantly

predicted their recovery. As noted in the discussion in study 2, it may be more appropriate to state that participants did not think that anything helped them.

Study 3 examined how young adults recover from experiences of workplace aggression and violence on a longitudinal basis (i.e., 6 different time points). Results indicated that problem-focused coping strategies (i.e., active coping, planning, and instrumental support) moderated the effects of workplace aggression on participants' general health (i.e., decrease levels of anxiety and negative affectivity). Emotion-focused coping strategies (i.e., positive refraining, acceptance, humour, religion, emotional support, self-distracting, denial, venting, substance, behavioural disagreement, and self-blame) were found to have negatively moderated the effects of workplace aggression on an individual's general well-being (i.e., increasing levels of anxiety). Unfortunately neither problem nor emotion-focused coping strategies were found to moderate the effects of workplace violence on an individual's well-being.

Impact on Existing Research

The following three studies add some vital information to the existing body of literature on young workers. More specifically how young workers experience aggression and violence and how do they cope with their experiences. As noted in study 1, sources of workplace aggression and violence were not found to be consistent with previous research (Teed et al., 2008). More specifically, participants were more likely to experience workplace violence from an insider (i.e., co-workers and supervisors) in comparison to an outsider. This supports the notion that workplace environments composed mainly of young adults are not the same as those composed of older employees. These findings

support the notion that young adults are inexperienced in dealing with stressful work situations (McCabe et al., 2008), the incivility spiral (Anderson & Pearson, 1999), spillover (Tepper, Henle, Lambert, Giacalone, & Duffy 2008) and may react differently to stressful situations, in comparison to adults. For example, an adult worker may get frustrated with a co-worker but will not physically lash out at this worker, but a young adult who has a friend as a classmate and a co-worker may not have sufficient work or life experience to manage these emotions and consequently acts them out.

These findings also have practical implications for organizations. Many organizations anticipate that violence will occur from external sources. As previously noted, violence (i.e., homicides via robberies) is often the cause of workplace fatalities (National Institute of Occupational Safety and Health ,2003), consequently organizations develop strategies to manage workplace violence from external sources. For example, WorkSafeBC has developed a guide with techniques for retail owners, managers and workers to prevent violence (WorkSafeBC, 2012). The majority of this guide pertains to physical controls (i.e., store design and security devices) and procedural controls (i.e., training and safe work procedures) that are focused on customers; the guide fails to recognize and provide strategies for managing violence from within the organization (i.e., co-workers). Organizations can benefit from recognizing that industries that employ high frequency rates of young adults (e.g., retail and services) may benefit from developing material on preventing and managing the outcomes of workplace violence between employees.

As noted in study 2, although workplace aggression happened more frequently than workplace violence, participants rated incidents of workplace violence more severely than aggression. This result implies that victims of workplace violence may in fact have a lot of difficulties dealing with the aftermath of their experiences. This finding may pertain to the following 3 points. First, young adults have little experience in dealing with these stressful encounters (McCabe et al., 2008). Second, as noted in study 1, if young adults work in environments consisting mainly of other young workers, they may be more prone to experience workplace violence from other co-workers as opposed to outsiders. Third, many organizations have tailored their workplace violence programs towards dealing with violence from external sources (e.g., WorkSafeBC, 2012). Based on these 3 points, research could benefit from examining how long it takes for young workers to recover from incidents of workplace violence. In addition, research may wish to evaluate the effectiveness of current programs designed to help young adults recover from these experiences. From a practical perspective, organizations in the service and retail industry may want to be sensitive to young adults who are victims of workplace violence by understanding that they may deal with these situations differently than adults. Providing young victims with proper counselling and offering them the opportunity to speak to someone who is trained in dealing with workplace violence, may provide them with the support they require to overcome their difficulties.

As noted in study 2, the majority of victims of workplace aggression and violence sought someone to talk to immediately following the incident at work or after their working hours. Victims were trying to cope with their experiences. This finding is

important as few studies (if any) have examined how young workers deal with these incidents. Perhaps the more important and alarming aspect of these findings is that the vast majority of victims of workplace violence and aggression who spoke to someone at work stated that “nothing helped” (or as previously noted “thought that nothing helped”). These findings could be explained by the fact that the young adults’ working environments were ill prepared to deal with this information. For example, managers were not properly trained on how to deal or support victims of workplace aggression and violence. Although not directly examined in this study, another potential explanation could be that the victims’ working environment had low levels of organizational support. Organizational support has been found to moderate the effects of physical violence and psychological aggression on an individual’s well-being (Schat & Kelloway, 2003). Regardless of the potential explanations, research could benefit from using qualitative methods (i.e., interviews) to examine why talking to someone was perceived as not helping. From a practical perspective, organizations should recognize that young workers who experience workplace violence will most likely talk to someone; therefore, organizations should try to direct these victims to the appropriate trained staff immediately following the incident, be it an HR professional or a manager, and provide them with the contact information of their employee assistant programs, should they have one. Secondly, results showed that “accepting” that they (participants) were victims of workplace aggression and violence helped them recover from their experiences. Organizations could possibly help their employees recover from workplace aggression and violence by providing them with a realistic job preview (e.g. customers may verbally

insult you on this job or at times this jobs can become stressful and at times your co-workers may become agitated) prior to starting their employment.

In Study 3, problem-focused coping strategies were found to be effective in mediating the effects of workplace aggression on an individual's general well-being; whereas emotion-focused strategies were found to have the opposing effect (i.e., increasing levels of anxiety). With respects to practical implications, research has found that employees can be successfully trained on problem-focused coping strategies (Weiten et al., 2011). Problem-focused training could be as simple as providing employees with different techniques for dealing with aggressive customers or even providing a step by step procedure in dealing with aggressive co-workers. For example, young workers could have been trained to walk away from an insulting customer or to seek a manager should one of their co-workers become aggressive. Thus, young employees would not only understand that this was a viable solution to their problem, but that the organization would actually support this type of behaviour. Organizations could thus benefit from providing this type of training to young adults who are employed within the service and retail sector.

Results also found that when participants used the two coping strategies simultaneously (i.e., high levels of emotion-focused coping and high levels of problem-focused) they reported lower levels of anxiety and negative affectivity. These results support Lazarus's (1999) findings in that people will most likely use whatever is at their disposal to help them cope with their problems. These findings may represent what young workers face on a day to day basis in their working environment. Some young workers

may have many problem-focused strategies that are their disposal. For example, a supportive supervisor may provide victims of workplace aggression with a step by step guide of what to do next time they are put in a similar situation; whereas, other employees may have a supervisor who is more laissez-faire and they consequently must resort to using emotion-focused coping strategies to help them deal with their problems. Future research should focus on examining how interactions between problem and emotion focused strategies may help young victims of workplace aggression to cope with their experiences.

Perhaps the most alarming result from Study 3 was that neither problem or emotion focused coping moderated the effects of workplace violence on victims' general health, nor did an interaction between both coping strategies. It is possible that victims of workplace violence felt that they had little control over their incident, which is an important facet to problem-focused coping (Folkman and Lazarus; 1985). For example, if a customer verbally threatened to kill them, they may feel as if they have very little options to deal with the situation at hand. Thus, problem-focused coping may not be a valuable alternative for these types of situations where victims have little control. Interestingly, Schat and Kelloway (2000) noted that perceived control was directly associated with emotional well-being. In addition, they found that training targets of workplace violence could effectively enhance employees' perception of control. Research could examine if participants were properly trained in being targets of workplace violence; if so, they may be more prone to use problem-focused coping strategies.

Emotion-focused strategies were also not found to moderate the effects of workplace violence on levels of negative affectivity and aggression. Although not examined directly in this study, it is possible that victims of workplace violence reached out for emotional support, but no matter what other people said, it did not help them cope with their situation. Similar to study 2, it is also possible that victims of workplace violence accepted that violence was a form of their job and consequently did not have to resort to emotional or problem-focused coping strategies

Although problem and emotion-focused coping strategies did not significantly help participants recover from their experiences of workplace violence, nor did an interaction between both coping-strategies being used simultaneously, future research could benefit from examining if specific coping strategies in lieu of a broad taxonomy of emotion-focused coping (i.e., 11 facets), which was used in study 3, would be effective. For example, acceptance was found to be successful in helping victims recover from their experiences of workplace aggression and violence in study 2. In certain situations, young adults may have little control over their situations (e.g., being a bouncer at a bar); the notion of just accepting their situations may actually help them cope. As noted earlier, organizational support could also be an important aspect to examine if victims feel that they have little control over their situation. Also, examining how facets of emotion-focused coping and problem-focused coping interact with one another to moderate the effects of workplace violence.

Given the amount of young adults who are employed in the service and retail sector (Zacoks et al., 1998) and that this industry is reputed of having high rates of

workplace aggression (Chappell & Di Martino, 2000), future research and retail and service sectors could benefit from having a scale designed specifically to measure how young workers cope with workplace aggression and violence. From an individual perspective, properly understanding how young workers successfully cope with aggression and violence could decrease their levels of strain (i.e., anxiety). From an organizational perspective, properly identifying young employees who are having difficulties with coping could help them get the appropriate support that they need, which in turn could possibly improve their level of service to customers and prevent them from quitting their jobs. In order to develop such a scale, future research would have to conduct extensive interviews with young victims of workplace aggression and violence within the service and retail sector industry over an extended period of time.

On a final note, future research could benefit from modifying the broad definition of workplace aggression. Workplace aggression was defined as “behaviour 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 content” (Schat & Kelloway, 2005, p. 191). The notion of “intended to physically or psychologically harm” may be somewhat inaccurate in the sense that it does not necessarily matter whether or not the perpetrator intended to harm the victim, what matters is how the victim perceived the perpetrators actions. For example, an individual who becomes very impassioned in a discussion may raise his voice with absolutely no intent of psychologically harming the other individual; however, the person on the receiving end of this conversation may perceive the “raised voice” as an aggressive behaviour that is

intended to harm. Should this behaviour persist over time, based on the incivility spiral, the victim who perceives the behaviours as aggressive could lash out at the perpetrator, the perpetrator in return could be somewhat puzzled as to why his co-worker has been aggressive and rude towards him when he did nothing to warrant this type of behaviour. In other words, the original aggressor (unbeknownst to him) now has become a victim. Future research on workplace aggression and violence could benefit from modifying “is intended to physically or psychologically harm a worker” to “is perceived to physically or psychologically harm a worker”. This definition may provide a more accurate account of certain incidents of workplace aggression and violence, which by definition, may have otherwise gone unreported.

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Appendix A

Study 1 – REB Approval



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Appendix B

Study 1: Overview for Participants

Introduction To Participants

Hi everyone, my name is Michael Teed, I am currently completing my Ph.D. at Saint Mary's University in Industrial and Organizational Psychology. I am currently doing research with young adults that examines workplace aggression and violence with my colleague Dr. Jane Mullen from Mount Allison University. Your company has kindly agreed to allow me to recruit participants at your theatre.

I am basically asking participants to complete a survey that should take roughly 30 minutes to complete. The survey consist of questions pertaining to your experiences with workplace aggression and violence over the last year, your safety at work, your managers leadership style, your general well-being, and general demographic information. You are not required to sign your name on the survey, your individual results will be anonymous. All results will be presented to your managers in the form of means in the hopes of developing policies to improve your working environment.

You are not obliged to participate in this study, so those of you that are not interested in participating in the study are free to do so without any form of repercussion. Also, if you do choose to participate and at any point feel uncomfortable answering any questions on the survey, you may choose not to answer them or you are also free to leave the study at any point in time without any form of repercussion. Those of you who are interested in participating in the study, please raise your hand and I will hand you a copy of the informed consent which will provide you with information on the study. Please sign the informed consent and return to me, at which point I will provide you with a copy of the informed consent for your records and a copy of the survey. You are to complete the survey in this room. I ask that you do so quietly without interacting with any of your co-workers. Once you have completed the survey, please return it to the drop off box in the front of the room. Once you return the survey, I will provide you with a feedback sheet explaining the study and providing you with contact information should you require additional information.

Appendix C

Study 1 – Measures

Physical Violence at Work (Schat & Kelloway, 2000)

Please Note: The following items need to be formatted to assess three sources of violence (customers, co-workers, supervisors)

The following items describe violent or aggressive events which may occur from many sources at work (e.g. customers, other employees, supervisors). For each item please indicate how often you have experienced the violent events at work during THE PAST YEAR.

Please respond to each item by circling the appropriate number.

1 = Never 2 = Infrequently (1 or 2 times) 3 = Sometimes (3 or 4 times) 4 = Somewhat Frequently (5 to 7 times) 5 = Often (8 to 10 times) 6 = Very often (10 to 15 times) 7 = Extremely often (More than 15 times)

IN THE PAST YEAR...

1. Have you been hit, kicked, grabbed, shoved or pushed by a (insert customer, co-worker, supervisor) while you've been at work?
2. Have you been spat on or bitten by (insert customer, co-worker, supervisor) while you've been at work?
3. Have you had an object thrown at you (insert customer, co-worker, supervisor) while you've been at work?
4. Have you been threatened by (insert customer, co-worker, supervisor) with any of the above examples of physical violence while you've been at work?
5. Have you been threatened by a (insert customer, co-worker, supervisor) with a weapon while you've been at work?

Psychological Aggression at Work (Schat & Kelloway, 2000)

Please Note: The following items need to be formatted to assess three sources of aggression (customers, co-workers, supervisors)

The following items describe aggressive events which may occur from many sources at work (e.g. customers, other employees, supervisors). For each item please indicate how often you have experienced the violent events at work during THE PAST YEAR.

Please respond to each item by circling the appropriate number.

1 = Never 2 = Infrequently (1 or 2 times) 3 = Sometimes (3 or 4 times) 4 = Somewhat Frequently (5 to 7 times) 5 = Often (8 to 10 times) 6 = Very often (10 to 15 times) 7 = Extremely often (More than 15 times)

IN THE PAST YEAR...

While at work...

1. Have you been yelled at or shouted? (insert customer, co-worker, supervisor)
2. Have you been sworn at? (insert customer, co-worker, supervisor)
3. Have you been glared at? (insert customer, co-worker, supervisor)
4. Given the silent treatment? (insert customer, co-worker, supervisor)
5. Target of false accusation? (insert customer, co-worker, supervisor)
6. Target of negative gestures? (insert customer, co-worker, supervisor)
7. Publicly embarrassed? (insert customer, co-worker, supervisor)
8. Had your sense of judgment questioned? (insert customer, co-worker, supervisor)
9. Assigned meaningless tasks? (insert customer, co-worker, supervisor)
10. Had bad things said about you to others? (insert customer, co-worker, supervisor)
11. Told you are incompetent? (insert customer, co-worker, supervisor)
12. Teased? (insert customer, co-worker, supervisor)
13. Treated with disrespect? (insert customer, co-worker, supervisor)

Psychological Health – General Health Questionnaire (Banks et al., 1980)

Banks, Clegg, Jackson, Kemp, Stafford, Wall, 1980

We would like to ask some questions about your health and well-being over the **PAST 4 MONTHS**. Please read the following statements and use the scale to circle the response that best applies to you.

Please respond to each item by circling the appropriate number.

1 = Never 2 = Infrequently (1 or 2 times) 3 = Sometimes (3 or 4 times) 4 = Somewhat Frequently (5 to 7 times) 5 = Often (8 to 10 times) 6 = Very often (10 to 15 times) 7 = Extremely often (More than 15 times)

How often during the PAST 4 MONTHS have you....

1. Been able to concentrate on what you're doing
2. Lost sleep from worry
3. Felt you were playing a useful part in things
4. Felt capable about making decisions
5. Felt that you couldn't overcome your difficulties
6. Been able to enjoy day-to-day activities
7. Been able to face your problems
8. Been feeling unhappy and/or depressed
9. Been losing confidence in yourself
10. Felt under strain
11. Been feeling happy, all things considered

Appendix D

Study 2 – REB Approval



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Appendix E

Study 2 - Measures

Study 2- Customer Aggression & Violence: Critical Incident Survey

We appreciate you taking 30-45 minutes to complete this survey. Your responses will help us to understand your experiences dealing with customer aggression and violence and how these experiences affect you and the organization you work for. Your responses are entirely confidential so please respond as honestly as possible.

BACKGROUND INFORMATION

In order to link your responses from this scale with your customer aggression incident report, please use a codeword consisting of the first 4 letters of your mother's maiden name & the day of your birth.

e.g.,

<u>First 2 letters</u> your first name		<u>Day</u> of Birth		<u>First 2 letters</u> of your mother's name	
J	O	1	6	D	I

Your codeword:

<u>First 2 letters</u> your first name		<u>Day</u> of Birth		<u>First 2 letters</u> of your mother's name	

Gender: Male Female

Age: _____

Ethnicity (e.g., Black, White, Asian):

WORK INFORMATION

1. What type of organization do you work for (e.g., grocery store, clothing store, casino, call-centre)?

2. What is your current position (e.g., server, sales associate)?

3. My work status is (*circle one*): Full-time Part-time
4. What is your hourly wage?

5. On average, how many hours a *week* do you spend working in your customer service job? _____
6. What percentage of time would you say that you spend interacting with customers (0-100%)? _____
7. You primarily deal with customers (*circle one*):

Face-to-face Phone Computer (e.g., email) Other (please specify): _____

CRITICAL INCIDENT REPORT (5 SEPARATE PAGES)

Your codeword:

<u>First 2 letters</u> your first name		<u>Day of Birth</u>		<u>First 2 letters</u> of your mother's name	

1. What circumstances or events led up to the incident of workplace aggression or violence? Who was involved in the circumstances?
2. Describe the incident of workplace aggression or violence. Describe the behaviours of both parties.
3. On a scale from 1 (not at all severe) to 7 (very severe) how severe would you rate this incident? _____
4. What was the outcome of the incident of workplace aggression or violence? Describe your behaviours, mental, and physical states?
5. What did you do immediately following the incident?
6. After experiencing this incident, what did you do when you got home?
7. Did any of these activities, either at work or at home, help you deal with the incident or make you feel better. Please identify the activities and explain.
8. On a scale from 1(not at all effective) to 7 (very effective), how much did this activity make you feel better? _____

Appendix F

Study 2 – Preliminary Coding Index

CODE SCHEME FOR STUDY 1
Critical Incident Number: _____

A) WHAT TYPE OF INCIDENT WAS IT?

- **Aggression:** “behaviour 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 content”. Examples include, insulting, ignoring, being uncivil, rude, condescending, non-verbal expressions, raising voice, etc.”
- **Violence:** a physical act intended to inflict physical harm on the worker or workers and occurs in a work related content”. Examples include hitting, punching, pushing, shoving, or any type of physical threat. A THREAT of violence is an act of violence even if not acted on
- Other** – Please explain. _____

B) SOURCE OR PERPETRATOR OF THE INCIDENT) WHO WAS THE PERPETRATOR (WHO STARTED THE INCIDENT)?

- Within the Organization**
 - Supervisor/boss: Someone who is in a supervising or in a higher position than the employee
 - Co-worker: Someone at the same level as the employee
 - Subordinate: Someone who the employee is supervising
- Outside the Organization**
 - Client (_____)

C) WHAT LEAD UP TO THE INCIDENT

- Unsatisfied with service
- Denied a service
- Alcohol intake
- Incivility
- Working alone

D) OUTCOME OF THE INCIDENT

Psychological:

- Depression
- Moody
- Stress
- Anxiety

Physical:

- Gastronomical problems
- Sleeping problems

- Headaches
- **Behavioural:**
 - Decrease in performance
 - Counterproductive work behaviour
 - Absenteeism

E) ACTIONS IMMEDIATELY FOLLOWING THE INCIDENT

- Talked to their supervisor
- Talked to their co-worker
- Contacted their HR representative about the incident
- Talked to friend or family member about the incident
- Talked to no one about the incident
- Other: _____

F) TYPE OF OFF THE JOB ACTIVITIES

- Job related or other work related activities
- Household and childcare activities
- Leisure activities
 - Low effort activities
 - Social activities
 - Physical activities
- Other
 - _____

G) WHICH ACTIVITY WAS MOST HELPFUL**ACTIONS IMMEDIATELY FOLLOWING THE INCIDENT**

- Talked to their supervisor
- Talked to their co-worker
- Contacted their HR representative about the incident
- Talked to friend or family member about the incident
- Talked to no one about the incident
- Other: _____

TYPE OF OFF THE JOB ACTIVITIES

- Job related or other work related activities
- Household and childcare activities
- Leisure activities
 - Low effort activities
 - Social activities
 - Physical activities
- Other
 - Binge drinking

Appendix G

Study 2 – Revised Coding Index

CODE SCHEME FOR STUDY 1
Critical Incident Number: _____

A) WHO WAS THE PERPETRATOR (WHO STARTED THE INCIDENT)?

- Insider (an employee of the company)**
 - Supervisor/boss: Someone who is in a supervising or in a higher position than the employee
 - Co-worker: Someone at the same level as the employee
 - Subordinate: Someone who the employee is supervising
- Outsider (client, robber)**
 - Client (_____)
- Other** (please describe _____)

B) WHAT CAUSED OR LED UP TO THE INCIDENT?

1 – IF BETWEEN CUSTOMER AND EMPLOYEE

- Unsatisfied with Service:** Customer was unsatisfied with service
 - Reasonable complaint (customer in the right)
 - Unreasonable complaint (customer in the wrong)
 - Complaining about price increase
- Denied of Service**
 - Did not get what they requested
 - Thought they were entitled to something
- Customer was intoxicated**
 - Customer had to be vacated
- Sexual Harassment**
 - Customer said inappropriate comments
- Working Alone**
 - Employee was working alone
- Incivility**
 - Customer was being rude
- Other**
 - _____

2 – IF BETWEEN WORKERS AND CO-WORKERS

- Relationship Conflict amongst Co-workers**
 - Difficult to work with, poor personality
- Co-worker or subordinate did not follow proper procedures**
 - Quit without proper notice
 - Did not listen to directives (i.e. employee did not do work)
- Co-workers were not happy with a product developed by another co-worker**
 - Product was unsatisfactory in their eyes
- Working in high stress environment**
 - Overly busy...things not going as fast as normal
 - High job demands
- Not properly communication what needs to be done**
 - Mistake made due to poor communication
- Sexual Harassment**
 - Stalking
 - Promises of promotion
 - Would pay money for sex
 - Verbal
 - Physical
- Internal Politics**
 - Set-ups
- Incivility**
 - Being rude
- Other**
 - _____

C) HOW DID THE PERPETRATOR REACT DURING THE INCIDENT?

- Incivility:** Please identify the type of incivility from the list below:
 - **Non-Verbal:** Red in face, Sighs, Dirty Looks/looked angry, Snickered, Physically looked violent,
 - **Verbal:** Swore, Raised voice/yelling, Insulted/personal attacks, Laughed, Directly told employees they had bad performance, told other customers about bad performance, Accusations, Intimidation, Discrimination, Sexual Harassment (verbal or physical), Use of profanities, Ranting, Complaining in front of others, Sent nasty emails, Ignored me, responded with hostile emails, Refused to participate, uncooperative
 - **Context:** Unreasonable, Rude, Hostile, Demonstrated persistence
- Violence:** Please identify the type of violence from the list below
 - Threats (i.e. going to come back to cause harm/kill you)

- Threw something
 - Slammed door on someone
 - Use of a weapon
 - Other:
-

D) HOW DID THE VICTIM RESPOND TO THE PERPETRATOR DURING THE INCIDENT?

- Did nothing:**
 - Kept interacting politely with perpetrator
 - Just listened to perpetrator complain
 - Kept working
 - Suppressed emotions (was angry but didn't do anything)
 - Almost succumbed to tears
 - Just did what he was told
 - Calm and composes
 - Did something overtly**
 - Smiled (knew that it would upset them)
 - Walked away
 - Defended themselves
 - Did something directly**
 - Yelled at perpetrator
 - Tried to rectify the situation
 - Refused to work and walked out
 - Joked with customer in a way that made things worse
 - Forcefully told the person to leave
 - Immediately got manager**
 - Escalated:** reacted in a way that made the situation worse
 - Incivility:** Swore, Raised voice, Insulting, Being rude, Refused service, Other: _____
 - Violence:** Threatened; Threw objects; Punched; Kicked; Pushed; Other: _____
 - Other:** _____
-

E) WHAT TYPE OF INCIDENT WAS IT?

- Aggression:** "behaviour 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 content". Examples include, insulting, ignoring, being uncivil, rude, condescending, non-verbal expressions, raising voice, etc."
- Violence:** a physical act intended to inflict physical harm on the worker or workers and occurs in a work related content". Examples include hitting,

punching, pushing, shoving, or any type of physical threat. A THREAT of violence is an act of violence even if not acted on

- Other** – Please explain. _____

F) HOW DID THE VICTIM REACT IMMEDIATELY FOLLOWING THE INCIDENT?

- Psychological:**
- Stress
 - Frustration/Anger
 - Rumination
 - Upset/Saddened
 - Rationalized (i.e. not my fault)
 - Salary not worth dealing with difficult people
 - Embarrassed
 - Thought of quitting
 - Hostile
 - Defensive
 - Felt pressure from others
 - Shocked
 - Fearful it may happen to me
 - Felt like crying
 - Shaken
 - Isolated
 - Disgusted
 - Distracted unable to concentrate
 - Violated
- Physical:**
- Increased heart rate
 - Perspiration
 - Shaking
 - Red in the face
- Behavioural:**
- Talked to someone about incident
 - Internal: coworker, supervisor, HR, security
 - Supervisor handled the situation
 - Supervisor coached me how to handle difficult customers
 - External: partner, family member, police
 - Took a break
 - Filed a formal complaint
 - Boss fired employee
 - Did something physical
 - Broke down boxes
 - Apologized to other customers who witnessed the incident

- Tried his/her best to accommodate perpetrator
- Physically avoided perpetrator
- Refused to work with that person again
- Quit my job
- Kept working
- Did not bother the victim at all**
- Other:** _____

G) WHAT DID THE VICTIM DO AT HOME AFTER WORK?

- Talked to:
 - Family member (empathy, reassurance of right decision, venting, support)
 - Partner (empathy, reassurance of right decision, venting, support)
 - Friends (empathy, reassurance of right decision, venting, support)
 - Talked to employees the FOLLOWING DAY
- What were they talking about or why were they talking
 - Stating they hated their job
 - Laughed or made a joke about the incident
 - Sought understanding
 - Sought support for their decisions/actions
 - Decided to talk to boss/HR rep the following day at work
- Drank alcohol
 - Small quantities or drank to get drunk
- Ruminated
 - Negatively (continued to focus negatively on the event)
 - Scared to return to work
- Rationalized
 - Perpetrator was having a bad day
 - I reacted the best way I could
 - Realizing that things could be worse
- Went about evening
- Thought of looking for other work
- Playing Sports
- Praying
- Other: _____

H) WHICH ACTIVITY WAS MOST EFFECTIVE

Activities at Work

- Talking to someone:
 - At Work: co-worker, supervisor, police, HR
 - Outside: partner, family member, friend
- Taking a break
 - Giving me time to collect my thoughts
- Doing a physical activity
 - Breaking down boxes

- Other
 - _____

Activities at Home

- Talking to someone
- Watching a movie/TV
- Doing sports
- Doing chores
- Doing nothing
- Doing school work
- Drinking
- Sex
- Other
 - _____

Appendix H

Study 2 – Detailed List of Cohen’s Kappa Values

Appendix : Intercoder Reliability

Variable	Cohen's Kappa
Who was the Perpetrator – Inside the Company	
Co-worker	1.00
Subordinate	1.00
Supervisor	1.00
Who was the Perpetrator – Outside the Company	
Client	1.00
Client - small child at daycare	1.00
Friend – perpetrator knew someone at work	1.00
Robber	1.00
Additional Information about the Incident	
Incident took place in different culture	.979
Victim observed the incident	1.00
What Lead up to the Incident – Outsider (client)	
Denied service	1.00
Denied service - did not get what they requested	1.00
Denied service - sense that they were entitled to a service	1.00
Inappropriate comments	1.00
Incivility	.928
Intoxication - alcohol or drugs	1.00
Invasion of privacy - call centre contacting individuals	1.00
Mistook relationship as something else	1.00
Unsatisfied with service	1.00
Unsatisfied with service - reasonable complaint	1.00
Unsatisfied with service - unreasonable complaint	1.00
Cause – Working alone	1.00
What Lead up to the Incident – Insider (co-worker/supervisor/subordinate)	
Being rude	1.00
Did not follow proper procedures	1.00
Did not follow proper procedures - quit without notice	1.00
Did not follow proper procedures - listen to directives	1.00
High job demands	1.00
Internal politics	1.00
Mistake due to poor communication	1.00
Not satisfied with work	1.00
Overly busy	1.00
Poor personality/Difficult to work with	1.00
Sexual Harassment	1.00
Sexual Harassment – offered money for sex	1.00
Sexual Harassment - physical	1.00

Sexual Harassment - promise of promotion	1.00
Sexual Harassment - stalking	1.00
Sexual Harassment - verbal comments	1.00
Perpetrator's Reaction during Incident – Non-Verbal	
Did not make eye contact	1.00
Dirty looks	1.00
Looked aggravated	1.00
Looked violent	1.00
Red in face	1.00
Sigh	1.00
Snickered	1.00
Snotty tone	1.00
Perpetrator's Reaction during Incident – Verbal	
Accusations	1.00
Aggressive	1.00
Angry	1.00
Annoyed	1.00
Argumentative	1.00
Complaining in front of others	1.00
Condescending	1.00
Directly told employee (victim) they had bad performance	1.00
Discrimination	1.00
Frustrated	1.00
Harsh	1.00
Ignored me	1.00
Impatient	1.00
Inconsiderate	1.00
Insulted	.975
Intimidation	1.00
Judging	1.00
Laughed	1.00
Nasty emails/texts/voicemails	1.00
Profanities	.970
Rantings	.975
Refused to participate	1.00
Sexual harassment	1.00
Short tempered	1.00
Swore	1.00
Threatened to report	1.00
Told someone else employee had bad performance	1.00
Uncooperative	.970
Yelled	1.00

Emergency situation	1.00
Hostile – perpetrator was hostile	.974
Hot day	1.00
Persistent – perpetrator was persistent	1.00
Rude – perpetrator was rude	.979
Unreasonable – perpetrator was unreasonable	1.00
Perpetrator's Reaction during the Incident	
Grabbed victim's arm	1.00
Knocked object	1.00
Pushed victim	1.00
Slammed door on victim	1.00
Struck victim	1.00
Threatened victim	.936
Threw something at the victim	.936
Used a weapon on the victim	1.00
Victim's Response During the Incident	
Almost cried	1.00
Defended themselves	.950
Immediately got manager	1.00
Joked in a way that made things worse	1.00
Just did what perpetrator asked	.889
Kept interacting with perpetrator	.935
Kept working	.978
Listened to perpetrator	.979
Refused to work	1.00
Remained calm and composed	1.00
Repressed emotions	.965
Smiled	1.00
Told perpetrator to leave	1.00
Tried to rectify the situation	.979
Walked away	1.00
Yelled at perpetrator	1.00
Victim's Response During the Incident - Escalation	
Insulted	1.00
Punched	1.00
Raised voice	1.00
Refused service	1.00
Rude	1.00
Swore	1.00
Threatened	1.00

Type of Incident	
Aggression	.904
Sexual Harassment	1.00
Violence	.973
Victim's Psychological Reaction to Incident	
Amused by situation	1.00
Annoyed	1.00
Became irrational	1.00
Became short tempered	1.00
Confused	1.00
Defensive	1.00
Degraded	1.00
Despair	1.00
Didn't appreciate being yelled at	1.00
Disgusted by perpetrator's behaviour	1.00
Distracted – unable to concentrate	1.00
Embarrassed	1.00
Fearful it may happen to me	1.00
Felt incompetent	1.00
Felt like crying	.947
Flustered	1.00
Frustration	1.00
Guilty	1.00
Hostile	1.00
Intent to quit	1.00
Intimidated	1.00
Isolated myself	1.00
Mentally preparing for another conflict	1.00
Nervous	1.00
No longer wanted to work alone	1.00
Offended	1.00
Picked on	1.00
Pressure from others	1.00
Puzzled	1.00
Rationalized	1.00
Repressed anger	1.00
Rumination	1.00
Salary not worth dealing with such people/situation	1.00
Scared	1.00
Shaken	.950
Shocked	1.00
Stress	1.00
Tired of dealing with rude people	1.00

Upset	1.00
Unappreciated	1.00
Uncomfortable	1.00
Unnerved	1.00
Violated	1.00
Worried	1.00
Victim's Physical Reaction to the Incident	
Adrenaline	1.00
Body preparing for a fight	1.00
Increased heart rate	1.00
Perspiration	1.00
Red in the face	1.00
Shaking	1.00
Tense	1.00
Tired	1.00
Victim's Behaviour Following the Incident (at work)	
Apologized to other customers who witnessed the incident	1.00
Avoided perpetrator	1.00
Cried	1.00
Did something physical	1.00
Didn't bother victim	1.00
Filed a formal complaint	1.00
Kept working	1.00
Quit my job	1.00
Refused to work with that person again	1.00
Talked to co-worker	1.00
Talked to family member	1.00
Talked to friend	1.00
Talked to HR	1.00
Talked to partner	1.00
Talked to police	1.00
Talked to security	1.00
Talked to supervisor	1.00
Took a break	1.00
Tried to accommodate perpetrator	1.00
Victim's Behaviour Following the Incident (at home)	
Ate supper	.918
Cooked	1.00
Cried	1.00
Desensitised to customers	1.00
Didn't let the incident bother me	1.00
Drank alcohol – small quantities	1.00
Drank alcohol – large quantities	1.00

Looked for other options	1.00
Playing Sports	1.00
Played video games	1.00
Prayed	1.00
Rationalized	1.00
Rationalized – don't get paid enough for job	1.00
Rationalized – perpetrator having a bad day	1.00
Rationalized – realized that things could be worse	1.00
Reflected - days events	1.00
Reflected – proud of actions	1.00
Relaxed	1.00
Rumination	.951
Rumination – focused negatively on events	.878
Rumination – scared to return to work	1.00
Shower or took bath	1.00
Slept	1.00
Talked to family member	1.00
Talked to friends	1.00
Talked to manager	1.00
Talked to partner	1.00
Talking about – decided to talk to boss the following day	1.00
Talking about – hating job	1.00
Talking about – laughed/joked about incident	1.00
Talking about – support for decision	.882
Talking about – understanding	1.00
Talking about – venting	.925
Talking about – seeking empathy	.954
Talking about – seeking reassurance	1.00
Thought of looking for other work	1.00
Took Prescribed medication	1.00
Watched television	1.00
Went on about evening	1.00
Went online	1.00
Went out with friends	1.00
Wrote a letter of complaint	1.00
Victim's Most Helpful Activity at Work	
Doing physical activities	1.00
Talked to co-worker	1.00
Talking to family member (from work)	1.00
Talking to friend (from work)	1.00
Talking to HR	1.00
Talking to partner (from work)	1.00
Talking to police	1.00

Talked to supervisor	1.00
Taking a break	.942
Victim's Most Helpful Activity at Home	
Cooking	1.00
Doing Chores	No one
Doing nothing	1.00
Doing school work	No one
Drinking	1.00
Drinking alcohol	1.00
Eating	1.00
Going out with friends	1.00
Joking	1.00
Nothing helped	.918
Playing sports	1.00
Rationalized	.852
Sex	No one
Shower or bath	1.00
Sleep	1.00
Talking to someone	1.00
Video games	1.00
Watching a movie	1.00

Appendix I

Study 3 – REB Approval



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Appendix J

Study 3 – Measures

Study 3- Daily Diary Survey

We appreciate you taking 10 minutes to complete this survey after every working day, before you go to bed in the evening, for 10 working days. Your responses will help us to understand your experiences dealing with customers and how these experiences affect you and the organization you work for. Your responses are entirely confidential so please respond as honestly as possible.

IDENTIFICATION CODE

In order to link your responses from this scale with your pre scale, please use a codeword consisting of the first 2 letters of your first name, the day of your birth, and the first 2 letters of your mothers' name.

e.g.,

<u>First 2 letters</u> your first name		<u>Day of Birth</u>		<u>First 2 letters</u> of your mother's name	
J	O	1	6	D	I

Your codeword:

<u>First 2 letters</u> your first name		<u>Day of Birth</u>		<u>First 2 letters</u> of your mother's name	

DEMOGRAPHIC INFORMATION (ASKED AT TIME 1 AND TIME 6)

- Gender: Male Female Age: _____
- Ethnicity (e.g., Black, White, Asian):

- Relationship Status: Single Attached Married Divorced
- Do you have children? Yes No If yes, how many _____
- Living Arrangements: Live alone Live with others (how many? _____)
- Are you currently a student? Yes No
- If you answered yes, please answer the following two questions:
- How many courses are you taking? _____

9. How many hours do you invest in studying on a weekly basis? _____
10. What type of organization do you work for (e.g., grocery store, clothing store, casino, call-centre, bartender, waitress)?

11. What is your current position (e.g., server, sales associate)?

12. My work status is (*check one*): Full-time Part-time
13. What is your hourly wage?

14. On average, how many hours a *week* do you spend working in your customer service job? _____
15. What percentage of time would you say that you spend interacting with customers (0-100%)? _____
16. What percentage of time would you say that you spend interacting with other employees (0-100%)? _____

DAILY WORKING INFORMATION:

1. Did you work today? Yes No
2. If you did work, please answer the following questions
- a) How long was your shift today? _____
- b) What time during the day was your shift? Morning Afternoon Evening
- c) Were you working alone? Yes No

INCIDENTS OF WORKPLACE VIOLENCE

The following questions pertain to incidents of workplace violence. *Workplace violence is a specific type of physical action aimed at inflicting physical harm. Examples of these behaviours include pushing, punching, kicking, throwing objects or personal threats.* Based on this definition and example, please answer the following questions:

1. Did you experience an incident of workplace violence today? Yes No

If you answered no, please move on to the following section (Incidents of Workplace Aggression), if you answered yes, please answer the following questions:

2. How many incidents did you experience today? _____

3. Please rate the severity of the incident on a scale from 1 (not intense) to 7 (very intense). Should you happen to have experienced more than one incident of workplace violence, please rate, in your opinion, the most severe incident. _____

4. Please identify who was the perpetrator of the incident. Should you have experienced more than one incident of workplace violence, please identify the perpetrator of the most severe incident. (Please check the appropriate box)

A - Someone within the organization

Supervisor Co-worker Other
(_____)

B- Someone outside the organization

Customer Friend/Family member Other
(_____)

5. Immediately following the incident of workplace violence, how did you feel on a scale from 1 (very bad) to 7 (very good)? _____

INCIDENTS OF WORKPLACE AGGRESSION

The following questions pertain to incidents of workplace aggression. *Workplace aggression can be defined as behaviours by individuals', within or outside an organization, which are intended to physically or psychologically harm a worker. Examples of these behaviours include insults, condescending remarks, dirty looks, or even ignoring someone.*

1. Did you experience an incident of workplace aggression today? Yes No

If you answered no, please move on to the following section (After Work Activities), if you answered yes, please answer the following questions:

2. How many incidents did you experience today? _____

3. Please rate the severity of the incident on a scale from 1 (not intense) to 7 (very intense). Should you happen to have experienced more than one incident of workplace aggression, please rate, in your opinion, the most severe incident. _____

4. Please identify who was the perpetrator of the incident. Should you have experienced more than one incident of workplace aggression, please identify the perpetrator of the most severe incident. (please check the appropriate box)

A - Someone within the organization

Supervisor Co-worker Other
 (_____)

B - Someone outside the organization
 Customer Friend/Family member Other
 (_____)

5. Immediately following the incident of workplace aggression, how did you feel on a scale from 1 (very bad) to 7 (very good)? _____

WELL-BEING

1) POSITIVE AND NEGATIVE AFFECT SCHEDULE (PANAS) – MODIFIED (ONLY NEGATIVE MOODS)

Watson, D., Clark, L., & Tellegen, A. (1988). Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.

<i>Indicate to what extent you feel this way, that is, how do you feel on average</i>	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1. Distressed	1	2	3	4	5
2. Upset	1	2	3	4	5
3. Guilty	1	2	3	4	5
4. Scared	1	2	3	4	5
5. Hostile	1	2	3	4	5
6. Irritable	1	2	3	4	5
7. Ashamed	1	2	3	4	5
8. Nervous	1	2	3	4	5
9. Jittery	1	2	3	4	5
10. Afraid	1	2	3	4	5

2) ANXIETY

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *The Archives of Internal Medicine*, 166, 1092-1097.

Over the course of the evening, how often have you been bothered by the following problems.

	Very slightly or not at all	A little	Moderately	Quite a bit
1. Feeling nervous, anxious, or on edge.	1	2	3	4
2. Not being able to stop or control worrying.	1	2	3	4
3. Worrying too much about different things.	1	2	3	4
4. Trouble relaxing.	1	2	3	4
5. Being so restless that it is hard to sit still.	1	2	3	4
6. Becoming easily annoyed or irritable.	1	2	3	4
7. Feeling afraid as if something awful might happen.	1	2	3	4

COPE-BRIEF

Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioural Medicine*, 41 (1), 92-100.

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Please answering each question by using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

- 1 = I usually don't do this at all
- 2 = I usually do this a little bit
- 3 = I usually do this a medium amount
- 4 = I usually do this a lot

1. I take action to try to make the situation better. (active coping)
2. I think hard about what steps to take. (planning)
3. I look for something good in what is happening. (positive refraining)
4. I learn to live with it. (acceptance)
5. I make fun of the situation. (humour)
6. I pray or meditate. (religion)
7. I get comfort and understanding from someone (emotional support)

8. I get help and advice from other people (instrumental support)
9. I do something to think about it less, such as going to a movie or watching TV, reading, daydreaming, sleeping or shopping. (self-distracting)
10. I refuse to believe that this has happened. (denial)
11. I express my negative feelings. (venting)
12. I use alcohol or other drugs to help me get through it. (substance)
13. I give up the attempt to cope. (behavioural disagreement)
14. I blame myself for things that happened. (self-blame)
15. I concentrate my efforts on doing something about the situation I'm in. (active)
16. I try to come up with a strategy about what to do. (planning)
17. I try to see it in a different light, to make it seem more positive. (positive refraining)
18. I accept the reality of the fact that it has happened. (acceptance)
19. I make jokes about it. (humour)
20. I try to find comfort in my religion or spiritual beliefs. (religion)
21. I get emotional support from others. (emotional support)
22. I try to get advice or help from other people about what to do. (instrumental support)
23. I turn to work or other activities to take my mind off things. (self-distracting)
24. I tell myself that this isn't real. (denial)
25. I say things to let my unpleasant feelings escape. (venting)
26. I use alcohol or other drugs to make myself feel better. (substance)
27. I give up trying to deal with it. (behavioural disagreement)
28. I criticize myself (self-blame)

Note:

Problem-based coping: 1, 2, 8, 15, 16, and 22

Emotion-based coping: 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, and 28.