

## Workplace Aggression in Teenage Part-Time Employees

Kathryne E. Dupré  
Memorial University of Newfoundland

Michelle Inness, Catherine E. Connelly,  
Julian Barling, and Colette Hopton  
Queen's University

Among adult employees, interpersonal injustice and abusive supervision predict aggression toward supervisors at work. The aim of this study was to assess whether similar relationships exist among teenage employees and, further, whether teenagers' reasons for working moderate these relationships. Multiple regression analyses on data from 119 teenage employees showed that financial and personal fulfillment reasons for working moderate the impact of interpersonal injustice and abusive supervision on aggression directed at workplace supervisors. These findings contribute to the understanding of workplace aggression by demonstrating that (a) teenagers engage in this workplace behavior, (b) the predictors are similar to those of adult aggression, and (c) reasons for working play a moderating role among this particular cohort. The possible long-term consequences of teenagers' use of aggression at work are discussed.

*Keywords:* aggression, teenagers, youth, violence

Most teenagers in the United States, Canada, and Europe are now employed on a part-time basis while still at school (see Loughlin & Barling, 1999, 2001). Upon graduation from high school, 80% of high school students in North America will have held part-time jobs (Greenberger & Steinberg, 1986). Just under half of these students will have worked more than 20 hr per week during the school year (Bachman & Schulenberg, 1993), and by 12th grade, 70% of these students will have been employed for more than 20 hr per week during the summer months (Runyan & Zakocs, 2000). With part-time employment now the norm for teenagers, the need to understand this phenomenon for young workers, their employing organizations, and society in general looms large (e.g., Barling & Kelloway, 1999).

Although the study of young workers has been recognized as an important part of introducing teenagers to the world of work

(Frone, 2000; U.S. National Institute on Occupational Safety and Health [NIOSH], 1996, 1997), young workers' work-related experiences, attitudes, and behaviors have received little research attention (Frone, 1999; Loughlin & Barling, 1999, 2001). In particular, although several health and safety workplace issues have received research attention within the realm of adult employment, with few exceptions (e.g., Rubenstein & Sternbach, 1999), minimal research has focused on health and safety issues relating to teenagers' jobs. One of these neglected issues is workplace aggression, a phenomenon that is a common feature in workplace settings.

There is evidence that young people are frequently the target of workplace aggression (e.g., Keashly, Trott, & MacLean, 1994). NIOSH (2003) reported that between 1992 and 2000, 63% of workplace fatalities involving U.S. retail workers under the age of 18 were due to assaults and other violent acts. Although there are several issues affecting young workers that in general warrant empirical attention, we argue that from organizational, societal, and developmental perspectives, further study of workplace aggression is among the most significant of these issues (see also Tucker & Loughlin, 2006). In particular we believe that beginning to investigate whether teenagers act as perpetrators of workplace aggression is of utmost importance.

Aggression is defined as behavior that is performed by one individual with the intent of causing harm (see, for example, Bandura, 1973; Jenkins, 1996). Aggressive behaviors at work can take a variety of forms, and as a result a number of taxonomic frameworks have been proposed to describe the wide range of acts that constitute aggressive behaviors at work (e.g., R. A. Baron, Neuman, & Geddes, 1999; S. A. Baron, 1993; Buss, 1961; S. Fox & Spector, 1999; Mantell, 1994; Robinson & Bennett, 1995). These acts include physical behaviors (e.g., punching, damaging property) as well as psychological and verbal behaviors (e.g., verbal insults, ignoring the target), and they can be active or passive (i.e., initiating or withholding actions), overt or covert (i.e., obvious or anonymous acts of aggression), and direct or indirect

---

Kathryne E. Dupré, Faculty of Business Administration, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, Canada; Michelle Inness, Catherine E. Connelly, Julian Barling, and Colette Hopton, School of Business, Queen's University, Kingston, Ontario, Canada.

Michelle Inness is now at the School of Business, University of Alberta, Edmonton, Alberta, Canada; Catherine E. Connelly is now at the DeGroote School of Business, McMaster University, Hamilton, Ontario, Canada.

Portions of this research formed part of Kathryne E. Dupré's doctoral thesis submitted to the School of Business of Queen's University and were supported by grants from the Social Sciences and Humanities Research Council of Canada. An earlier version of this article was presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Toronto, Ontario, Canada, April 2002. We thank Monique Barling for assistance with data collection and Kevin Kelloway and Nick Turner for their constructive comments and assistance throughout the conduct of this study.

Correspondence concerning this article should be addressed to Kathryne E. Dupré, Faculty of Business Administration, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador A1B 3X5, Canada. E-mail: kdupre@mun.ca

(i.e., targeting the intended target directly or a third party, Binning & Wagner, 2002), focusing on both people in organizations and the organizations themselves. Research indicates that all forms of workplace aggression are potentially harmful for both individuals and organizations (e.g., Barling, Rogers, & Kelloway, 2001; Budd, Arvey, & Lawless, 1996; O'Leary-Kelly, Griffin, & Glew, 1996; Rogers & Kelloway, 1997; Schat & Kelloway, 2000).

Although media reports often suggest that the most frequent manifestations of workplace aggression are direct acts of physical aggression, in reality less sensational acts such as verbal or psychological aggression are more common (R. A. Baron et al., 1999; Braverman, 1999; Neuman & Baron, 1998). L. Greenberg and Barling (1999) found that whereas 2 of the 136 men in their study reported using physical violence at work, 82%, 74%, and 76% admitted to some form of psychological aggression against co-workers, subordinates, and supervisors, respectively. Despite the less dramatic nature of these acts, victims of psychological aggression often judge it to be worse than physical aggression (see O'Leary & Jouriles, 1994), suggesting that the outcomes are not necessarily less severe.

Notwithstanding the substantial and growing body of research on workplace aggression, there is no research on workplace aggression among teenage workers. This lack of research is problematic considering the number of teenagers who have the potential to engage in this workplace behavior given their occupational status.

### Teenage Aggression

The lack of research on teenage employees' aggression is striking because teenage aggression is commonly viewed as a significant societal problem with both immediate and long-term consequences (American Psychological Association, 1999). National statistics in both the United States and Canada indicate that young people participate in more violent criminal activity than do adults (Perkins, 1997; Wallace, 2003). According to the U.S. National Crime Victimization Survey, although Americans aged 12 to 24 years constituted 22% of the population in 1992–1997, they were the perpetrators in 35% of the country's murders and 49% of serious violent crime, including rape, robbery, and aggravated assault (as cited in Perkins, 1997; see also Snyder, Sickmund, & Poe-Yamagata, 1996). Current research suggests that various forms of teenage aggression in schools exist at somewhat alarming rates (see, e.g., the Youth Risk Behavior Survey; Centers for Disease Control and Prevention, 2004). Although aggression in schools does not necessarily translate into aggression in the workplace, and there is some variation across studies, it can provide an indication of the degree of aggression among teenagers. Cleary (2000), for example, found that 35% of students had been victimized at school and approximately 39% had been involved in either violence or the potential for violence at school (e.g., carried a weapon or had been in physical fights).

Understanding the variables that predict aggressive behaviors in teenage workers could be especially important for the intervention and prevention of workplace aggression, given that aggression may not only be carried into later career stages (Barling & Kelloway, 1999) but also escalate over time (see Andersson & Pearson, 1999; Barling, 1996; Neuman & Baron, 1998). The notion of escalation is reinforced by research findings showing that less

severe acts of relationship or marital aggression serve as the first step in an upward spiral that may result in more severe levels of aggression (Murphy & O'Leary, 1989). Likewise, some data suggest that adolescent dating relationships form the foundation for aggression in adult relationships (Henton, Cate, Koval, Lloyd, & Christopher, 1983; Magdol, Moffitt, Caspi, & Silva, 1998). Moreover, patterns of behavior established in adolescence have been shown to extend into adulthood (e.g., Huesmann, Moise-Titus, Podolski, & Eron, 2003), providing further support for the importance of understanding such behaviors earlier rather than later in life.

With part-time teenage employment the norm and evidence of aggression in general among this cohort of individuals, it is plausible that teenagers engage in aggression at work. If this workplace behavior does exist, there may be critical implications for the subsequent development of workplace attitudes and behaviors that future research must consider. Thus, the aim of our study is to ascertain whether teenage workplace aggression occurs and, perhaps more important, if it does, to identify its predictors. As with research that has examined workplace aggression among adults (see, e.g., L. Greenberg & Barling, 1999; LeBlanc & Kelloway, 2002), in this study we focus on both psychological and physical aggression engaged in by employees.

### Predictors of Workplace Aggression

In workplace aggression research, a common method of predicting employee aggression is to examine situational factors in the workplace (e.g., Inness, Barling, & Turner, 2005; Neuman & Baron, 1998). Moreover, Anderson and Bushman (2002) emphasized the instrumental nature of aggression, suggesting that the specific motives and targets of aggressive acts are important for its subsequent understanding. This is consistent with social interaction theory, which suggests that aggressive behavior has a purpose and tends to be goal directed (Tedeschi & Felson, 1994). L. Greenberg and Barling (1999) showed the importance of considering the source and target of aggression, because different factors predict psychological aggression against different groups of employees. More recent research supports this finding, with a meta-analysis by Hershcovis et al. (2005) showing that aggression is indeed target specific. Inness et al. (2005) provide further evidence of the contextual nature of workplace aggression with their finding that experiences at one job do not affect workplace aggression in another job. In the present study, we focus specifically on the aggression that teenage employees direct toward their workplace supervisors. We focus explicitly on supervisor aggression because among the studies that have specified the source and target of workplace aggression, supervisor aggression is the one for which we currently have the most knowledge and understanding (see, e.g., Hershcovis et al., 2005).

Evidence indicates that workplace aggression tends to occur when employees experience interpersonal mistreatment, with interpersonal provocation argued to be among the most important causes of human aggression (e.g., Anderson & Bushman, 2002). Thus, when the source of interpersonal employee mistreatment is a workplace supervisor, the employee may direct aggression at that supervisor. Research on adult work experiences has identified factors that predict aggression directed at supervisors. As with research on adult work experiences, we focus on employees'

perceptions of their supervisors' behaviors (e.g., Inness et al., 2005), in an attempt to examine the specific perceptions that may lead to aggression. Consistent with this, we address two factors that have been found to be linked to supervisor-directed aggression: perceived supervisory interpersonal injustice and abusive supervision (e.g., R. A. Baron et al., 1999; Inness et al., 2005). Given the strength of these predictors in influencing workplace aggression in previous research with adults, and because the likelihood of them being relevant to employed teenagers is high given the universality of these variables to employees of all ages, we expect that perceived supervisory interpersonal injustice and abusive supervision will be important predictors of teenagers' aggression at work.

Various types of organizational injustice have received substantial research attention. Earlier research focused on distributive (Deutsch, 1985) and procedural (Folger & Greenberg, 1985; Lind & Tyler, 1988) injustice (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001), both of which are related to aggression directed at workplace supervisors (see L. Greenberg & Barling, 1999, for a discussion). More recently, however, research has come to focus on interpersonal injustice, with findings suggesting that it may be the most important form of injustice in predicting aggression against workplace supervisors (see Dupré & Barling, 2006; Inness et al., 2005).

Interpersonal injustice is described as employees' perceptions of whether they are treated with a lack of courtesy, respect, and sensitivity by those responsible for carrying out procedures (Colquitt, 2001; Donovan, Drasgow, & Munson, 1998). When confronted with interpersonal injustice, people have been shown to respond with negative emotions such as anger or hostility (Folger, 1993) and are motivated to reestablish a sense of perceived justice (Cropanzano & Folger, 1989; Homans, 1961). This could be achieved by retaliating against the source of the injustice (Townsend, Phillips, & Elkins, 2000), by seeking restitution (e.g., Bies, Shapiro, & Cummings, 1988; J. Greenberg, 1990), or by using aggression to "fire back" (J. A. Fox & Levin, 1994) at perceived mistreatment by supervisors. Supervisors are usually responsible for executing workplace decisions and procedures, and thus the quality of their interactions with their subordinates is an important source of justice, largely because it is so personal in comparison to other forms of justice (Inness et al., 2005). Moreover, interpersonal injustice has been consistently associated with supervisor-directed workplace aggression in previous research (e.g., R. A. Baron et al., 1999).

Supervisors' treatment of employees can go beyond being unfair and become actively abusive (O'Leary-Kelly et al., 1996). Both interpersonal injustice and abusive supervision are forms of supervisor mistreatment, but whereas interpersonal injustice specifically refers to the perception that supervisory treatment is unfair, supervisor behavior becomes abusive when it includes a "sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000, p. 178). Although abusive supervision is infrequent, it is associated with negative outcomes (Zellers, Tepper, & Duffy, 2002), including poor health (Duffy, Ganster, & Shaw, 1998) and destructive thoughts and feelings (Ashforth, 1997; Frone, 2000; Keashly et al., 1994). As compared with their adult counterparts, we believe that abusive supervision will be particularly salient for teenage employees given their relatively greater vulnerability. This vulnerability is evidenced by their lim-

ited access to alternative jobs, fewer opportunities for geographical mobility (Loughlin & Barling, 1999), lower representation by unions (Bryson, Gomez, Gunderson, & Meltz, 2001; Gallagher, 1999; Mayhew & Quinlan, 2002), and the belief among some employers (e.g., the fast food industry) that teenage employees are easier to manage than adults because of their lack of power (Schlosser, 2002).

Research indicates that at times, subordinates reciprocate their supervisor's behavior in some way as a method of coping with the abuse (Duffy, Ganster, & Pagon, 2002; Inness et al., 2005). Day and Hamblin (1964) found that "the extent that a supervisor enforces work specifications or rules by aggressing against those subordinates who depart from or violate the rules" (p. 500) produced significant increases in aggression toward supervisors in return.

### Interactions Between Individual Factors and Perceived Workplace Factors

Individual factors interact with perceived workplace factors in predicting workplace aggression (Barling, 1996). Given the importance of teenagers' reasons for working, we suggest that the reasons why teenagers engage in part-time employment will moderate the relationships between interpersonal injustice and abusive supervision, on the one hand, and teenage employees' workplace aggression directed at their supervisors, on the other.

All people enter the workforce to meet certain goals, such as financial need or personal fulfillment. This is important because the reasons that people work may influence how they perceive and experience the work environment and how they cope with unpleasant incidents at work. Teenagers' reasons for working have been discussed extensively in an attempt to understand whether these reasons are fulfilled or thwarted through their employment and because of a belief that the reasons why teenagers work influence their experience of work (e.g., Bedenbaugh & Garvey, 1993; Crispell, 1995; Ruscoe, 1996; Sanford et al., 1994; Steinberg, Fegley, & Dornbusch, 1993). We believe that two of teenagers' predominant reasons for working will moderate the relationship between their work experiences and workplace aggression: namely, financial and personal fulfillment.

Teenagers who work primarily for financial reasons (Bailey, 1992; Bensimhon, 1993) may need to maintain their employment in the face of an undesirable work environment, thus increasing their dependence on their employment and employers. This may be especially true for teenagers given recent statistics showing that teenagers are at a disadvantage in the labor market as compared with all workers. The U.S. Bureau of Labor Statistics (2004) reported that for the first quarter of 2004, the unemployment rate for the 16–19 age group was 16.6%, as compared with 5.6% among all workers. Although it is possible that teenagers work to be able to spend money on frivolous items, Ruscoe (1996) reported that 33% of students who work are saving their money for college, with other uses of their money including care for their children, money for parents, church donations, and clothing purchases. As such, negative experiences at work may be more detrimental for people who feel compelled to remain at a particular job for financial reasons. Continuance commitment, for example, which occurs when employees stay with an organization because of a lack of alternatives (Meyer & Allen, 1997), is negatively associ-

ated with job performance (Meyer, Pounonen, Gellatly, Goffin, & Jackson, 1989). The negative effects of abusive supervision were more pronounced for employees who perceived themselves to have limited mobility (Tepper, 2000), and this may be particularly relevant to teenagers, whose employment options are generally more limited than those of adults, who have greater experience and skills. Given that education, work experience, and skills are inversely related to age, young workers are likely to be less able to command high-paying, high-quality jobs. Most young workers' jobs in North America have been concentrated in the lower level service industries (e.g., food and beverage services, cashiers, sales clerks) since the 1980s (Loughlin & Barling, 1999). These jobs typically pay poorly, require few skills, offer little career potential, and have primarily part-time hours (Greenberger, Steinberg, & Ruggiero, 1982). Teenagers are ideal candidates for these jobs because they are willing to accept low pay and often want flexible hours (Schlosser, 2002).

Individuals also choose to work for personal fulfillment, which could arise from the job itself or from the quality of social relationships on the job (e.g., Frost & Muhammad, 1979; Porter, 1962; Rhoades & Eisenberger, 2002). Teenagers who work indicate that some of the ways in which they get fulfillment through their jobs are by the recognition that it will be good for their resumes (Ruscoe, 1996) and through the social experience they gain outside the home and school (Bailey, 1992). In contrast to the situation in which financial reasons for employment are primary, we expected that teenagers who primarily seek personal fulfillment from their employment would be less dependent on their employment and employers, as personal fulfillment can be achieved through other means (e.g., involvement in athletic activities, volunteering in community activities). Thus, when teenagers perceive supervisors as treating them unfairly or abusively, we expected that those teens who work for personal fulfillment would be willing to seek this fulfillment through alternative employment (paid or volunteer) or through other means that provide personal fulfillment.

### Current Study Hypotheses

The main purpose of this study is to determine whether teenagers engage in aggression at work. Moreover, if teenage workplace aggression does exist, we want to examine the prediction of this workplace phenomenon to understand why it occurs.

#### *Hypothesis 1*

We predict that when teenagers' financial reasons for working are high and interpersonal injustice and abusive supervision are high, aggression will also be high, and when interpersonal injustice and abusive supervision are low, aggression will be low. We further hypothesize that when teenagers' financial reasons for working are low, aggression will be low, regardless of the degree of perceived interpersonal injustice and abusive supervision.

#### *Hypothesis 2*

We hypothesize that when teenagers' personal fulfillment reasons for working are high, aggression will be low, regardless of the degree of perceived interpersonal injustice and abusive supervi-

sion. We further predict that when teenagers' personal fulfillment reasons for working are low and interpersonal injustice and abusive supervision are high, aggression will also be high, and when interpersonal injustice and abusive supervision are low, aggression will be low.

## Method

### *Participants and Procedure*

Surveys were distributed to 131 employed Canadian high school students (71 girls, 60 boys) through peer nomination. A small group of senior high school students were contracted to distribute questionnaires and information about the study to full-time high school students who were employed on a part-time basis, which was defined as working at least 2 hr per week at a job and a maximum of 37.5 hr per week. Respondents who worked more than 37.5 hr per week were excluded in subsequent analyses, and the resulting sample consisted of 119 teenagers (69 girls, 50 boys). Participants returned questionnaires anonymously in sealed envelopes to the contracted students and in return received a \$1 gift certificate for a local coffee and donut store as a token of appreciation.

The average age of the participants was 17 years ( $SD = 1.2$ ); their average education level was Grade 11 ( $SD = 1.1$ ). Participants worked an average of 18.0 hr per week ( $SD = 8.6$ , range = 2.0–37.5; mean hourly rate of pay = \$7.29 Canadian,  $SD = \$1.70$ ), had been with their current organization for an average of 10.4 months ( $SD = 10.6$ ), and had been with their current supervisor for an average of 9.3 months ( $SD = 9.8$ ). All of these teenagers were in nonmanagerial positions; 22% worked in fast food restaurants, 17% in small local stores, 14% in large department and grocery stores, 14% in restaurants, 9% in recreation and fitness centers, 9% in community and government services, 8% in miscellaneous organizations (e.g., construction firms, veterinary clinics, bowling alleys), 4% at gas stations, and 4% in bars, and 4% delivered newspapers.<sup>1</sup> The average reported age of their supervisors was 37.2 years ( $SD = 11.6$ , range = 18.5–68.0; 58 men, 52 women<sup>2</sup>).

### *Materials*

Although we focus on the roles of interpersonal injustice, abusive supervision, and reasons for working in predicting teenagers' workplace aggression, other factors need to be controlled because of their demonstrated relationship to aggression. Thus, participants were asked a series of questions relating to age, education, hours worked per week, hourly rate of pay, time worked with supervisor, and anger.

Research suggests that certain individuals have a greater predisposition than others to act in aggressive ways. Although empirical studies are inconclusive regarding the effects of age and workplace aggression, age tends to show a relationship with aggression (see Douglas & Martinko, 2001). R. A. Baron et al. (1999) found that workers aged 19 to 24 years reported demonstrating aggressive behaviors more often than workers over the age of 24. However, a recent meta-analysis of full-time employees found that age was not significantly related to aggression (Herscovis et al., 2005). It could be that in some employment situations young people lack the necessary interpersonal skills to properly respond to potentially aggressive situations. Although we control for age, the age range of participants in this study is limited, and as a result age is less likely to play a significant role as compared with previous research. We also control for teenage employees' highest level of education attained, hourly rate of pay, hours worked per week, and time worked with supervisor, all of which are relevant to teenagers' experience of employment (Barling & Kelloway,

<sup>1</sup> These percentages do not add to 100 because of rounding error.

<sup>2</sup> The gender of 9 supervisors was not reported.



1999; Barling, Rogers, & Kelloway, 1995). Additionally, we control for the tendency to outwardly express anger, given the important finding that anger tends to be related to aggressive behavior directed toward other persons (see Averill, 1982; Douglas & Martinko, 2001; Dye & Eckhardt, 2000; Glomb & Liao, 2003; Spielberger, 1999). The eight-item Anger-Out subscale of the State-Trait Anger Expression Inventory (Spielberger, 1999) was used to assess the frequency with which anger is expressed outwardly. Participants report on a 4-point scale (1 = *infrequently*; 4 = *frequently*) how often they express feelings relating to their anger.

*Workplace aggression* toward supervisors was assessed using L. Greenberg and Barling's (1999) 22-item scale, which is based on Straus's (1979) Conflict Tactics Scales. Three items were added to this scale for the current study to provide greater coverage of the range of workplace aggression behaviors. Participants indicate how often they have engaged in a series of aggressive acts over the past year (0 = *never*, 1 = *once*, 2 = *twice*, 3 = *3–5 times*, 4 = *6–10 times*, 5 = *11–20 times*, 6 = *more than 20 times*). Both psychological workplace aggression (12 items, e.g., "Over the last year, I transmitted damaging information about my supervisor") and physical workplace aggression (13 items; e.g., "Over the last year, I shoved my supervisor") are measured. Normally all items on this scale are combined to provide an overall level of workplace aggression; however, it was our intention to assess psychological and physical aggression separately.

*Perceived workplace factors.* Perceptions of interpersonal injustice were measured using 13 items adapted from a scale developed by Donovan et al. (1998) designed to measure employees' perceptions of interpersonal treatment at work. Items in the current study focused on supervisor treatment (e.g., "At work, my supervisor plays favorites"). Although items typically are rated on a 3-point response scale, we used a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*) to maximize variance. Abusive supervision was assessed using Tepper's (2000) 15-item scale. Participants rate on a 5-point scale (1 = *I cannot remember him/her ever using this behavior with me*, 5 = *He/she uses this behavior with me very often*) the extent to which one's supervisor engages in a number of abusive behaviors, such as "Tells me my thoughts or feelings are stupid."

*Reasons for working.* Participants' reasons for working were ascertained using a six-item scale designed for the present study that measures reasons for working using a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). An exploratory factor analysis with varimax rotation provided strong support for two separate factors, one that reflected financial reasons and one that reflected personal fulfillment reasons for working (see Table 1 for items and results).

## Results

Descriptive statistics, intercorrelations, and reliability data for all variables are presented in Table 2. Because only a small percentage of teenagers had engaged in physical aggression at work (14% in total, with 8% having engaged in only one act of physical aggression), it was not possible to examine psychological

and physical aggression separately. The 12 items on the psychological workplace aggression scale were summed to provide an overall score, and this measure of psychological aggression was used in all subsequent analyses. The most common forms of psychological aggression directed at supervisors were transmitting damaging information, saying something spiteful, and making rude gestures, with approximately 25% of participants having engaged in these behaviors. Approximately 16% of participants reported "giving the silent treatment," being rude, yelling at, and insulting or name-calling supervisors. Approximately 6% of participants reported threatening to hit, threatening to throw something, damaging property, swearing at, and crying to make supervisors feel guilty. Although the level of psychological aggression in this group ( $M = 3.56$ ,  $SD = 6.13$ ) was similar to that of previous studies using this same measure (see Dupré & Barling, 2006; L. Greenberg & Barling, 1999; Inness et al., 2005), the relative lack of physical aggression was different from other studies that have examined workplace aggression.

The level of perceived interpersonal injustice ( $M = 3.37$ ,  $SD = 1.05$ ) was comparable to what has been reported in other studies using this same measure (in previous studies, mean scores of interpersonal injustice ranged from 2.45 to 5.16, with similar standard deviations to that of the current study; see Dupré & Barling, 2006; L. Greenberg & Barling, 1999; Inness et al., 2005). The level of perceived abusive supervision ( $M = 2.01$ ,  $SD = 0.99$ ) was somewhat higher than that reported in other studies using this same measure (in previous studies, mean scores ranged from 1.31 to 1.70, with a lower standard deviation than that of the current study; see Inness et al., 2005; Tepper, Duffy, & Shaw, 2001; Zellars et al., 2002), suggesting teenagers' perceived abusive supervision may be higher than what is perceived in general.

To determine whether either financial or personal fulfillment reasons for working moderated the relationships between interpersonal injustice and abusive supervision and workplace aggression, we conducted separate moderated multiple regression analyses. On the first step of each regression analysis, in addition to entering age, education, hours worked per week, hourly rate of pay, time worked with supervisor, and anger as control variables, given that there may be overlap between the two reasons for working (i.e., the variables being tested as moderators), we entered the reason for working that was not being tested as the moderator in that particular regression analysis, as an additional control variable. Both regression analyses and tests for interactions were conducted following the procedures outlined by Aiken and West (1991).

Table 1  
*Exploratory Factor Analysis of Six Items Assessing Reasons for Working*

Item	Factor 1	Factor 2
1. My main reason for working is for the pay.	.81	-.17
2. Quite frankly, the only reason I work is for the money.	.72	-.42
3. The pay that I receive for the work I do is very important.	.48	.09
4. My main reason for working is because I enjoy the work.	-.30	.76
5. My main reason for working is for the social relationships.	-.09	.62
6. My main reason for working is for the experience.	.07	.58
% variance	36.04	14.59
Eigenvalue	2.58	1.41

Table 2  
Descriptive Statistics and Correlations Among All Variables ( $N = 119$ )

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	17.00	1.18	—												
2. Education	11.12	1.07	.84**	—											
3. Hours per week	18.00	8.55	.24*	.20*	—										
4. Hourly rate	7.29	1.67	-.01	-.04	-.09	—									
5. Time with supervisor	9.33	9.81	.14	.12	-.02	.08	—								
6. Anger-Out subscale	2.03	0.67	-.07	-.07	.02	.04	-.00	(.84)							
7. Gender of teenager			.15	.16	-.01	-.07	-.07	-.09	—						
8. Gender of supervisor			-.04	-.03	-.05	.08	-.13	-.08	.23*	—					
9. Interpersonal injustice	3.37	1.05	-.05	-.12	.14	-.11	.09	.15	-.14	-.06	(.85)				
10. Abusive supervision	2.01	0.99	-.26**	-.24*	.11	-.09	-.05	.31**	-.21*	-.21*	.61**	(.95)			
11. Financial reasons	3.74	0.97	.06	.00	-.02	-.01	-.07	-.22*	.14	.11	-.05	-.33**	(.71)		
12. Personal fulfillment	3.23	1.00	.05	.14	.01	.09	-.17	-.28*	.09	.02	-.34**	-.14	-.29**	(.70)	
13. Aggression <sup>a</sup>	3.56	6.13	-.05	-.17	-.03	.05	.09	.14	-.11	-.03	.28**	.23*	.27**	-.27**	—

Note. Reliability data (alphas) appear on the diagonal.

<sup>a</sup> Internal measures of consistency such as Cronbach's alpha are inappropriate for the aggression measures included in this study and thus are not included (see, e.g., Bollen & Lennox, 1991; MacCallum & Browne, 1993).

\*  $p < .05$ . \*\*  $p < .01$ .

### Hypothesis 1

A regression analysis was conducted to test whether financial reasons for working moderated the relationship between interpersonal injustice and workplace aggression, and a second regression analysis was conducted to test whether financial reasons for working moderated the relationship between abusive supervision and workplace aggression. In both of these regression analyses the control variables (i.e., age, education, hours worked per week, hourly rate of pay, time worked with supervisor, anger, and personal fulfillment reasons for working) were entered on Step 1; the standardized independent variable (i.e., interpersonal injustice or abusive supervision) and moderator variable (i.e., financial reasons for working) were entered on Step 2; and the interaction term was entered on Step 3.

Financial reasons for working moderated the effect of both interpersonal injustice and abusive supervision on workplace aggression:  $\Delta R^2 = .09$ ,  $p < .01$ ;  $\Delta R^2 = .14$ ,  $p < .001$ , respectively (see Table 3 for the results of both regression analyses). For both

low and high financial reasons for working, when interpersonal injustice and abusive supervision were low, workplace aggression was low. When interpersonal injustice and abusive supervision were high and when financial reasons for working were low, workplace aggression remained low. However, when interpersonal injustice and abusive supervision were high and financial reasons for working were also high, workplace aggression was higher (see Figures 1 and 2).

### Hypothesis 2

A regression analysis was conducted to test whether personal fulfillment reasons for working moderated the relationship between interpersonal injustice and workplace aggression, and a second regression analysis was conducted to test whether personal fulfillment reasons for working moderated the relationship between abusive supervision and workplace aggression. In both of these regression analyses the control variables (i.e., age, education, hours worked per week, hourly rate of pay, time worked with

Table 3  
Results of Hierarchical Regression Analyses for the Moderating Effect of Financial Reasons for Working on the Relationships Between Interpersonal Injustice and Workplace Aggression and Between Abusive Supervision and Workplace Aggression

Step	Variable	Interpersonal injustice				Abusive supervision			
		$\beta$	$R^2$	$\Delta R^2$	<i>df</i>	$\beta$	$R^2$	$\Delta R^2$	<i>df</i>
1	Anger-Out subscale	.02	.11	.11	7, 89	.02	.11	.11	7, 89
	Age	-.01				.13			
	Education	-.09				-.09			
	Hours worked per week	.07				.02			
	Hourly rate	.08				.05			
	Time worked with supervisor	.08				.05			
	Personal fulfillment reasons for working	-.05				-.12			
2	Independent variable	.27**	.26**	.15**	2, 87	.38**	.26**	.16**	2, 87
	Financial reasons for working	.30**				.31**			
3	Independent Variable $\times$ Financial Reasons	.31**	.35**	.09**	1, 86	.41**	.41**	.14**	1, 86

Note.  $N = 119$ .

\*\*  $p < .01$ .

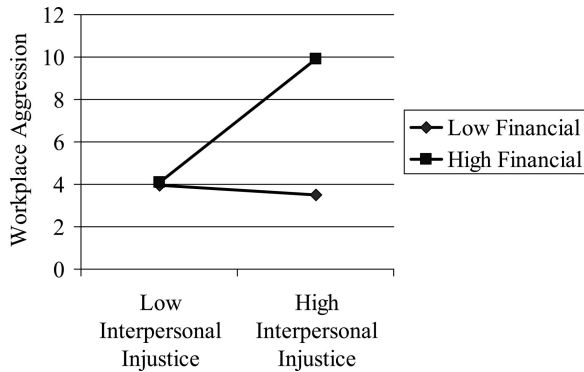


Figure 1. The moderating effect of financial reasons for working on the relationship between interpersonal injustice and workplace aggression.

supervisor, anger, and financial reasons for working) were entered on Step 1; the standardized independent variable (i.e., interpersonal injustice or abusive supervision) and moderator variable (i.e., personal fulfillment reasons for working) were entered on Step 2; and the interaction term was entered on Step 3.

Personal fulfillment reasons for working moderated the effect of interpersonal injustice and abusive supervision on workplace aggression:  $\Delta R^2 = .13, p < .001$ ;  $\Delta R^2 = .06, p < .01$ , respectively (see Table 4 for the results of both regression analyses). When personal fulfillment was high, workplace aggression remained at a similar level for both low and high interpersonal injustice and abusive supervision. However, when personal fulfillment was low, under low interpersonal injustice and abusive supervision, workplace aggression was low, and under high interpersonal injustice and abusive supervision, workplace aggression was higher (see Figures 3 and 4).

### Discussion

The aim of this study was to ascertain whether aggression at work by teenage part-time employees exists, and the variance in the workplace aggression data supports the notion that it does. Teenagers are aggressive at work, and the predictors of this behavior are both unique and similar to those of adult workplace aggression. Although teenagers appear to engage in levels of aggression directed at workplace supervisors similar to those of adult employees, most of this aggression is psychological. The results show that reasons for working influence how workplace experiences affect workplace aggression. In this respect, the current findings extend research conducted on interpersonal injustice and abusive supervision with adult employees.

Financial reasons for working moderated the relationships between interpersonal injustice and abusive supervision and workplace aggression. When young workers expressed strong financial reasons for employment, these relationships were exacerbated. For those with low financial reasons for working, interpersonal injustice and abusive supervision were not as strongly associated with aggression. As suggested earlier, teenage employees who work for financial reasons may feel somewhat trapped in their current jobs and thus use aggression as a way of responding to interpersonal mistreatment by their supervisors. Personal fulfillment reasons for working also moderated the relationships between interpersonal

injustice and abusive supervision and workplace aggression. When teenagers engaged in work for personal fulfillment, the associations between interpersonal injustice and abusive supervision and workplace aggression were much weaker. One possibility is that teenagers seeking personal fulfillment are less likely to remain in a situation that makes such fulfillment unlikely, making exit an attractive option (Barling et al., 2001). In contrast, those who do not seek personal fulfillment through their work would be more likely to submit to adverse circumstances and may respond aggressively to interpersonal mistreatment, believing that they have less to lose. Future research should examine why reasons for work moderate the relationships between interpersonal injustice, abusive supervision, and workplace aggression by focusing directly on the possibilities for exit, and also perhaps for voice (Gallagher, 1999).

The findings from this study suggest several additional avenues for future research that would be well worth considering. If replicated, these findings are important because of what young workers could be learning about work, supervision, and aggression. This is especially salient because teenagers are more influenced by their work environments than are their adult counterparts (Lorence & Mortimer, 1985). The lessons learned during this developmental phase may not be readily amenable to later change (e.g., Krosnick & Alwin, 1989), may predict subsequent workplace aggression, and may escalate into more severe forms of aggression.

Research indicates that early exposure to particular behaviors that are either tolerated or reinforced may make these behaviors more likely to occur in the future (Bandura, 1977), and data in other contexts show that early exposure to aggression makes its later occurrence more likely (Huesmann et al., 2003; O'Leary et al., 1989). Krosnick and Alwin (1989) argued that people are most vulnerable to attitude change during late adolescence and early adulthood. Thus, the experience of having initiated acts of workplace aggression could have implications for teenage employees' well-being and subsequent workplace attitudes and behaviors as they progress toward adulthood, along with conceptual implications for the understanding of aggression at work in general. Future research is necessary to examine the long-term consequences of involvement in and vicarious exposure to workplace aggression. Moreover, because it is widely believed that there is a progression from less serious to more serious forms of aggression (e.g., Andersson & Pearson, 1999; Barling, 1996; Neuman & Baron,

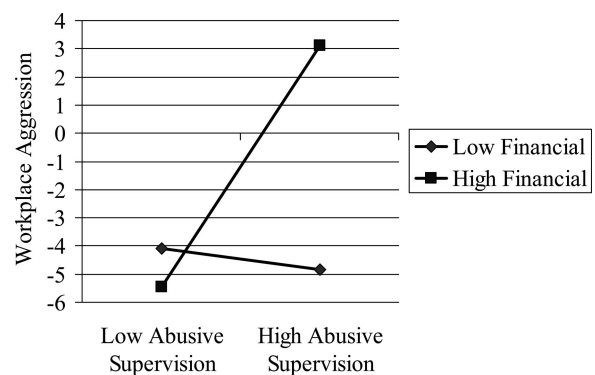


Figure 2. The moderating effect of financial reasons for working on the relationship between abusive supervision and workplace aggression.

Table 4  
*Results of Hierarchical Regression Analyses for the Moderating Effect of Personal Fulfillment Reasons for Working on the Relationships Between Interpersonal Injustice and Workplace Aggression and Between Abusive Supervision and Workplace Aggression*

Step	Variable	Interpersonal injustice				Abusive supervision			
		$\beta$	$R^2$	$\Delta R^2$	$df$	$\beta$	$R^2$	$\Delta R^2$	$df$
1	Anger-Out subscale	.01	.16*	.16*	7, 89	-.03	.16*	.16*	7, 89
	Age	.15				.16			
	Education	-.21				-.21			
	Hours worked per week	.05				.08			
	Hourly rate	.02				.05			
	Time worked with supervisor	.08				.13			
	Financial reasons for working	.30**				.38**			
2	Independent variable	.35**	.26**	.11**	2, 87	.35**	.26**	.11**	2, 87
	Personal fulfillment reasons for working	-.12				-.11			
3	Independent Variable $\times$ Personal Fulfillment	-.40**	.40**	.13**	1, 86	-.26**	.33**	.06**	1, 86

Note.  $N = 119$ .  
 \*  $p < .05$ . \*\*  $p < .01$ .

1998), there is even more reason to focus on the evolution of teenage employees' aggression over time.

Both predictor variables in this study, interpersonal injustice and abusive supervision, reflect poor quality leadership. Future research might investigate specifically whether leadership training could be used to prevent problems of aggression in the workplace, especially as our findings suggested that perceptions of abusive supervision among teenagers are higher than among their adult counterparts. Research should also consider other predictors of workplace aggression. For example, employees who feel that they are controlled and closely monitored (see Dupré & Barling, 2006; L. Greenberg & Barling, 1999) tend to be more aggressive toward their supervisors, and these two variables might be related to teenage workplace aggression. Moreover, reasons for working is an area in which research could be undertaken in a number of regards. A more finite focus on the reasons for working (e.g., provision of financial necessities vs. luxuries) might yield different results (see March, 1991). Moreover, given the moderating role of reasons for working in this study, future research might consider whether reasons for working fulfill a similar role in the prediction of adults' workplace aggression. As well, future research could

benefit from greater heterogeneity of scale items for both financial and personal fulfillment reasons for working.

Additionally, future research might consider the role of supervisor and subordinate gender in workplace aggression directed at workplace supervisors, as this might play a role in influencing aggression in the workplace among teenagers. Job availability could also affect findings related to teenage workplace aggression, and future research should consider economic factors that relate to teenage employment.

Last, other targets of aggression (coworkers, customers) should now be included in research focusing on aggression at work among teenagers. Given that our study indicates that teenagers do engage in aggression at work toward supervisors, they might also direct aggression at other sources. Moreover, while research does suggest that aggression tends to be target specific, there is the possibility for spillover effects, which occur when individuals are not able or willing to retaliate against the source of their frustration and instead aggress against a less threatening or more available target (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000), thus perhaps making coworker aggression even more prevalent than supervisor-directed aggression.

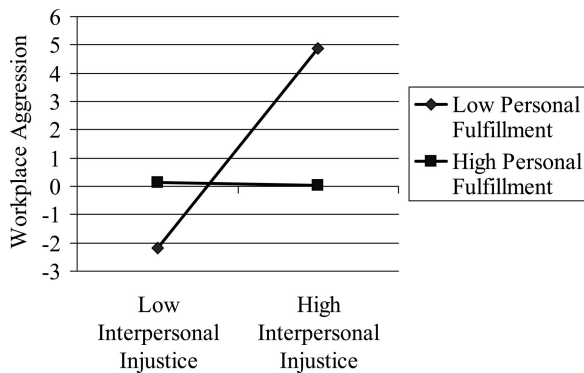


Figure 3. The moderating effect of personal fulfillment reasons for working on the relationship between interpersonal injustice and workplace aggression.

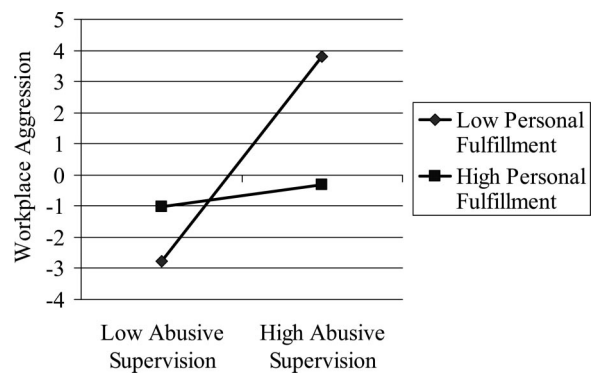


Figure 4. The moderating effect of personal fulfillment reasons for working on the relationship between abusive supervision and workplace aggression.



### Limitations

As with any research, there are certain limitations to this study that should be addressed in future research. First, the cross-sectional nature of the data warrant consideration, especially because Hoobler and Tepper (2001) have shown a pattern of reciprocal causation between abusive supervision and job satisfaction, organizational commitment, psychological distress, and job performance. Second, the sample size limited the extent to which the two predictor and two moderator variables could be examined simultaneously. This is significant, because there may be additive effects from the predictor variables. Third, because the data were self-reported, the magnitude of the relationships between predictor and dependent variables could be inflated. However, the minimal correlation between some of the measured variables (e.g., .14 for the Anger-Out subscale and workplace aggression), and the existence of significant interactions, reduces the likelihood that this is a threat (Aiken & West, 1991; Lindell & Whitney, 2001).

### Conclusion

We have shown that some of the factors that predict adults' workplace aggression replicate to younger workers. In addition, financial and personal fulfillment reasons for working moderate the relationships between interpersonal injustice and workplace aggression and between abusive supervision and workplace aggression. Organizations have a responsibility for the well-being of young workers, and research should continue to focus on this important component of the workforce.

### References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- American Psychological Association. (1999). *Warning signs: A violence prevention guide for youth from MTV and APA*. Retrieved September 1, 2002, from <http://www.apahelpcenter.org/featuredtopics/feature.php?id=38>
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology, 3*, 27–51.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review, 24*, 452–471.
- Ashforth, B. E. (1997). Petty tyranny in organizations: A preliminary examination of antecedents and consequences. *Canadian Journal of Administrative Sciences, 14*, 126–141.
- Averill, J. R. (1982). *Anger and aggression: An essay on emotion*. New York: Springer.
- Bachman, J. G., & Schulenberg, J. (1993). How part-time work intensity relates to drug use, problem behavior, time use, and satisfaction among high school seniors: Are these consequences or merely correlates? *Developmental Psychology, 29*, 220–235.
- Bailey, A. (1992). Teenagers' employment, earnings, and spending. *Journal of Home Economics, 84*, 20–24.
- Bandura, A. (1973). *Aggression: Social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1977). *Social learning theory*. New York: Prentice Hall.
- Barling, J. (1996). Workplace violence: Its scope and the issues. In G. VandenBos & E. Q. Bulatao (Eds.), *Violence on the job: Identifying risks and developing solutions* (pp. 29–49). Washington, DC: American Psychological Association.
- Barling, J., & Kelloway, E. K. (Eds.). (1999). *Young workers: Varieties of experiences*. Washington, DC: American Psychological Association.
- Barling, J., Rogers, A. G., & Kelloway, E. K. (2001). Behind closed doors: In-home workers' experience of sexual harassment and workplace violence. *Journal of Occupational Health Psychology, 6*, 255–269.
- Barling, J., Rogers, K. A., & Kelloway, E. K. (1995). Some effects of teenagers' part-time employment: The quantity and quality of work make the difference. *Journal of Organizational Behavior, 16*, 143–154.
- Baron, R. A., Neuman, J. H., & Geddes, D. (1999). Social and personal determinants of workplace aggression: Evidence for the impact of perceived injustice and the Type A behavior pattern. *Aggressive Behavior, 25*, 281–296.
- Baron, S. A. (1993). *Violence in the workplace: A prevention and management guide for business*. Ventura, CA: Pathfinder.
- Bedenbaugh, E. H., & Garvey, R. C. (1993). Competing for time: School and teenage employment. *NASSP Bulletin, 76*, 74–81.
- Bensimhon, M. (1993). The exhausting days and sleepless nights of a working teenager. *Life, 16*, 74–83.
- Bies, R. J., Shapiro, D. L., & Cummings, L. L. (1988). Causal account and managing organizational conflict. *Communication Research, 15*, 381–399.
- Binning, J. F., & Wagner, E. E. (2002). Passive-aggressive behavior in the workplace. In J. C. Thomas & M. Hersen (Eds.), *Handbook of mental health in the workplace* (pp. 457–476). Newbury Park, CA: Sage.
- Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin, 110*, 305–314.
- Braverman, M. (1999). *Preventing workplace violence: A guide for employers and practitioners*. London: Sage.
- Bryson, A., Gomez, R., Gunderson, M., & Meltz, N. (2001). *Youth-adult differences in the demand for unionisation: Are American, British, and Canadian workers all that different?* London: Centre for Economic Performance, London School of Economics and Political Science.
- Budd, J. W., Arvey, R. D., & Lawless, P. (1996). Correlates and consequences of workplace violence. *Journal of Occupational Health Psychology, 1*, 197–210.
- Buss, A. H. (1961). *The psychology of aggression*. New York: Wiley.
- Centers for Disease Control and Prevention. (2004). Violence-related behaviors among high school students—United States 1991–2003. *Morbidity and Mortality Weekly Report, 53*, 651–655.
- Cleary, S. D. (2000). Adolescent victimization and associated suicidal and violent behaviors. *Adolescence, 35*, 671–682.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes, 86*, 278–321.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 386–400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*, 425–445.
- Crispell, D. (1995). Why working teens get into trouble. *American Demographics, 17*, 19–20.
- Cropanzano, R., & Folger, R. (1989). Referent cognitions and task-decision autonomy: Beyond equity theory. *Journal of Applied Psychology, 74*, 293–299.
- Day, R. C., & Hamblin, R. L. (1964). Some effects of close and punitive styles of supervision. *American Journal of Sociology, 69*, 499–510.
- Deutsch, M. (1985). *Distributive justice: A social-psychological approach*. New Haven, CT: Yale University Press.
- Donovan, M. A., Drasgow, F., & Munson, L. J. (1998). The Perceptions of Fair Interpersonal Treatment Scale: Development and validation of a measure of interpersonal treatment in the workplace. *Journal of Applied Psychology, 83*, 683–692.
- Douglas, S. C., & Martinko, M. J. (2001). Exploring the role of individual

- differences in the prediction of workplace aggression. *Journal of Applied Psychology*, 86, 547–559.
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, 45, 331–352.
- Duffy, M. K., Ganster, D. C., & Shaw, J. D. (1998). Positive affectivity and negative outcomes: The role of tenure and job satisfaction. *Journal of Applied Psychology*, 83, 950–959.
- Dupré, K. E., & Barling, J. (2006). Predicting and preventing supervisory workplace aggression. *Journal of Occupational Health Psychology*, 11, 13–26.
- Dye, M. L., & Eckhardt, C. I. (2000). Anger, irrational beliefs and dysfunctional attitudes in violent dating relationships. *Violence and Victims*, 15, 337–350.
- Folger, R. (1993). Reactions to mistreatment at work. In J. K. Murnighan (Ed.), *Social psychology in organizations* (pp. 161–183). Englewood Cliffs, NJ: Prentice Hall.
- Folger, R., & Greenberg, J. (1985). Procedural justice: An interpretive analysis of personnel systems. In K. M. Rowland & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 3, pp. 141–183). Greenwich, CT: JAI Press.
- Fox, J. A., & Levin, J. (1994). Firing back: The growing threat of workplace homicide. *Annals of the American Academy of Political and Social Science*, 534, 16–30.
- Fox, S., & Spector, P. E. (1999). A model of work frustration–aggression. *Journal of Organizational Behavior*, 20, 915–931.
- Frone, M. R. (1999). Developmental consequences of youth employment. In J. Barling & E. K. Kelloway (Eds.), *Young workers: Varieties of experience* (pp. 89–128). Washington, DC: American Psychological Association.
- Frone, M. R. (2000). Interpersonal conflict at work and psychological outcomes: Testing a model among young workers. *Journal of Occupational Health Psychology*, 5, 246–255.
- Frost, P. J., & Muhammad, J. (1979). Shift work, attitudes, and reported behavior: Some associations between individual characteristics and hours of work and leisure. *Journal of Applied Psychology*, 64, 66–70.
- Gallagher, D. G. (1999). Youth and labor representation. In J. Barling & E. K. Kelloway (Eds.), *Young workers: Varieties of experience* (pp. 235–258). Washington, DC: American Psychological Association.
- Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influence, reciprocal, and individual differences. *Academy of Management Journal*, 46, 486–496.
- Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of pay cuts. *Journal of Applied Psychology*, 75, 561–568.
- Greenberg, L., & Barling, J. (1999). Predicting employee aggression against coworkers, subordinates and supervisors: The roles of person behaviors and perceived workplace factors. *Journal of Organizational Behaviour*, 20, 897–913.
- Greenberger, E., & Steinberg, L. D. (1986). *When teenagers work: The psychological and social costs of adolescent employment*. New York: Basic Books.
- Greenberger, E., Steinberg, L. D., & Ruggiero, M. (1982). A job is a job is a job . . . or is it? *Work and Occupations*, 9, 79–96.
- Henton, J., Cate, R., Koval, J., Lloyd, S., & Christopher, F. S. (1983). Romance and violence in dating relationships. *Journal of Family Issues*, 4, 467–482.
- Hershcovis, S. M., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., et al. (2005). *Right on target? A meta-analysis of the predictors of insider-initiated workplace aggression*. Unpublished manuscript.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Harcourt Brace.
- Hoobler, J. M., & Tepper, B. J. (2001, August). *An examination of the causal relationship between abusive supervision and subordinates' attitudes, distress and performance*. Paper presented at the meeting of the Academy of Management, Chicago.
- Huesmann, L. R., Moise-Titus, J., Podolski, C., & Eron, L. D. (2003). Longitudinal relations between children's exposure to TV violence and their aggressive and violent behavior in young adulthood: 1977–1992. *Developmental Psychology*, 39, 201–221.
- Inness, M., Barling, J., & Turner, N. (2005). Understanding supervisor-targeted aggression: A within-person, between-jobs design. *Journal of Applied Psychology*, 90, 731–739.
- Jenkins, E. L. (1996). *Violence in the workplace: Risk factors and prevention strategies* (DHHS [NIOSH] Publication No. 96–100). Washington, DC: U.S. Government Printing Office.
- Keashly, L., Trott, V., & MacLean, L. M. (1994). Abusive behavior in the workplace: A preliminary investigation. *Violence & Victims*, 9, 341–357.
- Krosnick, J. A., & Alwin, D. F. (1989). Aging and susceptibility to attitude change. *Journal of Personality and Social Psychology*, 57, 416–425.
- LeBlanc, M. M., & Kelloway, E. K. (2002). Predictors and outcomes of workplace violence and aggression. *Journal of Applied Psychology*, 87, 444–453.
- Lind, E. A., & Tyler, T. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86, 114–121.
- Lorence, J., & Mortimer, J. (1985). Job involvement through the life course: A panel study of three age groups. *American Sociological Review*, 50, 618–638.
- Loughlin, C. A., & Barling, J. (1999). The nature of youth employment. In J. Barling & E. K. Kelloway (Eds.), *Young workers: Varieties of experience* (pp. 17–36). Washington, DC: American Psychological Association.
- Loughlin, C. A., & Barling, J. (2001). Young workers' work values, attitudes, and behaviours. *Journal of Occupational and Organizational Psychology*, 74, 543–558.
- MacCallum, R. C., & Browne, M. W. (1993). The use of causal indicators in covariance structure models: Some practical issues. *Psychological Bulletin*, 114, 533–541.
- Magdol, L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Developmental antecedents of partner abuse: A prospective-longitudinal study. *Journal of Abnormal Psychology*, 107, 375–389.
- Mantell, M. R. (1994). *Ticking bombs: Defusing violence in the workplace*. Burr Ridge, IL: Irwin Professional Publishing.
- March, H. W. (1991). Employment during high school: Character building or a subversion of academic goals? *Sociology of Education*, 64, 172–189.
- Marcus-Newhall, A., Pedersen, W. C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: A meta-analytic review. *Journal of Personality and Social Psychology*, 78, 670–689.
- Mayhew, C., & Quinlan, M. (2002). Fordism in the fast food industry: Pervasive management control and occupational health and safety for young temporary workers. *Sociology of Health and Illness*, 24, 261–284.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage.
- Meyer, J. P., Paunonen, S. V., Gellatly, I. H., Goffin, R. D., & Jackson, D. N. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of Applied Psychology*, 74, 152–156.
- Murphy, C. M., & O'Leary, K. D. (1989). Psychological aggression predicts physical aggression in early marriage. *Journal of Consulting and Clinical Psychology*, 57, 579–582.
- National Institute for Occupational Safety and Health (NIOSH). (1996). *National research agenda* (DHHS Publication No. NIOSH 96–115). Washington, DC: U.S. Government Printing Office.

- National Institute for Occupational Safety and Health (NIOSH). (1997). *Special hazard review: Child labor research needs* (DHHS Publication No. NIOSH 97-143). Washington, DC: U.S. Government Printing Office.
- National Institute for Occupational Safety and Health (NIOSH). (2003). *Preventing deaths, injuries, and illnesses of young workers* (Publication No. 2003-128). Cincinnati, OH: NIOSH Publications Dissemination.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management*, 24, 391-419.
- O'Leary, K. D., Barling, J., Arias, I., Rosenbaum, A., Malone, J., & Tyree, A. (1989). Prevalence and stability of physical aggression between spouses: A longitudinal analysis. *Journal of Consulting and Clinical Psychology*, 57, 263-268.
- O'Leary, K. D., & Jouriles, E. N. (1994). Psychological abuse between adult partners: Prevalence and impact on partners and children. In L. L'Abate (Ed.), *Handbook of developmental and family psychology and psychopathology* (pp. 330-349). New York: Wiley.
- O'Leary-Kelly, A. M., Griffin, R. W., & Glew, D. J. (1996). Organization-motivated aggression: A research framework. *Academy of Management Review*, 21, 225-253.
- Perkins, C. A. (1997). *Special report: Age patterns of victims of serious violent crime*. Bureau of Justice Statistics. Retrieved December 30, 2003, from <http://www.ojp.usdoj.gov/bjs/pub/pdf/apvsvc.pdf>
- Porter, L. W. (1962). Job attitudes in management: I. Perceived deficiencies in need fulfillment as a function of job level. *Journal of Applied Psychology*, 46, 375-384.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698-714.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555-572.
- Rogers, K., & Kelloway, E. K. (1997). Violence at work: Personal and organizational outcomes. *Journal of Occupational Health Psychology*, 2, 63-71.
- Rubenstein, H., & Sternbach, M. R. (1999). Information from your family doctor: Health and safety issues for working teens. *American Family Physician*, 587, 60.
- Runyan, C. W., & Zakocs, R. C. (2000). Epidemiology and prevention of injuries among adolescent workers in the United States. *Annual Review of Public Health*, 21, 247-269.
- Ruscoe, G. (1996). Students who work. *Adolescence*, 31, 625-633.
- Sanford, M., Offord, D., McLeod, K., Boyle, M., Byrne, C., & Hall, B. (1994). Pathways into the work force: Antecedents of school and work force status. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 1036-1045.
- Schat, A. C. H., & Kelloway, E. K. (2000). Effects of perceived control on the outcomes of workplace aggression and violence. *Journal of Occupational Health Psychology*, 5, 386-402.
- Schlosser, E. (2002). *Fast food nation: The dark side of the all-American meal*. New York: Perennial.
- Snyder, H. N., Sickmund, M., & Poe-Yamagata, E. (1996). *Juvenile offenders and victims: 1996 update on violence, statistics summary*. Washington, DC: National Center for Juvenile Justice, Office of Juvenile Justice and Delinquency Program.
- Spielberger, C. D. (1999). *State-Trait Anger Expression Inventory* (professional manual). Lutz, FL: Psychological Assessment Resources.
- Steinberg, L., Fegley, S., & Dornbusch, S. M. (1993). Negative impact of part time work on adolescent adjustment: Evidence from a longitudinal study. *Developmental Psychology*, 29, 171-180.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 48, 465-479.
- Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, & coercive actions*. Washington, DC: American Psychological Association.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178-190.
- Tepper, B. J., Duffy, M. K., & Shaw, J. D. (2001). Personality moderators of the relationship between abusive supervision and subordinates' resistance. *Journal of Applied Psychology*, 86, 974-983.
- Townsend, J., Phillips, J. S., & Elkins, T. J. (2000). Employee retaliation: The neglected consequence of poor leader-member exchange relations. *Journal of Occupational Health Psychology*, 5, 457-463.
- Tucker, S., & Loughlin, C. (2006). Young workers. In E. K. Kelloway, J. Barling, & J. Hurrell (Eds.), *Handbook of workplace violence* (pp. 417-444). Thousand Oaks, CA: Sage.
- U.S. Bureau of Labor Statistics. (2004). *Characteristics of the unemployed*. Retrieved November 18, 2004, from <http://www.bls.gov/cps/home.htm#charunem>
- Wallace, M. (2003). Crime statistics in Canada. *Juristat*, 23.
- Zellers, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87, 1068-1076.

Received October 18, 2002

Revision received July 15, 2005

Accepted August 5, 2005 ■

## E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at <http://watson.apa.org/notify/> and you will be notified by e-mail when issues of interest to you become available!