

# Exploring the Role of Individual Differences in the Prediction of Workplace Aggression

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This study investigates the relationship between individual differences and the incidence of workplace aggression in a sample of employees from a transportation company and a public school system. Hierarchical multiple regression analysis indicated that measures of trait anger, attribution style, negative affectivity, attitudes toward revenge, self-control, and previous exposure to aggressive cultures accounted for 62% of the variance in the participants' self-reported incidence of workplace aggression. Further research on workplace aggression is advocated, focusing on the role of individual differences and their interactions with organizational and group-level variables.

During the past decade, the media has sensationalized acts of workplace aggression to the extent that "going postal" is now part of the vernacular of organizational discourse (Bensimon, 1994; Grimsley, 1998; Willingham, 1998). Accompanying the sensationalized accounts have been numerous practitioner-oriented articles attempting to explain the causes of workplace aggression (e.g., Silverstein, 1994; Stuart, 1992; Toufexis, 1994). In general, these articles contend that there are organizational-level causes such as rigid rules and oppressive working conditions (e.g., Armour, 1998; Grimsley, 1998), as well as individual-level causes, which describe perpetrators as disenfranchised loners who inappropriately attribute personal problems to the organization, supervision, or co-workers (Silverstein, 1994; Stuart, 1992; Toufexis, 1994; Willingham, 1998).

In conjunction with the situation described above, a succession of academic works has emerged in the organizational literature. The majority of this work is theoretical, which is probably due to both the recency of interest and the practical limitations of conducting field research in this area. Representative conceptualizations of workplace aggression are presented by Folger and Skarlicki (1998), Neuman and Baron (1998), Martinko and Zellars (1998), O'Leary-Kelly, Griffin, and Glew (1996), and Robinson and Greenberg (1998). However, although all these frameworks discuss individual and situational factors as antecedents to workplace aggression, there are some inconsistencies as to the importance of individual differences as independent predictors of aggressive workplace behavior.

O'Leary-Kelly et al. (1996) recognized that individual differences play a role in workplace aggression, but this process is not thoroughly articulated, and organizational or group levels of analysis are emphasized. More precisely, they indicate that their model and discussion are limited to the subset of injurious actions that are

prompted by factors in the organization. Moreover, although they do acknowledge the potential contribution of individual differences, they appear to discourage the investigation of these differences, indicating that "predictions of individual violence tend to be greatly overestimated. . . . Best predictors of criminal violence are demographic variables . . . which companies clearly are not free to use given Title VII. . . . We believe that an exclusive focus on these antecedent factors is misguided" (O'Leary-Kelly et al., 1996, p. 247). Similarly, in their discussion of deviant workplace behavior (which includes workplace aggression), Robinson and Greenberg (1998) noted that "no clear picture emerges of the deviant personality type in organizations. Indeed personality variables by themselves account for only a small portion of the variance in predicting deviant workplace behavior" (p. 13). Thus, this literature suggests that the potential of individual-differences variables in explaining workplace aggression is limited, particularly if they are considered as independent predictors of workplace aggression.

Martinko and Zellars (1998), Neuman and Baron (1998), and Folger and Skarlicki (1998) also recognized the contribution of individual and situational variables. Specifically, Martinko and Zellars presented a cognitive appraisal perspective, which focuses on the role of individual differences, proposing that individual differences with regard to the interpretation of situational factors are significant predictors of individuals who are predisposed to workplace aggression. Although Neuman and Baron (1998) put the majority of their emphasis on situational factors, they indicated that individual characteristics such as Type A behavior patterns, self-monitoring, and hostile attributional style may play important roles in predicting aggressive workplace behavior. Finally, in discussing their "popcorn" model, Folger and Skarlicki (1998) stated,

When we first conceived of the popcorn metaphor, our motivation had a lot to do with seeing the need for a counterbalance to a trend apparent at the time. Discussions in popular media . . . seem to over-emphasize a "profile" approach to workplace aggression, offering advice about the type of person who—as a disgruntled employee—might be most likely to "explode." . . . It seemed to us that such an orientation underestimated the power of the situation. . . . Now, however, we return full circle . . . to consider a true Person  $\times$  Situation interaction. (p. 75)

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Much of the empirical work (e.g., Greenberg, 1990; Robinson & O'Leary-Kelly, 1998; Skarlicki & Folger, 1997) emphasizes organizational and group-level factors as predictors of workplace aggression. Robinson and O'Leary-Kelly tested several hierarchical models of antisocial behavior and reported that the modeling of antisocial behavior by work group members significantly influenced self-reports of antisocial behavior by individual members of the work group. The amount of variance in individual antisocial behavior that was accounted for by the set of factors in the Robinson and O'Leary-Kelly study, which excluded individual differences other than demographic characteristics, approached 40%. Skarlicki and Folger reported that organizational injustice was positively related to organizational retaliatory behaviors (e.g., employee theft, sabotage, disobeying of supervisor's instructions). Furthermore, Skarlicki and Folger reported that their model, which consisted of factors concerning distributive, procedural, and interactional justice, accounted for 68% of the variance in obtained scores. Similarly, Greenberg reported that underpayment inequity was positively related to employee theft; however, the percentage of variance explained by underpayment inequity was not reported.

Because there has been so little empirical work concerning aggressive workplace behavior, it is difficult to discern the role of individual differences in explaining the incidence of workplace aggression. Although much of the empirical research indicates that organizational and group-level factors are important predictors of workplace aggression (e.g., Greenberg, 1990; Robinson & O'Leary-Kelly, 1998; Skarlicki & Folger, 1997), there is some recent empirical evidence that indicates the importance of individual differences other than demographics. Specifically, Skarlicki, Folger, and Tesluk (1999) found that the individual differences of negative affect and agreeableness moderated the relationship between perceptions of organizational injustice and organizational retaliatory behavior. Thus, on the basis of this research and the recognition of the potential role of individual differences suggested by Folger and Skarlicki (1998), Martinko and Zellars (1998), and Neuman and Baron (1998), we believe that the predictive power of models of workplace aggression can be increased by more thoroughly integrating individual differences. More specifically, whereas much of the workplace aggression literature discusses the importance of individual differences and the interaction of these variables with situational variables, the majority of the empirical work has focused on organizational or group-level factors. For this reason, we believe that a systematic attempt to assess the role of individual factors that may be predictive of workplace aggression is warranted.

The purpose of the present study is to explore individual differences that are believed to be related to the incidence of workplace aggression. The article begins with a definition for the incidence of workplace aggression, followed by a description of six salient individual differences that have often been identified in the aggression literature. Next, the sampling procedures and instruments are described. Last, a discussion of the results is provided, which emphasizes how individual differences can increase the explanatory power of current models of workplace aggression.

### Incidence of Workplace Aggression

Several descriptions of aggressive workplace behaviors have been offered. For example, Giacalone and Greenberg (1997) de-

scribed antisocial workplace behavior as employee behavior that is intended to bring harm to coworkers or the employing organization. Robinson and Bennett (1997) described workplace deviance as voluntary employee behavior that violates organizational norms and threatens the well-being of coworkers or the employing organization. Similar to these descriptions, Baron and Neuman (1996) and Martinko and Zellars (1998) described workplace aggression as employee behavior that is intended to harm coworkers or the employing organization. Following these researchers, we define the incidence of workplace aggression as the frequency of acts by employees to harm (actual or potential) others with whom they work or the employing organization.

### Individual Differences

The aggression literature describes numerous individual differences that may be associated with the incidence of workplace aggression, including but not limited to trait anger (Berkowitz, 1993; Spielberger, 1996), emotional susceptibility (Caprara, Renzi, Alcini, D'Imperio, & Travaglia, 1983), negative affectivity (Skarlicki et al., 1999; Watson & Clark, 1984), impulsivity (Baron & Richardson, 1994), self-control (Megargee, 1966), perceived controllability (Weiner, 1995), hostile attribution bias (Dodge & Coie, 1987), Type A behavior (Baron, Neuman, & Geddes, 1999), emotional reactivity (Berkowitz, 1993), attitudes toward revenge (Stuckless & Goranson, 1992), egotism (Mack, Shannon, Quick, & Quick, 1998), agreeableness (Skarlicki et al., 1999), anxiety (Anderson, Deuser, & DeNeve, 1995), gender (Eagly & Steffan, 1986), and past history (Bandura, 1973). However, from a practical perspective, it is unrealistic to include all of these factors in a single research design. Therefore, we selected a limited number of individual differences, which on the basis of theory and research appear to have a reasonable possibility of accounting for a significant proportion of the variability in the incidence of workplace aggression.

### Trait Anger

The anger and aggression literature refers to anger as a strong negative emotional state that may instigate aggressive behavior (Berkowitz, 1993; Geen, 1990; Weiner, 1995). In addition, this literature indicates that the emotional state of anger comprises several feelings that fluctuate in intensity over time. Specifically, this literature indicates that angry feelings range in intensity from mild annoyance to extreme fury or rage (Spielberger, 1996).

Recently, Spielberger (1996) described two categories of anger: state anger and trait anger. State anger is described as an emotional response to a particular event, which consists of several feelings that range in intensity and fluctuate over time. In contrast, trait anger is described as a disposition to experience state anger over time and context (Spielberger, 1996). Moreover, whereas state anger is viewed as a temporary or transitory emotional response, trait anger is viewed as a stable personality trait (Spielberger, 1996). Thus, because state anger refers to a temporary response to a particular event and trait anger refers to individuals' dispositions to experience state anger over time and context, this study focuses on trait anger.

Some people experience higher frequencies of state anger (high-trait-anger individuals) than do other people (low-trait-anger indi-

viduals). Further, high-trait-anger individuals are more likely to respond aggressively to particular situations than are low-trait-anger individuals, because high-trait-anger individuals are assumed to perceive a wider range of situations as anger provoking than do low-trait-anger individuals (Spielberger, 1996).

There is some empirical support for the notion that high-trait-anger individuals are more likely to react aggressively to provoking situations than are low-trait-anger individuals and for the notion that high-trait-anger individuals perceive a wider range of situations as anger provoking than do low-trait-anger individuals. For example, Caprara et al. (1983) found that individuals who experience higher frequencies of irritability are more likely to respond aggressively to provoking situations than individuals who experience lower frequencies of irritability. In addition, Gibson and Barsade (1999) found that employees who report higher levels of chronic anger (i.e., ongoing, generalized feelings of anger directed toward others in the workplace) are less likely to believe that they have been treated with dignity and respect by their supervisors and more likely to feel betrayed by their employers than employees who report lower levels of chronic anger.

On the basis of the anger literature, it appears that individuals may differ in their tendencies to experience state anger over time. Furthermore, on the basis of the anger and aggression literature, it appears that high-trait-anger individuals are more likely to both perceive a wider range of situations as anger provoking and engage in acts of workplace aggression than are low-trait-anger individuals. Thus, on the basis of the anger and aggression literature and the arguments presented herein, the following hypothesis is proposed:

*Hypothesis 1:* There is a positive relationship between trait anger and the incidence of workplace aggression.

### *Attitude Toward Revenge*

People who view aggressive behavior as acceptable or justifiable are more likely to engage in aggression than people who view aggressive behavior as unacceptable or unjustifiable (Bulatao & VandenBos, 1996). When people engage in aggressive behaviors for purposes of revenge, which refers to the infliction of harm in return for perceived harm (Elster, 1990; Stuckless & Goranson, 1992), they view their behavior as acceptable and justifiable (Stuckless & Goranson, 1992; Turner & Cashdan, 1988). Thus, the desire to seek revenge may be related to the incidence of aggressive behavior.

Revenge has been found to be a key factor in several studies of aggression. For example, Ney (1987) found that revenge was associated with assault, and Turner and Cashdan (1988) found that shoplifters often indicated that they engaged in shoplifting because they felt abused by the company. In the workplace context, Terris and Jones (1982) found that revenge was associated with employee theft. Similarly, Skarlicki and Folger (1997) found that when employees perceived that they were treated unfairly by the employing organization, they were more likely to engage in organizational retaliatory behaviors than when they perceived that they were treated fairly by the employing organization. More recently, Skarlicki et al. (1999) found that the relationship between perceptions of fairness and organizational retaliatory behaviors was stronger for employees who exhibited high negative affectivity than for employees who exhibited low negative affectivity.

Finally, it appears that individuals differ in their predisposition toward seeking revenge (Stuckless & Goranson, 1992). Specifically, some people possess more positive attitudes toward seeking revenge than others and have been referred to as avengers (e.g., Elster, 1990). Whereas people who feel guilty about seeking revenge may fail to be aggressive (Geen, 1990), avengers typically refuse to forget a misdeed to which they have been exposed and tend to be aggressive (Elster, 1990). Hence, given the empirical evidence that suggests that revenge is related to the incidence of workplace aggression (e.g., Skarlicki & Folger, 1997; Skarlicki et al., 1999; Terris & Jones, 1982), it appears that employees differ in their frequency of engaging in acts of workplace aggression to the extent they differ in their predisposition toward seeking revenge. Thus, on the basis of the revenge literature, the following hypothesis is stated:

*Hypothesis 2:* There is a positive relationship between attitude toward revenge and the incidence of workplace aggression.

### *Negative Affectivity*

*Negative affectivity* refers to a general disposition towards subjective distress (Watson, 1988; Watson & Clark, 1984). On the one hand, participants who exhibit high negative affectivity tend to perceive themselves as in distress, are highly sensitive to negative events, and have a generally pessimistic view of themselves and their surroundings. On the other hand, people who exhibit low negative affectivity perceive their world as less stressful, are less reactive to negative events, and are more optimistic about themselves and their surroundings (Mangan, Quartermain, & Vaughan, 1960; Watson, 1988).

Negative affectivity has been associated with aggression in the broader social psychological literature and in the workplace aggression literature. In the social psychology literature, Geen (1995) indicated that negative affectivity is a precursor to aggression, and Berkowitz (1983, 1993) argued that negative affectivity is directly related to aggression in that people who display high negative affectivity are more sensitive to aversive outcomes and more likely to respond aggressively to negative stimulation than people who display low negative affectivity. In the workplace aggression literature, Martinko and Zellars (1998) and Andersson and Pearson (1999) suggested that there is a positive relationship between negative affectivity and the incidence of workplace aggression. More precisely, Martinko and Zellars argued that individuals who exhibit high negative affectivity are more likely to exhibit hostile attribution styles and, as a result, are more disposed toward workplace aggression.

Some evidence suggests that negative affect is related to the incidence of workplace aggression. For example, Skarlicki et al. (1999) found that the relationship between employees' perceptions of fairness and organizational retaliatory behaviors is stronger for people who display high negative affectivity than for people who display low negative affectivity. George (1992) reported that people who exhibit high negative affectivity have worse relationships with their supervisors and are more difficult to like than people who exhibit low negative affectivity. Furthermore, negative affectivity has been found to be associated with aggression in general (e.g., Eysenck & Gudjonsson, 1989; Heaven, 1996). Thus, in consideration of both the theory and research described above, the following hypothesis is proposed:

*Hypothesis 3:* There is a positive relationship between negative affectivity and the incidence of workplace aggression.

### *Self-Control*

The literature on self-control (e.g., Block, 1977; Buss, 1961; Geen, 1990; Sarchione, Cuttler, Muchinsky, & Nelson-Gray, 1998) suggests that the inability of individuals to manage their emotions may be related to the incidence of workplace aggression. For example, Buss (1961) indicated that self-control is related to the individual's ability to manage his or her frustrations. Moreover, Buss argued that individuals with low self-control engage in more aggressive behaviors than individuals with high self-control because low-self-control individuals lack strong inhibition, which is characteristic of high-self-control individuals. Geen (1990) suggested that whereas individuals who possess higher levels of self-control are likely to remain calm during provocative situations, individuals who possess lower levels of self-control are likely to respond aggressively to provocative situations. Similarly, Baron and Richardson (1994) described low-self-control individuals as those who exhibit a "stable tendency to react offensively to minimal provocations" (p. 212). Finally, Hynan and Grush (1986) found that males who score higher on impulsivity, which appears to be the reciprocal of self-control, are more likely to exhibit aggressive behavior in an experimental setting than males who score lower on impulsivity. Thus, based on the theory and research discussed above, in the workplace context we expect the following:

*Hypothesis 4:* There is a positive relationship between low self-control and the incidence of workplace aggression.

### *Attributional Style*

Recent conceptualizations of the dynamics associated with anger and aggression (Greenberg & Alge, 1998; Mack et al., 1998; Martinko & Zellars, 1998; Neuman & Baron, 1998; Weiner, 1995) indicate that a person's cognitive appraisal of negative outcomes may predict anger and subsequent aggression. Specifically, this literature suggests that the likelihood of individuals responding aggressively to negative situations depends in part on their judgments of causality (i.e., to what they attribute the cause of the negative situations). Moreover, within the workplace context, Martinko and Zellars (1998) proposed that when individuals exhibit tendencies to attribute negative workplace outcomes to other persons or the employing organization (i.e., external attributions) and believe that these outcomes were controllable, intentional, and stable and that there were no mitigating circumstances, anger and subsequent aggression are more likely to be demonstrated than if individuals exhibit tendencies to attribute the causes to factors that are internal, uncontrollable, unintentional, or unstable.

Although we are not aware of any validation of the notion that attributional tendencies or styles are related to the incidence of workplace aggression, numerous studies have documented that attributions and attributional styles affect behavior in organizational contexts (e.g., Anderson, Jennings, & Arnoult, 1988; Dobbins & Russell, 1986; Moss & Martinko, 1998; Seligman, 1990). In addition, the results of several studies of aggression in general (e.g., Dodge, 1987; Dodge, Murphy, & Buchsbaum, 1984; Epstein & Taylor, 1967; VanOostrum, 1997) have indicated that an attri-

bution of intent to harm is a powerful determinant of aggressive retaliation. For example, Nasby, Hayden, and DePaulo (1980) and Dodge and Coie (1987) found that aggressive participants exhibit a heightened tendency to attribute hostile intent to others' actions even when the latter's actions are ambiguous. Thus, on the basis of theory and research from the organizational and social psychological literature, it appears that hostile attribution style may be related to the incidence of workplace aggression.

*Hypothesis 5:* There is a positive relationship between hostile attributional style (i.e., tendency to make external, stable, controllable, and intentional attributions for negative workplace outcomes) and the incidence of workplace aggression.

### *Past History*

A fundamental tenet of Bandura's (1965, 1973, 1983) social learning theory of aggression is that aggressive behaviors are learned in a social context. Moreover, the social learning literature on aggression indicates that individuals learn to be aggressive through processes such as reinforcement and modeling of aggressive behavior. Thus, according to this line of reasoning, the environment in which a person develops is viewed as a strong causal factor in determining whether he or she displays aggressive behavior later in life.

Numerous laboratory studies have demonstrated that participants respond aggressively after observing aggressive models (e.g., Bandura, 1973; Bandura, Ross, & Ross, 1963). Also, much evidence indicates that aggressive behavior is often learned in the family environment (Berkowitz, 1993; Bjorkqvist, 1997; Geen, 1990; Kirwil, 1997; Patterson, 1980). For example, Huesmann, Eron, Lefkowitz, and Walder (1984) conducted a longitudinal study that examined aggression and found that the parents' aggressive tendencies were significantly and positively correlated with their adult child's aggressive tendencies. In addition, studies have indicated that there are particular subcultures that condone unusually high levels of aggressive behavior (Nisbett, 1993; Short, 1968), and Geen (1990), Berkowitz (1993), and Wolfgang and Ferracuti (1967) have argued that people who grow up in more aggressive-prone cultures are likely to be predisposed to aggression in their adult lives. Hence, in the social psychology literature, it appears that there is almost unequivocal support for the notion that aggression can be learned and that one's previous exposure to aggressive cultures will influence his or her aggressive tendencies later in life. Thus, on the basis of this literature, we hypothesize that

*Hypothesis 6:* There is a positive relationship between previous exposure to aggressive cultures and the incidence of workplace aggression.

### *Interactions*

As suggested by the models of workplace aggression described above, a multitude of variables influence the process of aggression, and it is likely that there are many complex interactions among the variables as they relate to the incidence of workplace aggression. However, because it is not practical to test all of the possible interactions among these variables, we have selected two of these

interactions that are likely to account for a significant portion of the variability in the incidence of workplace aggression.

### *Trait Anger $\times$ Self-Control*

Although we are unaware of any research that directly links trait anger and self-control, we believe that there is a reasonable probability that these two variables interact to influence the incidence of workplace aggression. That is, the concepts of both state anger and self-control appear to be related in that theory and research indicate that as opposed to others, individuals who are high in state anger and low in self-control are more likely to express irritability, which often results in aggressive behavior (Buss, 1961; Caprara et al., 1983). In addition, it appears that trait anger influences whether individuals interpret a particular situation as provoking (Spielberger, 1996) and self-control influences whether a person is likely to respond aggressively to a provocation (Geen, 1990). Thus, combining these two factors, we expect that trait anger (which increases the likelihood of state anger) and self-control interact so that individuals who are high on trait anger and low in self-control are more likely to become aggressive than others. Therefore, we propose that

*Hypothesis 7:* Self-control will moderate the relationship between trait anger and the incidence of workplace aggression in such a way that the lower the self-control, the stronger the relationship.

### *Attitude Toward Revenge $\times$ Previous Exposure to Aggressive Cultures*

A second interaction that may help explain the incidence of workplace aggression is the interaction of attitude toward revenge by previous exposure to aggressive cultures. Although some individuals are predisposed to seeking revenge, they might not use aggression as a vehicle for revenge. For example, rather than responding aggressively to a perceived wrongdoing one may elect to report the wrongdoing to the proper authorities.

The literature cited above (e.g., Bandura, 1973; Berkowitz, 1993; Bjorkqvist, 1997; Geen, 1990; Huesmann et al., 1984; Kirwil, 1997; Patterson, 1980; Wolfgang & Ferracuti, 1967) suggests that individuals' responses to provocative situations are influenced by culture. More precisely, this literature indicates that individuals are more likely to respond aggressively to perceived wrongdoing when they have been exposed to cultures that support aggression than when they have been exposed to cultures that do not support aggression. Thus, we may view previous exposure to aggressive cultures as a moderator of the effects of attitudes toward revenge on aggression, so that individuals who are high on attitudes toward revenge may be less likely to report aggression when they have had less as opposed to more exposure to aggressive cultures. The reason is that culture may provide the mechanism for learning how to express revenge and that, as a result, those individuals who have not had significant exposure to aggressive cultures may not manifest aggression, even if they have positive attitudes toward revenge. Therefore, we propose that

*Hypothesis 8:* Previous exposure to aggressive cultures will moderate the relationship between attitude toward revenge and the incidence of workplace aggression in such a way that the higher the previous exposure to aggressive cultures, the stronger the relationship.

## Control Variables

### *Gender*

Studies indicate that males tend to be more aggressive than females (Feshbach, 1997; Geen, 1990; Reinisch & Sanders, 1986; Whiting & Edwards, 1973) and score higher on attitude toward revenge than females (Stuckless & Goranson, 1992) and that after displaying aggressive behavior, women are more likely than men to experience fear, anxiety, and guilt (Eagly & Steffan, 1986). However, recently, Bettencourt and Miller (1996) found that although males are more likely to react aggressively in unprovoked situations than are females, provocation greatly attenuates this difference. Nevertheless, because the results of these studies indicate that gender may be related to aggressive behavior, gender is controlled for in this study.

### *Age*

Both the social psychological and organizational literature (e.g., Feshbach, Feshbach, & Jaffe, 1997; Geen, 1990; Murphy, 1993; Rotenberg, 1985) suggest that age is related to the incidence of workplace aggression. Specifically, studies indicate that as people grow older, they are able to provide more reasons for being angry during provocative situations, better at understanding the causes for their anger, and able to exert greater cognitive control over their expressions of anger (Geen, 1990; Rotenberg, 1985). Thus, age is controlled for in this study.

### *Profession*

The industrial relations literature suggests that differences between professions are associated with the incidence of workplace aggression. For example, the results of a study on the roots of industrial conflict and the propensity to strike suggest that some professions are more prone to acts of workplace aggression than are others (Kerr & Siegel, 1954). Specifically, Kerr and Siegel found that workers strike most often and most violently when employed in professions that tend to isolate them from society, coupled with a strong sense of lower-class-mindedness. For this reason, profession is controlled for in this study.

### *Education and Tenure*

The organizational literature also suggests that one's level of education and organizational tenure are related to the incidence of workplace aggression. For example, Mensch and Kandel (1988) found that one's level of education is associated with substance abuse while at work, and substance abuse often has been associated with acts of workplace aggression (Barling, 1996; Chappell & Di Martino, 1998). In addition, the results of a study conducted by Robinson and O'Leary-Kelly (1998) indicate that organizational tenure is associated with individual antisocial behavior while at work. For these reasons, one's level of education and organizational tenure are controlled for in this study.

## Method

### *Sample*

The sample consisted of 151 employees from two organizations located in the northeastern United States. Ninety-seven of the participants were

employed by a medium-sized transportation company, and 54 were employed by a public school system. Whereas 120 of the participants were in nonmanagement positions, 21 were in line management, 6 were in middle management, and 4 were in senior management positions. In addition, the sample included 76 men and 75 women with an average tenure of 4 years and an average age of 35 years. Furthermore, the sample comprised 136 Whites, 9 Native Americans, 2 African Americans, 2 Asians, and 2 Hispanics.

## Measures

**Incidence of workplace aggression.** A 13-item scale that was adapted from Robinson and O'Leary-Kelly's (1998) 9-item Individual Antisocial Behavior Scale was used to measure the incidence of workplace aggression. Specifically, the 13-item scale included the 9 items from Robinson and O'Leary-Kelly's scale, as well as 4 additional items that were developed for this study. The 13 items asked the participants to indicate on a 5-point scale the extent that they had engaged in aggressive workplace behaviors during the past 6 months. The additional items were as follows: "Doing unkind things to purposely harm other coworkers while at work," "Saying unkind things to purposely harm other coworkers while at work," "Saying nasty things about other coworkers while at work," and "Saying nasty things about the organization while at work." Higher scores indicate a higher incidence of workplace aggression.

The 13-item scale was pilot tested on 100 students taking management courses at a large southeastern university. The responses were subjected to a principal-components analysis using Kaiser's criterion and a scree plot (Kim & Mueller, 1978). The results of this analysis indicated that the 13 items loaded on a single factor. In addition, the responses were examined for evidence of internal consistency. For the 9-item scale, Robinson and O'Leary-Kelly (1998) reported alphas of .68 for a sample consisting of 187 full-time employees and .75 and .81 for a sample consisting of 102 master's of business administration students taken at two different points in time. The alphas for the 13-item scale were .92 and .93 for the pilot study and the main study, respectively.

**Trait anger.** The 10-item Trait-Anger subscale of the State-Trait Anger Expression Inventory (Spielberger, 1996) was used to measure trait anger. The subscale consists of Likert-type items that measure individual differences in the inclination to experience state anger over time. For example, on a 4-point scale, participants are asked to indicate how they generally feel about having a fiery temper or feeling annoyed when they do not receive recognition for doing good work. Higher scores indicate higher trait anger. For the 10-item subscale, past studies have reported internal reliability coefficients exceeding .70 (Spielberger, 1996). For this study, the internal reliability coefficient was .91.

**Attitude toward revenge.** Stuckless and Goranson's (1992) 20-item Vengeance Scale was used to measure a person's attitude toward revenge. The 20-item scale consists of 7-point Likert-type items that measure the extent a person possesses a positive attitude toward revenge. Examples of the statements include "I don't just get mad, I get even," "I believe in the motto an eye for an eye, a tooth for a tooth," and "Revenge is sweet." Higher scores indicate more positive attitudes toward revenge. Stuckless and Goranson reported an internal reliability coefficient of .92. For this study, the internal reliability coefficient was .95.

**Negative affect.** We used the 10-item Negative Affect subscale of the Positive Affect and Negative Affect Scale (Watson, Clark, & Tellegen, 1988) to measure negative affect. Using 10 mood descriptors (e.g., afraid, upset, hostile), participants are asked on a scale of 1 to 5 to indicate the degree to which they generally feel the way being described. Higher scores indicate higher levels of negative affect. Watson and Clark (1984) reported internal reliability coefficients exceeding .82 across four samples for the 10-item subscale. For this study, the internal reliability coefficient was .87.

**Self-control.** The Self-Control subscale of the Personal Values Scale (Scott, 1965) was used to measure the participant's level of self-control. The 20-item subscale consists of Likert-type items that measure the extent

people value self-control. For example, participants are asked to indicate the extent to which they admire particular behaviors, including "swearing when one is angry" and "showing one's feelings readily." However, for this study, the subscale was adapted so that participants were asked to indicate on a scale of 1 to 5 the accuracy of the following statements: "I swear when I am angry" and "I show my feelings readily." Higher scores indicated less self-control. Scott reported an internal consistency coefficient for the Self-Control subscale that exceeded .80. For this study, the internal reliability coefficient was .92.

**Attributional style.** We used 32 items from the Organizational Attributional Style Questionnaire (OASQ; C. R. Campbell & Martinko, 1998; Kent & Martinko, 1995; Martinko & Moss, 1999) to measure the extent a person exhibits a hostile attributional style. The 32-item scale consists of 7-point Likert-type items that measure the extent individuals exhibit a tendency to attribute negative workplace outcomes to external, stable, intentional, and controllable causes. For example, participants are provided with the following scenarios: "You receive almost no raise compared to others in your department" and "You fail to receive a promotion that you wanted for a long time." They are then asked, "To what extent is this outcome caused by something about you [1] versus other people or circumstances [7]?" "To what extent is this outcome caused by things that vary over time [1] versus things that are stable over time [7]?" "To what extent do you believe that another individual (entity) had absolutely no control over this outcome [1] versus had total control over this outcome [7]?" and "To what extent do you believe that another individual (entity) did not intend for the outcome to occur [1] versus totally intended for the outcome to occur [7]?" Scores on each dimension are obtained by calculating the average of the responses on that dimension. A composite score for attributional style is then obtained by calculating the average of the four dimensions. Higher scores indicate more hostile attributional styles. In previous studies that used the OASQ, internal reliability coefficients exceeded .70 (Kent & Martinko, 1995). In this study, the internal reliability coefficient was .89.

**Previous exposure to aggressive cultures.** To measure previous exposure to aggressive cultures, we developed a six-item scale (see the Appendix). The scale was based on an extensive review of the aggression literature (e.g., Berkowitz, 1993; Geen, 1990) and our own ideas concerning the characteristics of aggressive cultures. Originally, we developed a seven-item scale that made inquiries concerning the participants' previous experiences. For example, the participants were asked to indicate on a 5-point scale ranging from 1 (*absolutely not true*) to 5 (*absolutely true*) the extent they believed the following statements to be true: "In the neighborhood(s) that I grew up in people were often threatening to do bad things to each other" and "In the home I grew up in people were often engaged in verbal confrontations."

We pilot tested the 7-item scale using 64 students taking management courses at a large southeastern university. The results of a principal-components analysis using Kaiser's criterion and a scree plot indicated that the seven items loaded on two factors. Specifically, six of the items loaded strongly and positively on one factor, and one item loaded strongly and positively on another factor. Furthermore, whereas the internal consistency coefficient for the seven-item scale was .83, a reliability analysis indicated that dropping the item that loaded on the second factor would increase the coefficient to approximately .88. Subsequently, the seventh item, which asked about the extent participants watched violent television programs while growing up, was deleted.

The remaining six items were then pilot tested on a separate group of 56 students taking management courses at the same university. The results of a principal-components analysis indicated that all six items loaded strongly and positively on one factor and that this factor accounted for nearly 65% of the variance in the obtained scores. In addition, a reliability analysis indicated that the internal consistency coefficient for the six-item scale was .87. The reliability coefficient for the main study was .95.

### Procedure

Common method variance (D. T. Campbell & Fiske, 1959; Fiske, 1982) has been a concern when using self-reports in organizational research (Podsakoff & Organ, 1986). Presumably, common method variance inflates the observed relationships among variables because of the use of a single source of measurement (Podsakoff & Organ, 1986). However, researchers may use procedural methods to help attenuate the effect of common method variance on study results. In this study, we used one of the procedural methods suggested by Podsakoff and Organ (1986). Specifically, the participants were given the predictor scales to complete first, and 5 to 7 days later, they were given the criterion scales.

One hundred fifty-eight people participated in the study. However, complete data were received from 151 participants. All administrations were conducted by one of the principal investigators in the participants' workplaces, and no references were made to link the two administrations. Furthermore, no members of higher level management were present when we administered the instruments to lower level personnel, and we assured participants of the anonymity of their responses by asking them to provide identifying information during both administrations that was not recognizable by other members of their organization.

### Data Analysis

We used hierarchical multiple regression procedures to estimate the model, which included the five control variables, the six individual differences, and the Trait Anger  $\times$  Self-Control and Attitude Toward Revenge  $\times$  Previous Exposure to Aggressive Cultures interactions. The set of control variables was entered in the first stage followed by the sets of individual differences and interactions in the second and third stages, respectively. We estimated the model using SPSS 9.0 (1998) software and dummy coded the dichotomous predictor variables, gender and profession, before estimating the model. Finally, because we hypothesized directionality, we used a one-tailed test to determine the significance of the hypothesized relationships.

### Results

Means, standard deviations, and Pearson product-moment correlations are presented in Table 1. These results indicated that the bivariate correlations between the incidence of workplace aggression and the predictor variables of trait anger, attitudes toward revenge, negative affectivity, self-control, attributional style, and

previous exposure to aggressive cultures were in the anticipated direction and significantly correlated.

To reduce the effect of multicollinearity between the interaction terms and related main effects, we centered the interaction terms around zero before estimating the model (Aiken & West, 1991; Smith & Sasaki, 1979). Table 2 contains the results of the hierarchical multiple regression analysis after centering. According to these results, the hypothesized model accounted for 67% of the variance in the obtained scores for the incidence of workplace aggression,  $F(13, 137) = 20.99, p \leq .001$ . These results also indicated that the set of individual variables accounted for an additional 59% ( $p \leq .001$ ) of the variance in the incidence of workplace aggression beyond the variance being explained by the set of control variables and that the set of interaction terms accounted for an additional 3% ( $p \leq .01$ ) of the variance in the incidence of workplace aggression beyond that being explained by the sets of control and individual variables.

The results shown in Table 2 indicated that the main effects of trait anger, attitude toward revenge, attributional style, and previous exposure to aggressive cultures were in the hypothesized direction and significant ( $p \leq .05$ ). Thus, these results suggested that individuals who exhibited higher levels of trait anger were more likely to report a higher incidence of workplace aggression than individuals who exhibited lower levels of trait anger (Hypothesis 1), individuals who possessed more positive attitudes toward revenge were more likely to report a higher incidence of workplace aggression than individuals who possessed less positive attitudes toward revenge (Hypothesis 2), individuals who exhibited more hostile attributional styles were more likely to report a higher incidence of workplace aggression than individuals who exhibited less hostile attributional styles (Hypothesis 5), and individuals who had been exposed to more aggressive cultures were more likely to report a higher incidence of workplace aggression than individuals who had been exposed to less aggressive cultures (Hypothesis 6).

On the other hand, as shown in Table 2, the main effects for negative affectivity and self-control were not significant, indicating that neither self-control nor negative affectivity independently accounted for a significant amount of the variability in the inci-

Table 1  
Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. IWA	22.48	11.27	—											
2. TA	21.64	6.81	.68*	—										
3. ATR	53.69	25.71	.68*	.73*	—									
4. NA	16.72	5.91	.21*	.23*	.19*	—								
5. SC	55.91	13.87	.57*	.70*	.66*	.01	—							
6. AS	3.59	1.09	.60*	.58*	.64*	.18*	.52*	—						
7. PH	12.90	7.27	.54*	.51*	.52*	.34*	.42*	.38*	—					
8. Gender	0.50	0.50	.00	.13	.23	-.01	.22	.15	.11	—				
9. Age	3.47	1.14	-.02	-.07	-.04	.26	-.05	.14	-.05	-.01	—			
10. Profession	0.64	0.48	-.11	.08	.15	-.20	.22	.12	.04	.59	-.19	—		
11. Education	3.46	1.71	-.01	-.06	-.18	.15	.10	-.12	-.09	-.41	.13	-.66	—	
12. Tenure	4.32	2.14	.12	-.02	.03	.22	-.05	.05	-.03	-.24	.58	-.47	.31	—

Note. *N* = 151. IWA = incidence of workplace aggression; TA = trait anger; ATR = attitude toward revenge; NA = negative affectivity; SC = self-control; AS = attributional style; PH = previous exposure to aggressive cultures.

\*  $p < .05$ .

Table 2  
*Results of Hierarchical Regression Analysis for the Incidence of Workplace Aggression*

Variable	Step 1	Step 2	Step 3
Step 1			
Age	-.088		
Education	-.069		
Gender <sup>a</sup>	-.050		
Profession <sup>b</sup>	-.156		
Organizational tenure	.101		
Step 2			
Trait anger		.220**	
Attitude toward revenge		.179*	
Negative affectivity		.023	
Low self-control		.081	
Attribution style		.152*	
Previous exposure to aggressive cultures		.122*	
Step 3			
Trait Anger $\times$ Self-Control			.137*
Attitude Toward Revenge $\times$ Aggressive Cultures			.121

Note.  $N = 151$ .  $R^2 = .05$  for Step 1,  $\Delta R^2 = .59$  for Step 2 ( $p \leq .001$ ), and  $\Delta R^2 = .03$  for Step 3 ( $p \leq .01$ ). Entries are standardized betas.

<sup>a</sup> Male = 1, female = 0. <sup>b</sup> Transportation = 1, teachers = 0.

\*  $p \leq .05$ . \*\*  $p \leq .01$ .

dence of workplace aggression. Thus, Hypothesis 3 and Hypothesis 4 failed to be supported by this analysis.

The results shown in Table 2 also did not support Hypothesis 8, which stated that there would be an interaction between previous exposure to aggressive cultures and attitude toward revenge with regard to their effects on the incidence of workplace aggression. On the other hand, Hypothesis 7, which predicted an interaction between trait anger and self-control with regard to their effect on the incidence of workplace aggression, was supported ( $p \leq .05$ ). To further explore the nature of this interaction, we split the sample into low-, medium-, and high-self-control groups and regressed the incidence of aggressive workplace behavior on trait anger. The results indicated that the interaction term was in the hypothesized direction. Specifically, self-control moderated the relationship between trait anger and the incidence of workplace aggression so that the lower the self-control, the stronger the relationship between trait anger and the incidence of workplace aggression.

## Discussion

In general, our results indicate that the individual-differences variables selected for this study account for more than 60% of the variance in our measure of the incidence of workplace aggression. This finding is both statistically and practically significant. Given that measures of the incidence of workplace aggression used in prior studies (e.g., Robinson & O'Leary-Kelly, 1998) have been similar to the measures used in this study, it appears that individual differences are as important in predicting workplace aggression as organizational or group level variables. However, because our study does not provide a direct contrast among organizational, group, and individual factors, it is impossible to determine which types of variables account for more variability in predicting the

incidence of workplace aggression. Moreover, we want to emphasize that we are not advocating an approach to workplace aggression solely on the basis of individual differences. We believe that such an argument would be fallacious, just as an argument that individual differences are not important is similarly impossible to defend. As George (1992) observed, "The person-situation debate in psychology has led to the relatively widespread acceptance of an interactional perspective and an accumulating body of evidence that traits are important (which by no means denies the importance of the situation)" (p. 191). Along this line of thinking, Folger and Skarlicki (1998) suggested that a social interactional perspective probably best explains workplace aggression. Likewise, Martinko and Zellars's (1998) model suggests that the incidence of workplace aggression is the result of a complex interaction between and among environmental and individual-differences variables.

Our findings suggest that individual differences make a major contribution in explaining the variability in the measures of workplace aggression and suggest that it is worthwhile to consider a perspective of workplace aggression in which individual differences play a more central role. From a theoretical standpoint, there is already discussion in the general psychological literature that suggests that aggression may be traitlike. Berkowitz (1993) suggested that a large majority of behaviors in the human repertoire are malleable and dependent on environmental and situational stimuli for their emergence and development. However, a small subset of behaviors, which includes aggression, appear to be less malleable (Berkowitz, 1993). Thus, according to this argument, there is a class of behaviors, which includes aggression, that is likely to emerge across various environmental conditions. Further, within the context of workplace aggression, the notion that aggression is less malleable suggests that some organizational members are predisposed to aggression and will become involved in incidents of workplace aggression without any apparent organizational provocation. Consequently, although administrators must manage organizational and group factors that are likely to precipitate aggression, management can also have a significant impact on reducing incidents of workplace aggression by identifying and managing individuals who are predisposed to aggression. In this regard, note that although there are privacy and legal constraints such as Title VII that limit organizations' abilities to manage individual differences (O'Leary-Kelly et al., 1996), these constraints are not absolute. Moreover, even if the possibility of managing individual differences was totally constrained, an understanding of their role in the process of workplace aggression would still be necessary if the goal of our theories is to understand and explain workplace aggression. Thus, we see the role of individual differences as critical to the understanding and explanation of workplace aggression. We also believe that furthering the understanding of aggressive workplace behavior will help explicate what is and is not possible regarding the management and control of incidents of workplace aggression.

Further reflecting on the role of individual-differences variables in predicting the incidence of workplace aggression, note that in most prior studies purporting to test the effects of organizational and group-level variables, the primary measures of these variables have been the perceptual judgments of organizational members. For example, to measure group antisocial behavior, Robinson and O'Leary-Kelly (1998) aggregated the group members' self-reports of antisocial behavior, excluding the employee whose antisocial



behavior is being predicted. In addition, Skarlicki and Folger (1997) assessed organizational injustice by inquiring about members' perceptions concerning distributive, procedural, and interactional justice. The perceptual nature of these data suggests that much of the variability in measures of organizational and group level factors associated with the incidence of workplace aggression in prior studies is due to individual differences in perceptions of these factors rather than the objective characteristics of the environments. Thus, in future studies, to ascertain whether variability in the incidence of workplace aggression is the result of organizational, group, or individual-level factors, hard measures of these factors that are not dependent on the perceptions of organizational members are needed.

In addition to discussing the overall role of individual differences in the incidence of workplace aggression, it is also important to consider the nature of the individual differences that we have found to be related to the incidence of workplace aggression. The results for trait anger, attitude toward revenge, previous exposure to aggressive cultures, and attribution style all indicate that these traits explain significant variability in the incidence of workplace aggression in our sample. More specifically, the relationship between trait anger and the incidence of workplace aggression suggests that individuals who are high on trait anger are more likely than others to engage in workplace aggression. Similarly, the attributional style measure suggests that individuals who have tendencies to attribute negative events to external, stable, intentional, and controllable causes are more likely to report the incidence of workplace aggression than individuals who display other attribution patterns. Our data indicate that individuals who have positive attitudes toward revenge are also more likely than others to report engaging in incidents of workplace aggression. Finally, those participants reporting the highest exposure to aggressive culture are also those who report the highest incidence of workplace aggression.

Each of the traits identified in this study is associated with individual differences in how people interpret or react to environmental stimuli. Thus, given similar organizational environments, we would expect individuals who are high as opposed to low in attitudes toward revenge, trait anger, prior exposure to aggressive cultures, and hostile attribution style to report more incidents of workplace aggression. Furthermore, in some cases, provocation from within the organization may be minimal and, from a practical standpoint, undetectable. In these situations, we anticipate that individual differences will explain the majority of the variance in the incidence of workplace aggression. However, on the other hand, when organizational environments differ, it may well be that organizational and group level factors will be more predictive of the incidence of workplace aggression than individual factors. Regardless, however, we fully expect that the interaction of individual and situational factors will provide the best explanation for the variability in the incidence of workplace aggression.

As indicated in the results, we also failed to confirm some of our hypotheses. Neither negative affectivity nor low self-control is independently associated with the incidence of workplace aggression. However, the lack of support for the relationship between negative affectivity and the incidence of workplace aggression may be explained by referring to some of the recent work concerning negative affectivity and workplace victimization (e.g., Aquino & Bradfield, 1998; Aquino, Groer, Bradfield, & Allen,

1999). Specifically, Aquino and his colleagues suggested that some individuals who exhibit high negative affectivity present themselves passively rather than actively and, thus, are likely to be targets of aggression rather than aggressors. However, because both Skarlicki et al. (1999) and Spector (1994) found that negative affectivity moderates the relationship between perceptions of fairness and retaliation and that negative affectivity is significantly related to interpersonal conflict, respectively, additional research regarding the relationship between negative affectivity and the incidence of workplace aggression may still be warranted.

We also failed to confirm that there is a direct relationship between self-control and the incidence of workplace aggression. A possible explanation for this finding can be found in the early work of Megargee and his colleagues (Megargee, 1966; Megargee, Cook, & Mendelsohn, 1967), who suggested that very high levels of self-control can be related to aggression. More specifically, in studying extremely aggressive male juveniles who had been incarcerated, Megargee and his colleagues found that counselors often described these individuals as highly controlled, conscientious, and meek as compared with juveniles incarcerated for less aggressive crimes. Thus, Megargee and his colleagues argued that tension and frustration can build up in overcontrolled individuals and may manifest itself in extremely aggressive acts. Anecdotal reports of the meek and mild mannered (i.e., overcontrolled) employee who goes on a rampage also suggest that self-control is related to aggression but that this relationship is more complex than what is often suggested in the literature (e.g., Baron & Richardson, 1994; Buss, 1961; Geen, 1990).

Indeed, the interaction between self-control and trait anger suggests that the role of self-control is complicated. The results indicate that the lower the self-control, the stronger the relationship between trait anger and the incidence of workplace aggression. This finding is somewhat remarkable because we failed to find the direct relationship we predicted between self-control and the incidence of workplace aggression. It suggests that although self-control may not be directly related to the incidence of workplace aggression, it may interact with a number of other variables and still play an important role in explaining workplace aggression.

One possible explanation for the failure to confirm the Attitude Toward Revenge  $\times$  Previous Exposure to Aggressive Cultures interaction (Hypothesis 8) is that individuals who have more positive attitudes toward revenge (i.e., avengers) also believe that aggression is the primary mechanism for seeking revenge. Thus, their perceived range of alternative responses to wrongdoing may be much more limited and biased toward aggression than individuals who have less positive attitudes toward revenge. Thus, the influence of previous exposure to aggressive cultures on the relationship between attitudes toward revenge and the incidence of workplace aggression may be attenuated. Nevertheless, given the exploratory nature of this study, it is premature to rule out further investigation of this potential relationship.

### *Limitations*

The limitations of our study are similar to those of other studies of workplace aggression in that we used questionnaire data and our sample was limited to a small number of organizations. Because our sample was limited, our generalizability is limited in that it is possible that different results would be obtained with another

sample. For example, negative affectivity might be significantly related to the incidence of workplace aggression in another sample.

Although we used a recognized procedure (Podsakoff & Organ, 1986) of collecting our data at two different points in time to attenuate common method variance, the possibility of common method variance was not eliminated. In addition, the sensitive nature of the data collected makes it possible that the data were biased by the participants' desire to provide socially desirable responses (e.g., underreporting the incidence of workplace aggression). Although these problems are common to studies of workplace aggression (e.g., Robinson & O'Leary-Kelly, 1998), they are nonetheless problematic. Thus, as suggested above, just as hard measures of organizational, group, and individual factors would be desirable, hard measures of the incidence of workplace aggression would also be helpful. Further, alternative data collection procedures such as interviews, observations, and archival records (e.g., Allen & Lucero, 1998) would help triangulate findings in the area of workplace aggression.

Another limitation is that our data set was limited to a subset of individual differences. Recent research (Baron et al., 1999; Spector, 1994) has indicated that Type A behavior may also account for a significant proportion of the variability in the incidence of workplace aggression. In addition, as suggested earlier, the individual-differences variables of emotional susceptibility, impulsivity, perceived controllability, egotism, agreeableness, and anxiety may also account for a significant proportion of the variance in the incidence of workplace aggression.

Finally, our data did not include organizational or group-level factors. Future research designs should include individual, group, and organizational factors believed to be associated with the incidence of workplace aggression. In addition, although our study did look at interactions among individual differences, those interactions did not account for much variance (3%) in the incidence of workplace aggression. However, we do believe that exploring potential interactions among individual, group, and organizational factors may identify much of the unaccounted variability in the incidence of workplace aggression.

## Conclusion

This study found that trait anger, attitudes toward revenge, attributional style, previous exposure to aggressive cultures, and the Trait Anger  $\times$  Self-Control interaction are predictive of individuals' self-reported incidence of workplace aggression. Therefore, individual differences should play an integral part of any comprehensive theory of workplace aggression. In addition, future research should examine the contribution and role of each of these individual-differences variables.

Finally, further research on workplace aggression should include individual, group, and organizational factors. The interactions among these factors will help to explain even more of the variability in the incidence of workplace aggression. Such efforts are likely to enhance our understanding and explanation of the causes of workplace aggression.

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## Appendix

## The Aggressive Culture Exposure Scale

For the following: Please read each statement and indicate how accurate you believe the statement to be by circling the number on the scale which best describes your response.

1. In the neighborhood(s) I grew up in people were often engaged in verbal confrontations.  
Absolutely not true   1   2   3   4   5   Absolutely true
2. In the neighborhood(s) I grew up in people were often involved in physical confrontations.  
Absolutely not true   1   2   3   4   5   Absolutely true
3. In the neighborhood(s) I grew up in people were often insulting each other.  
Absolutely not true   1   2   3   4   5   Absolutely true
4. In the neighborhood(s) I grew up in people were often threatening to do bad things to each other.  
Absolutely not true   1   2   3   4   5   Absolutely true
5. In the home I grew up in people were often engaged in verbal confrontations.  
Absolutely not true   1   2   3   4   5   Absolutely true
6. In the home I grew up in people were often engaged in physical confrontations.  
Absolutely not true   1   2   3   4   5   Absolutely true

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