ABSTRACT

Matthew L. Bell. THE IMPACT OF MORAL JUDGMENT ON THE RELATIONSHIP BETWEEN TRAIT AGGRESSION AND DEVIANT BEHAVIOR. (Under the direction of Dr. Mark Bowler) Department of Psychology, May 2014.

The purpose of this study was to investigate moral judgments' mediating effect on the relationship between trait aggression and deviant behavior. Participants consisted of 337 undergraduate students at a large southeastern university. An online survey format measured the two facets of trait aggression (implicit and explicit), moral development, ethical ideology, and deviant behavior. Driven by the literature, a saturated model was created and a path analysis tested all hypothesized relationships. Findings were as follows: 1) cognitive moral development significantly mediated the relationship between trait aggression and deviant behavior; 2) explicit aggression significantly moderated the relationship between implicit aggression and deviant behavior; 3) moral judgment was significantly related to trait aggression and deviant behavior; and 4) cognitive moral development was significantly related to ethical ideology. The study serves to highlight avenues that influence and potentially decrease the occurrence of deviant behaviors in academic and organizational settings.

# THE IMPACT OF MORAL JUDGMENT ON THE RELATIONSHIP BETWEEN TRAIT AGGRESSION AND DEVIANT BEHAVIOR

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THE IMPACT OF MORAL JUDGMENT ON THE RELATIONSHIP BETWEEN TRAIT AGGRESSION AND DEVIANT BEHAVIOR

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# INTRODUCTION

Deviant behaviors in the workplace have a substantial negative fiscal impact on organizations (Vardi & Weitz, 2004), with estimates ranging from $6 billion to $200 billion annually (Murphy, 1993). These include any intentional behaviors that are both contrary to the organization's legitimate interests (Gruys & Sackett, 2003) and are committed by employees with the purpose of inflicting harm on the organization or its members (Penney & Spector, 2002). As most negative organizational acts are included, these deviant behaviors range from overt activities such as theft, production sabotage, and interpersonal aggression. More covert activities such as wasting time, spreading rumors, and squandering materials were also identified. Although there is substantial research examining the situational antecedents of deviant behaviors in the context of the workplace (e.g., Bennett, 1998; Greenburg, 1990; Penney & Spector, 2005), recent research demonstrates that these behaviors are often a direct function of a singular antecedent: trait aggression (e.g., Bing et al., 2007; Bowler, Woehr, Bowler, Wuensch, & McIntyre, 2011; Frost, Ko, & James, 2007).

Trait aggressive individuals demonstrate a powerful desire to inflict harm on others (Baron & Richardson, 1994). However, like their non-aggressive counterparts, they have a strong desire to view themselves favorably (James, McIntyre, Glisson, Bowler, & Mitchell, 2004). To alleviate the dissonance between these two conflicting desires, aggressive individuals utilize a set of implicit biases, known as justification mechanisms, to make the target of aggression more deserving of hostility through cognitive rationalization (James, 1998). Furthermore, these mechanisms afford aggressive individuals the needed evidence to view themselves as being socially upstanding and their acts as being acceptable (Baumeister, Smart, & Boden, 1999; Westen & Gabbard, 1999). This is problematic for organizations, given that aggressive

employees often engage in harmful acts towards both organizations (e.g., Robinson & Bennett, 1995) and their coworkers (e.g., Chang & Lyons, 2012). Fortunately, the proclivity to use these justifications can now be measured via conditional reasoning items (James, 1998), thus affording organizations the ability to identify and screen such individuals.

In potential contrast to trait aggression is moral judgment. Moral judgment denotes the process by which a particular course of action in a given situation is determined as being either right or wrong (Rest, Thoma, & Edwards, 1997). Though typically centric to the specific norms of behavior within a society (Treviño, Weaver, & Reynolds, 2006), there are two primary conceptualizations of moral judgment—cognitive moral development and ethical ideology. Cognitive moral development outlines a linear progression of moral development through six stages (Kohlberg, 1969), whereas ethical ideology takes a more multidimensional approach, viewing moral judgments as being a function of the factors of idealism and relativism (Forsyth, 1980).

Previous research has investigated both mediating and moderating relationships between personality characteristics and deviant behavior in the workplace. Mount, Illies, and Johnson (2006) demonstrated that job satisfaction partially mediated the relationship between three of the Big Five's personality characteristics (agreeableness, emotional stability, conscientiousness) and deviant behavior. Similarly, Bing et al. (2007) found explicit aggression to moderate the relationship between implicit aggression and deviant behavior. The present study seeks to build on the work of Bing et al. and further demonstrate the moderating effect of explicit aggression on the relationship between implicit aggression and deviant behavior. Moreover, the present study seeks to investigate the potential mediating effects of deviant behavior and ethical ideology.

## DEVIANT BEHAVIOR

As previously noted, deviant behaviors in the workplace include any intentional behaviors enacted by an organizational member that are viewed as contrary to the organization's legitimate interests (Gruys & Sackett, 2003). In research, these behaviors have assumed various titles that include counterproductive work behaviors (Gruys & Sackett, 2003; Penney & Spector, 2005), incivility (Cortina, Magley, Williams, & Langhout, 2001; Pearson, Andersson, & Wegner, 2001), workplace deviance (Hollinger, 1986; Robinson & Bennett, 1995), mobbing (Zapf, 2002), revenge (Bies, Tripp, & Kramer,1997), organizational retaliatory behavior (Skarlicki & Folger, 1997; Skarlicki, Folger, & Tesluck, 1999), and aggression (Baron & Neuman, 1996; Douglas & Martinko, 2001; Fox & Spector, 1999; Neuman & Baron, 1997; O'Leary-Kelly, Griffin, & Glew, 1996). Regardless of the term used, these deviant behaviors affect both the organization itself and its employees through acts including—but not limited to—absenteeism, client abuse, spreading rumors, production sabotage, theft, wasting time, wasting materials, and interpersonal aggression (Dalton & Mesh, 1991; Greenberg, 1990; Kessler, 2007; Penney & Spector, 2002; Perlow & Latham, 1993).

In an attempt to conceptualize workplace deviant behavior, researchers have created numerous different typologies and taxonomies representing negative organizational behavior. For example, Hollinger and Clark (1982; 1983a; 1983b) proposed two broad categorizations: property deviance and production deviance. Property deviance relates to the misuse and abuse of organizational assets (e.g., misusing discount privileges, property theft, property damage). In contrast, production deviance focuses on workplace norms violations (e.g., tardiness, drug abuse, intentionally sloppy work). Robinson and Bennett (1995) noted the omission of negative interpersonal interactions in Hollinger and Clark's conceptualization, leading to their expansion

of this framework and typology. As with the Hollinger and Clark conceptualization, Robinson and Bennett's (1995) typology suggests that workplace deviance varies across two independent dimensions. The first dimension differentiates the target of the negative behaviors, an individual or an organization. In contrast, the second dimension differentiates the seriousness of the behavior, major to minor. Thus, when combined, these two dimensions create a distinct set of four unique categories of deviant behaviors. The first type, production deviance, entails negative behavior targeting the organization and is typically considered to be a minor violation (e.g., leaving early, taking resources). The second type, property deviance, is also negative behavior targeting the organization but violations are considered major (e.g., sabotaging equipment, theft). In contrast, both the third and fourth types are focused on individuals instead of the organization, with political deviance (e.g., gossiping about a co-worker, blaming a co-worker) considered a minor violation and interpersonal aggression (e.g., sexual harassment, verbal abuse) viewed as a serious offense.

More recently, Gruys and Sackett (2003) further expanded on the dimensionality of deviant workplace behaviors by examining various relationships. Their findings developed into 11 distinct categories: (1) theft and related behavior, (2) destruction of property, (3) misuse of information, (4) misuse of time and resources, (5) unsafe behavior, (6) poor attendance, (7) poor quality work, (8) alcohol use, (9) drug use, (10) inappropriate verbal actions, and (11) inappropriate physical actions. Furthermore, Gruys and Sackett noted a positive relationship among all of the above-listed behaviors, indicative of the fact that occurrences of deviant behaviors are not isolated. Rather, an individual who has committed one form of deviant behavior is quite likely to engage in another.

**Counterproductive Student Behaviors**. Although they have been given little empirical attention in previous research, counterproductive student behaviors (CSBs) bear a strong resemblance to deviant workplace behaviors. Based on this similarity, along with the lack of an overall conceptualization of CSBs, attempts to measure them have often defaulted to the use of modified versions of deviant workplace behavior measures. For example, Hakstian, Farrell, and Tweed (2002) used their Inventory of Counterproductive Behavior to evaluate counterproductive academic behaviors. Thus, although similar to deviant workplace behaviors, CSBs are intentional behaviors enacted by a student that are viewed as contrary to the academic interests of the student, the school, or other students. To more adequately capture this unique categorization of this behavior, Rimkus (2012) developed the Counterproductive Student Behavior Scale (CSBS). This measure, which is based on the varying forms of deviant student behavior identified in the literature, measures eight distinct categories of CSBs: (1) procrastination, (2) deviant behavior, (3) drug use, (4) cheating/plagiarism, (5) alcohol use, (6) discrimination, (7) presenteeism, and (8) laziness. Indeed, the most accessible population to a majority of researchers is the student population at universities. This avenue of measurement and its accompanying conceptualization of CSBs afford greater opportunity to better utilize that population and further counterproductive behavior research.

## AGGRESSION

Trait aggression is characterized by an individual's proclivity to inflict harm on others. In addition to inciting negative behaviors, individuals high in trait aggression are more likely to respond to perceived sources of frustration with anger as well as use hostility to establish a position of dominance during social interactions (Baron & Richardson, 1994; Berkowitz, 1993). Trait aggression has been shown to be relatively stable and continuous across time with the demonstration of an aggressive disposition in early childhood having been shown to continue into adulthood (Huesmann, Eron, & Dubow, 2002; McCord, 1983). Moreover, this propensity is driven by two aspects of personality: explicit and implicit. Explicit aggression consists of self-ascribed dispositions to think, feel, and behave in ways available to introspection (Bornstein, 2002; Hogan, Hogan, & Roberts, 1996; McClelland, Koestner, & Weinberger, 1989). In contrast, implicit aggression is held outside of conscious awareness, consisting of cognitive processes and structures not available to introspection (Greenwald & Banaji, 1995; James, 1998; Westen, 1990, 1991; Winter, John, Stewart, Kohnen, & Duncan, 1998). Both of these components act relatively independently to form the trait aggressive personality.

**Explicit Aggression.** This component of trait aggression is based on conscious and deliberate intentions to cause pain or harm (Grumm, Hein, & Fingerle, 2011). Thus, explicitly aggressive individuals are keenly aware of their desire to engage in malevolent behavior. Subsequently, this self-awareness allows for its measurement via self-report measures (Costa & McCrae, 1992; James, 1998). However, aggressive individuals who are aware of their desire to harm others may be reluctant to reveal this negative attribute due to the potential negative social judgments. Thus, in spite of valuable information that self-report measures may provide (Barrick & Mount, 1996; Berry, Ones, & Sackett, 2007; Ones, Viswesvaran, & Schmidt, 1993; Schmidt

& Hunter, 1998), the value of this information is potentially confounded by an individual's impression management proclivities and subsequent response distortion (Furnham, 1997; Rosse, Stecher, Miller, & Levin, 1998; Viswesvaran & Ones, 1999). Due to these and other issues, such as self-deception, alternative methods using indirect means of assessment have been developed to measure the implicit cognitions that are unique to aggressive individuals (James, 1998).

**Implicit Aggression**. In contrast to explicit aggression, implicit aggression is the facet of trait aggression that involves cognitive processes and structures not available to introspection (James, 1998). More specifically, implicit aggression is an automatic response to the environmental events that trigger aggressive cognitions, motivations, emotions, and behavior (Todorov & Bargh, 2002). Furthermore, implicitly aggressive individuals often lack the awareness of their powerful desire to inflict harm on others (Baumeister, Dale, & Sommer, 1998; Baumeister, Smart, & Boden, 1996; Westen, 1998). However, like their non-aggressive counterparts, most aggressive individuals desire to view themselves as moral, stable, prosocial, and fully capable of self-control (Bersoff, 1999; Loewenstein, Weber, Hsee, & Welch, 2001). Thus, in order to alleviate this dissonance, acts of aggression are rationalized – ultimately concealing from themselves their underlying harmful desire (James & LeBreton, 2010). The cognitive mechanisms that enable this biased reasoning are known as justification mechanisms (JMs; James, 1998). Through the use of JMs, instances of aggression are reframed in a manner that transforms an individual's role as the aggressor perpetrating aggression into the role of a victim that is righting injustice, acting in self-defense, defying unjust rules, striking against oppression, and demonstrating courage (James et al., 2005; LeBreton, Barksdale, Robin, & James, 2007). This restructured viewpoint shields the individual from the negative emotions of shame, guilt or anxiety that would otherwise accompany such behavior (Cramer, 2006) and

replaces them with feelings of acceptance and social worthiness (Baumeister, Smart, & Boden, 1996; Westen & Gabbard, 1999).

**Conditional Reasoning.** As implicit cognitions are not available to introspection, they cannot be assessed via traditional self-report measures that require individuals to describe their own behavior (Greenwald & Banaji, 1995; James & Mazerolle, 2002). Subsequently, to accurately measure these underlying biases, indirect means are essential as they do not inform the subject about what is being measured nor do they require self-description (Greenwald & Banaji, 1995; Winter et al., 1998). To address this issue, James (1998) developed a novel method for the indirect measurement of personality. This new item format, dubbed conditional reasoning, serves to indirectly evaluate the strength of an individual's inclination to use JMs that serve to rationalize the behavior related to the particular construct of interest (e.g., aggression).

As noted by James and Mazerolle (2002), there are six primary JMs, or biases, of aggressive behavior. The most prominent and most studied of these is the *hostile attribution bias* (James, 1998; Crick & Dodge, 1994). Underlying this bias is the propensity to see and experience malevolent intent—even danger—in the behavior of others. Thus, nonthreatening or friendly acts may be viewed by an aggressive individual as having hidden undertones with the true intent of inflicting harm. Similarly, the *retribution bias* frames the intended target of aggression as being deserving of hostility based on the perception of wounded pride, tested self-esteem, and discourtesy (Baumeister, Smart, & Boden, 1996; Crick & Dodge, 1994). Subsequently, retaliation—as opposed to reconciliation—is considered a more rational and appealing behavior as it is framed as an attempt to restore honor and respect. As with the hostile attribution bias and the retribution bias, the *victimization by powerful others bias* is also based on the belief that one is being victimized (Averill, 1993; Toch, 1993). However, this bias sees

inequity and exploitation in the acts of people with perceived authority (e.g., manager, boss, team leader). This perception of being victimized allows for rationalizing aggressive acts as making a stand against oppression and injustice. Similarly, the *potency bias* focuses on social interactions, viewing them as opportunities to establish dominance and submission (Anderson, 1994; Baron & Richardson, 1994; Crick & Dodge, 1994). Subsequently, aggressive individuals may rationalize aggressive behaviors as being acceptable acts of strength, fearlessness, and assertiveness. The *derogation of target bias* (Averill, 1993; Gay, 1993; Toch, 1993) allows aggressive individuals to frame potential targets of aggression as being immoral, evil, and untrustworthy—thus, worthy of attack. Finally, the *social discounting bias* causes individuals to seek liberation from their repression, viewing social norms as repressive and restrictive of their free will (Finnegan, 1997; Huesmann, 1988; Millon, 1990; Toch, 1993). Thus, they are able to reframe any behavior that runs contrary to the social norms and customs as actually being an expression of their freedom.

**Channeling model for aggression.** Due to the interaction between explicit and implicit aggression, the manner by which aggression is expressed is not consistent across all aggressive individuals (Bing, Burroughs, Whanger, Green, & James, 2000; James & Mazerolle, 2002). Specifically, as noted by Winter et al. (1998), differing levels of implicit and explicit aggression interact and produce fundamentally different behaviors. This integrative model, which has been supported by subsequent research (Bing et al., 2007; Brunstein & Maier, 2005; Frost et al., 2007), provides a conceptual framework for the interaction of high-low expressions of implicit and explicit aggressive cognitions.

As detailed by Frost, Ko, and James (2007; James & Mazerolle, 2002), the integrative model for aggression includes four combinations of dichotomized implicit and explicit

aggressiveness. The first combination consists of high implicit preparedness to justify aggression and high explicit aggression. Having self-labeled themselves aggressive, with justification mechanisms firmly in place, individuals who fall into this category are able and willing to engage in all forms of aggression. The second combination—which includes high implicit and low explicit aggression—are individuals who have their JMs firmly in place, yet do not view themselves as aggressive. Their displays of aggression tend to be of a more subtle and passive nature, and are subsequently misrepresented as non-aggressive. The two remaining combinations both involve low implicit preparedness to justify aggression. When low implicit aggression combines with high explicit aggression, these individuals tend to view themselves as easy to anger, argumentative, and confrontational. Yet, because these individuals lack the implicit protective mechanisms, they are likely to channel thoughts and behaviors towards inhibiting their self-diagnosed aggressive tendencies. The final interaction represents low levels of both implicit and explicit aggression. Since these individuals do not view themselves as aggressive, nor do they have implicit aggressive cognitions, their behavior tends to be directed in a more prosocial manner, seeking out harmony and cooperation as compared to retribution and revenge.

# MORAL JUDGMENT

## Cognitive Moral Development

There are two primary conceptualizations to moral judgment—the process by which a course of action in a situation is determined right or wrong—cognitive moral development (CMD) and ethical ideology (Forsyth, 1980). Drawing on the work of Piaget (1965), Kohlberg's (1969) theory of cognitive moral development proposes that advanced moral reasoning requires highly developed capacities to advanced logical thinking, with progression following a cognitive development process. This sequential process advances through three levels—preconventional, conventional, and postconventional—with each entailing two substages. Beginning with the pre-conventional level, ethical dilemmas are solved from an egocentric point of view, or a self-serving perspective. In Stage 1, *obedience and punishment*, wrongdoing is determined by that which is punished. Adherence to rules or authority serves only to avoid punishment. At Stage 2, *instrumental purpose and exchange,* rules are obeyed in order to further self-interests. Decisions are based on negotiated outcomes benefitting his/her interest, and may not conform to that determined by an authority figure. Continued progression leads to the conventional level, where most people remain through their adult lives (Colby, Kohlberg, Gibbs, & Lieberman, 1983). In the third stage—*interpersonal accord, conformity, and mutual expectations*—an individual's view takes a shift from the self to others in determining appropriate actions, most often influenced by close associations. With this outward view, decisions are now viewed based on how they affect the self and others. In Stage 4, *social accord and system maintenance*, the individual adapts to the moral standards of society, and more particularly the laws of that society. Moral behavior is driven by the need to be viewed as good while maintaining law and order. The final level of CMD is the post-conventional level, alternatively known as the principled level.

Stage 5, *social contract and individual rights*, is characterized by high awareness of values, upholding rules and complying with the social contract. In Stage 6, *universal ethical principles*, a belief in universal principles dictates behavior, with universal principles superseding societal laws and customs.

One important note regarding CMD is Kohlberg's (1976) proposition that individuals cannot skip stages and must progress through them unidirectionally. Moreover, the stages are considered to be universal. That is, regardless of the country, religion, or gender of the individual, these stages and one's unidirectional movement through them are consistent. As noted by Colby et al. (1983), few individuals pass beyond Stage 4, and Ishida (2006) noted that just over 20% of the adult population ever reaches the post-conventional level.

Kohlberg's original approach to measuring and determining CMD involved in-depth interviews to uncover underlying moral reasoning (Kohlberg, 1976). Since Kohlberg's initial work, more sophisticated measurement instruments have been developed. The most commonly used measure is the Defining Issues Test (DIT). This measure utilizes an alternative approach to measurement by presenting moral dilemmas with a multiple choice response format (Rest, 1990). For decades, the DIT has been the most widely used instrument to assess CMD (Ishida, 2006; Rest, 1986).

The six stages of CMD have a considerable impact on the field of ethics research (e.g., Ashkanasy et al., 2006; Chang Yuan & Boon, 2009; Christensen, 2008; Cotter & Greif, 2007; Fritzsche, 2000; Michael & Buttetfield, 2005; Roberts & Wasieliski, 2012; Wimbush, 1999). Indeed, capturing advances in moral reasoning leads to an increased understanding of moral obligations in complex social systems (Rest, 1979). The greatest appeal of cognitive moral development is its ability to effectively capture individual differences in attitudes towards ethical

behavior, furthermore serving as a valuable predictor (Abdolmohammadi & Sultan, 2002; Goolsby & Hunt, 1992; Marnburg, 2001; Treviño & Youngblood, 1990).

**Ethical Ideology**

In contrast to moral development is the research on ethical ideology (Forsyth, 1980). To better understand and explain differences in moral judgment, Forsyth proposed that an individual's ethical ideology is best conceptualized as varying along two dimensions, idealism and relativism. *Idealism* reflects the importance an individual places on decisions that affect others, with an emphasis on an underlying set of universal moral principles (e.g., do not steal, tell the truth). Moreover, desirable consequences are always viewed as obtainable with the right actions taking place. Conversely, *relativism* reflects the degree of rejecting universal moral principles, instead taking a flexible judgment of right and wrong, relying more on personal attitudes and, more importantly, the circumstances surrounding the decision (Forsyth, 1992).

The dimensions of idealism and relativism have been used to create a taxonomy of differing ethical ideologies (Forsyth, 1980). Specifically, the combination of high/low levels of relativism with high/low levels of idealism result in four categories, situationists (high-relativism, high-idealism), absolutists (low-relativism, high-idealism), subjectivists (high-relativism, low-idealism), and exceptionists (low-relativism, low-idealism). Situationists reject universal moral principles, instead believing that actions should be conducted to produce positive consequences for all involved (Forsyth, 1980, 1992). Absolutists believe that the best outcome will always be achieved by following universal moral principles. Actions are viewed as producing positive outcomes for all parties while still respecting universal moral principles. Often, absolutists are strict when making moral judgments, particularly if the action is harmful to others or violates principles. Subjectivists reject universal moral principles, taking on a more

egocentric viewpoint, putting their own personal values at the forefront, and support their judgments based on what they personally gain or lose (Barnett, Brown, & Hebert, 1998). Exceptionists respect universal moral principles, but do not believe negative consequences can always be avoided. They are able to engage in situations capable of causing harm to another if they feel it is for the greater good of all involved (Forsyth, 1980, 1992).

In ethics research, ethical ideology has demonstrated a significant influence on decision making (e.g., Barnett, Bass, & Brown, 1996; Bass, Barnett, & Brown, 1998; Forsyth, 1978; Hartikainen & Torstila, 2004; Tansey, Brown, Hyman, & Dawson, 1994). For example, Forsyth (1985) noted that individuals scoring high on the idealism dimension were more likely to endorse statements that demonstrate concern for others; whereas individuals scoring high on relativism endorsed statements reflecting situational driven outcomes. Furthermore, of the two dimensions, research suggests that idealism has a greater influence on ethical judgment than does relativism (Barnett et al, 1996; Barnett et al., 1998; Bass et al., 1998; Douglas, Davidson, & Schwartz, 2001), though not all findings are consistent (Marques & Azevedo-Pereira, 2009). Nonetheless, both have a significant relationship with overall individual behavior.

## THE PRESENT STUDY

Given the demonstrated validity of both implicit aggression (Frost et al., 2007; James, 1998) and explicit aggression (Douglas & Martinko, 2001; Hepworth & Towler, 2004; Hershcovis et al., 2007; Penney & Spector, 2002), there is an increasing amount of empirical evidence supporting their influence on behavior. When combined, these two components of aggression explain significantly more variance in deviant behavior than when measured independently (Bing et al., 2007). More specifically, Bing et al. (2007) demonstrated explicit aggression as a moderator to the implicit aggression-deviant behavior relationship. Under the overarching conceptualization of trait aggression—implicit aggression, explicit aggression, and their interaction—we expect similar findings in the present study (see Figure 1).

*H1: Implicit and explicit aggression will be positively related to deviant behavior. Furthermore, explicit aggression will moderate the relationship between implicit aggression and deviant behavior, such that the relationship between implicit aggression and deviant behavior is stronger when explicit aggression is high than when it is low.*

Though the domains of aggression and morality have typically been developed in relative isolation from each other, conceptualizations of both have a similar undertone. Baron and Richardson's (1994) definition of aggression addresses any behavior whose primary intent is harming another person. Similarly, Turiel (1998) defines morality based on the harmful consequences of an act. Indeed, numerous acts of aggression demonstrate moral transgressions, and in turn, numerous moral transgressions involve physically or verbally aggressive components. This similarity encourages further investigation of these two factors, more particularly aggression as it relates to cognitive moral development and ethical ideology.

The existence of a relationship between trait aggression and cognitive moral development has yet to be established in research. Typically, moral judgment has been studied as an antecedent to aggressive behavior, demonstrating a negative relationship between moral judgment and aggression (Murray-Close, Crick, & Galotti, 2006; Palmer, 2003, 2005; Stams et al., 2006; Vorrath & Brendtro, 1985). Yet, nestled within the research is a potential link to implicit aggression. That is, Palmer and Hollin's (2001) study of aggression reported a hostile attribution bias associated with immature moral reasoning (i.e., lower moral development). As previously mentioned, the hostile attribution bias is one of six justifications involved with implicit aggression, and given the relationship among the six JMs (James, 1998; James & Mazerolle, 2002), reason would suggest the existence of a relationship between implicit aggression and CMD. Moreover, with the relationship between CMD and aggressive behavior being previously established, the rationale for a relationship between trait aggression and CMD makes sense considering that trait aggression leads to aggressive behavior (James, 1998). Thus, we expect to find a negative relationship between trait aggression and CMD.

*H2: Trait aggression will be negatively related to cognitive moral development.*

Similar to CMD, the relationship between trait aggression and ethical ideology has yet to be established. In order to establish this connection, we must use indirect means. First, Hastings and Finegan (2011) demonstrated an ethical ideology-aggressive behavior relationship, with idealism showing a negative relationship and relativism establishing a positive relationship when scores on idealism were low. Second, implicit and explicit aggression has been shown to be positively related to deviant (i.e., aggressive) behaviors (Bing et al., 2007; Frost et al., 2007). In light of these two relationships, reason would suggest the existence of an association between trait aggression and ethical ideology. Considering idealism's adherence to universal moral

principles, we expect to find a negative relationship between trait aggression and ethical idealism. In contrast, with relativism reflecting the degree of rejecting universal moral principles and taking on a flexible view of judging right and wrong, we expect a positive relationship between trait aggression and ethical relativism.

*H3: Trait aggression will be negatively related to idealism*.

*H4: Trait aggression will be positively related to relativism.*

Since the inception of Forsyth's (1980) ethical ideology, a limited amount of discussion has been raised as to the relationship of cognitive moral development and ethical ideology. Initially, the relationship was deemed non-existent by Forsyth (1980). Yet, in contrast, a study using a marketing practitioner sample did find a significant relationship existing between an individual's principled cognitive moral development and ethical ideology (Ho, Vitell, Barnes, & Desborde, 1997). These opposing findings prompted Ishida (2006) to further investigate the relationship and subsequently found evidence to confirm Forsyth's position.

With relatively limited discussion, and conflicting findings, it behooves an extension to this discussion. Though Forsyth (1980) and Ishida (2006) found no relationship between the two schools of thought, reason would dictate that some form of relationship does exist. Not only that a relationship does exist, but that one precludes the other. Indeed, given that cognitive moral development begins early in life, it is reasonable to infer that the more principled an individual's moral development, the more likely that individual will be to adhere to an idealistic rather than a relativistic viewpoint. As both the latter stages of CMD and ethical idealism adhere to universal principles of moral conduct, it is expected that they will demonstrate a positive relationship. Conversely, with ethical relativism taking a more subjective approach and not adhering to universal principles, we expect CMD and ethical relativism to have a negative relationship.

*H5: Cognitive moral development will be positively related to idealism.*

*H6: Cognitive moral development will be negatively related to relativism.*

The processes of ethical decision making are suggested to occur in sequential order – beginning with the recognition or awareness of the moral issue, making a moral judgment of the issue, establishing intent, and ending with moral action (Rest, 1979, 1986). Drawing on this, moral judgment precedes the behavior, and according to Kohlberg and Candee (1984), individuals are inclined to act in ways consistent with their judgment (i.e., level of moral development). Furthermore, increased ethical decision making and ethical behavior—as opposed to deviant behavior—has been linked to advanced moral development (Kish-Gephart, Harrison, & Treviño, 2010; Treviño & Youngblood, 1990). For example, Greenberg (2002) found theft to be more prevalent among employees with lower moral development than among those with higher levels. Based on these findings, we expect a relationship to exist between CMD and deviant behavior. Specifically, we expect the occurrences of deviant behavior to decrease as CMD increases.

*H7: Cognitive moral development will be negatively related to deviant behavior.*

Of equal importance is the ethical ideology relationship with deviant behaviors. Henle, Giacalone, and Jurkiewicz (2005) suggest that ethical ideology plays a significant role in an employee's decision to engage in deviant behavior. Additionally, among the combinations of the two dimensions of ethical ideology, Henle et al. found idealists to be least likely to engage in interpersonal or organizational deviant behavior. Elsewhere in research, idealism demonstrated a positive relationship with ethical judgment; conversely, relativism displayed a negative relationship with ethical judgment and the tendency to follow organizational rules (Barnett et al, 1996; Mudrack, 2005). Consequently, we expect the two dimensions of ethical ideology to be

related to deviant behavior. Moreover, we expect idealism to be negatively related to deviant behavior, and relativism to be positively related to deviant behavior.

*H8: Idealism will be negatively related to deviant behavior.*

*H9: Relativism will be positively related to deviant behavior.*

Ultimately, this study is designed to explore the mediating effect of moral judgment on the relationship between trait aggression and deviant behavior. Previous research has examined the personality trait-deviant behavior relationship, examining both moderators and mediators of this relationship. Bing et al. (2007) found explicit aggression to moderate the relationship between the implicit aggression-deviant behavior relationship. Moreover, Mount et al. (2006) demonstrated job satisfaction's ability to mediate the agreeableness-deviant behavior relationship. Consequently, if previous hypotheses hold true, reason would lead to the expectation that moral judgment will have a mediating effect on the trait aggression-deviant behavior relationship.

*H10: Trait aggression will have a significant indirect effect on deviant behavior through its influence on cognitive moral development. That is, cognitive moral development will mediate the trait aggression-deviant behavior relationship. This indirect effect will also include paths from cognitive moral development through relativism and idealism to deviant behavior.*

*H11: Trait aggression will have a significant indirect effect on deviant behavior through its influence on idealism. That is, idealism will mediate the trait aggression-deviant behavior relationship.*

*H12: Trait aggression will have a significant indirect effect on deviant behavior through its influence on relativism. That is, relativism will mediate the trait aggression-deviant behavior relationship.*

# METHODS

## Participants

Data were collected from 337 participants (67% female) at a large southeastern university. All students were enrolled in undergraduate psychology courses and received partial course credit in exchange for their voluntary participation in the study. Participants' ages ranged from 18 to 23, with the majority being 18 (50%), 19 (36%), and 20 (11%) years of age. The distribution of the academic year of the participants was 78% freshman, 17% sophomore, 3% junior, and 2% senior. Participants were primarily Caucasian (69%), Black/African American (19%), and Asian (5%), with the remaining 7% self-identifying as being a member of another group. Furthermore, 93% of participants identified themselves as not Hispanic or Latino.

## Procedure

All measures used in the study were administered via on online survey administered on the Qualtrics Research Suite. Prior to participating in the study, students completed a consent form indicating that their participation was voluntary. Upon completion of the consent form, students were asked to complete a demographic questionnaire and the measures for implicit and explicit aggression. Following successful completion of these surveys and in an attempt to prevent participant fatigue, participants were then given an additional link to continue completion of the moral development, ethical ideology, and counterproductive student behaviors measures at a later date.

## Materials

**Implicit aggression**. Implicit aggression was measured via the CRT-A (James & McIntyre, 2000). The CRT-A consists of 22 reasoning problems, each of which is based on one of the six JMs for aggression. Each item attempts to measure the presence of aggression-related

cognitive biases that are utilized to rationalize aggressive behavior (LeBreton et al., 2007). The measurement scale associated with this test is the Justification of Aggression Scale (JAGS; James et al., 2005). High scores on the JAGS indicate that JMs are in place to guide reasoning for aggression and that the individual is implicitly prepared to justify engaging in aggressive behavior, whereas low scores on the JAGS indicate that the defenses to justify aggression are not well developed (cf. James & LeBreton, 2010; James et al., 2005; James & McIntyre, 2000). Participant scores on the CRT-A ($M$ = 4.84, $SD$ = 2.17) exhibited no significant mean differences based on age, sex, race, ethnicity, and education status. Using the recommended modified KR-20 formula to measure internal consistency as outlined by James and LeBreton (2012), the CRT-A demonstrated an internal consistency of .90.

**Explicit aggression**. Participants were given the Anger-Hostility scale of NEO-PI-R to measure self-reported levels of aggression (Costa & McCrae, 1992). This scale is comprised of 8 items relating to a participant's self-reported feelings and behaviors of aggression. The items on the NEO-PI-R are measured using a Likert-type scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). Participant scores on the Angry Hostility Scale of the NEO-PI-R ($M$ = 22.07, $SD$ = 4.77) exhibited no significant mean differences based on age, sex, race, ethnicity, and education status. The A-H scale of the NEO-PI-R demonstrated an acceptable internal consistency of .73.

**Moral development**. Participants were given the short-form DIT that consists of three moral dilemmas (Rest, 1990). These dilemmas are followed by a set of 12 statements with statements corresponding to a particular stage of cognitive moral development. Participants then rate each of the statements for importance in moral reasoning. After rating the 12 statements, the four most important are selected and placed in rank-order from one to four. The most widely

used index to score the DIT is the P-score (Rest, 1986; Rest et al., 1997). This P-score indicates the relative importance that subjects assign to moral considerations, primarily at stages five and six, when coming to a decision about moral dilemmas (Rest, 1990). The P-score is computed through assignment point values to the four most important statements the participant selects that corresponds with the stages of cognitive moral development. Four points are given to the most important statement being associated with stages 5 and 6. Three points are given to the second most important statement corresponding to stages 5 and 6, while two points are given to the third most important statement and one point is given to the fourth most important statement corresponding to stages 5 and 6. The coefficient of internal consistency for the P-score typically falls within the .70 - .80 range (Rest, 1993). Participant P-scores on the DIT ($M$ = 8.35, $SD$ = 4.24) exhibited no significant mean differences based on age, sex, race, ethnicity, and education status. Rest (1993) reports the short form to be correlated with the long form at about .90.

**Ethical ideology**. Ethical ideology was measured via the Ethical Position Questionnaire (EPQ; Forsyth, 1980). The EPQ consists of 20 items, 10 measuring ethical idealism (e.g., "The existence of potential harm to others is always wrong, irrespective of the benefits to be gained") and 10 measuring ethical relativism (e.g., "Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action"). Participants indicate the degree to which they agree or disagree with each statement on a five-point Likert-type scale that ranges from "Strongly Disagree" to "Strongly Agree." Participant scores for idealism ($M$ = 3.55, $SD$ = .59) and relativism ($M$ = 3.46, $SD$ = .62) exhibited no significant mean differences based on age, sex, race, ethnicity, and education status. The internal consistency for the both the idealism and relativism scales were acceptable (.73 and .74, respectively).

**Counterproductive student behaviors**. Participants completed the Deviant Behavior subscale of the Counterproductive Student Behaviors Scale (CSBS; Rimkus, 2012). This questionnaire is comprised of seven statements regarding deviant student behavior (e.g., "Made fun of a fellow student based on his/her religion"). Participants indicated how often they had engaged in various deviant behaviors since starting college. Items were measured using a nine-point rating scale ranging from "Never" to "Daily." The scale demonstrated an internal consistency of .71. Participant scores on the Deviant Behavior scale of the CSBS ($M$ = 7.53, $SD$ = 1.22) exhibited no significant mean differences based on participants' age, sex, race, ethnicity, or education status.

**Data Analysis**

Missing data were replaced with the full information maximum likelihood (FIML) method and total scores were measured for the CRT-A Justification of Aggression Scale (Implicit Aggression), NEO-PI-R Angry Hostility scale, DIT P-Score, EPQ Idealism subscale, EPQ Relativism subscale, and the Deviant Behavior subscale from the CSBS. Descriptive statistics (i.e., means and standard deviations) and correlations were computed for all study variables (i.e., implicit aggression, explicit aggression, moral development, idealism, relativism, and deviant behavior) and are presented in Table 1.

The statistical program Mplus (version 7) was used to test the hypothesized path model (see Figure 1). The Mplus program runs a series of sequential multiple regressions for each step in the model to calculate path estimates, standard errors, $t$-values, and probability values for each path in the model. In addition to path coefficients and their associated probability values, explained variance and residual variance statistics were computed for each outcome variable in the model (i.e., deviant behavior, moral development, idealism, and relativism). Analyses were

conducted via bootstrapping with a .05 criterion of statistical significance was employed for all statistical procedures.

## RESULTS

Table 2 provides the decomposition of the significant effects from the Mplus analysis of the hypothesized path model. This table reports the standardized parameter estimate of the effects (i.e., path coefficient), standard errors, and *t* statistics for all tested effects, as well as the $R^2$ (i.e., explained variance) values for the four outcome variables in the model (i.e., deviant behavior, moral development, idealism, and relativism). As ethical idealism and relativism were from the same measure, they were allowed to covary for the ensuing analysis. Allowing this covariance subsequently transformed the measurement model into a fully saturated model; thus, the model had perfect fit to the data.

Hypothesis 1 proposed that trait aggression would be positively related to deviant behavior. As noted in Table 2, the interaction between implicit and explicit aggression was significant such that the relationship between implicit aggression and deviant behavior was stronger when explicit aggression was high than when it was low (see Figure 2). Thus, Hypothesis 1 was supported. As individuals' implicit aggression, explicit aggression, and their interaction increased, the greater their tendency to engage in deviant behavior.

Hypothesis 2 proposed that trait aggression would be negatively related to cognitive moral development. As noted in Table 2, both implicit and explicit aggression exhibited a significant negative relationship with cognitive moral development. Therefore, Hypothesis 2 was supported. As individual levels of implicit aggression and explicit aggression increased, cognitive moral development decreased. Similarly, Hypothesis 3 proposed that trait aggression would be negatively related to idealism. Again, both implicit aggression and explicit aggression displayed a significant negative relationship with idealism. Thus, Hypothesis 3 was fully supported. As implicit aggression and explicit aggression increased, idealism decreased. Finally,

Hypothesis 4 proposed that trait aggression would be positively related to relativism. Interestingly, only implicit aggression demonstrated a significant positive relationship with relativism. Therefore, Hypothesis 4 was partially supported. As individuals' implicit aggression increased, their relativism increased.

Hypothesis 5 proposed that cognitive moral development would be positively related to idealism and Hypothesis 6 proposed that it would be negatively related to relativism. As noted in Table 2, cognitive moral development exhibited a significant positive relationship with idealism and a significant negative relationship with relativism. Thus, Hypotheses 5 and 6 were both supported. As cognitive moral development increased, idealism increased and relativism decreased.

Hypothesis 7 proposed that cognitive moral development would be negatively related to deviant behavior. As noted in Table 2, cognitive moral development demonstrated a significant negative relationship with deviant behavior. Thus, Hypothesis 7 was supported; as individuals' cognitive moral development increased, their deviant behavior decreased.

Furthermore, Hypothesis 8 proposed that idealism would be negatively related to deviant behavior and Hypothesis 9 proposed that relativism would be positively related to deviant behavior. As noted in Figure 2, idealism displayed a significant negative relationship with deviant behavior. However, the relationship between relativism and deviant behavior fell short of statistical significance. Thus, Hypothesis 8 was supported; as individual levels of idealism increased, deviant behavior decreased. However, Hypothesis 9 was not supported.

For Hypotheses 10, 11, and 12, indirect effects were tested, including exploratory indirect effects found in the hypothesized model. All significant indirect effects are presented in Table 3. Results indicated that only Hypothesis 10 was supported. Both implicit and explicit aggression

were found to have significant indirect effects on deviant behavior via cognitive moral development. This is, implicit and explicit aggression both influenced cognitive moral development, and that influence subsequently transferred to deviant behavior. Idealism and relativism's mediating effects on the trait aggression-deviant behavior relationship both fell short of statistical significance.

Results from the exploratory indirect effects indicated that implicit and explicit aggression had significant indirect effects on idealism via cognitive moral development. This is, implicit and explicit aggression both influenced cognitive moral development, and that influence subsequently transferred to idealism. Similarly, implicit aggression was found to have a significant indirect effect on relativism through cognitive moral development. In other words, implicit aggression influenced cognitive moral development, and that influence transferred to relativism. Lastly, the two dimensions of ethical ideology were tested to see if there was a significant interaction in the prediction of deviant behavior. Results indicated that this interaction fell short of statistical significance. Figure 3 exhibits the final measurement model and displays only significant paths resulting from the Mplus path analysis.

# DISCUSSION

The findings encountered in this study serve to expand the literature on trait aggression, deviant behavior, and moral judgment. Indeed, the relationships among these variables provide multiple areas of discussion and intrigue. Implications not only surface from the overarching concepts of trait aggression and moral judgment; when dissected, the individual facets of both variables provide multiple nuances which will be discussed throughout this section.

## Implications

Ultimately, the purpose of this study was to test whether a person's moral judgment would influence the previously demonstrated trait aggression-deviant behavior relationship (Bing et al., 2007; Frost et al., 2007). Indeed, the results indicate that greater principled moral development will decrease the likelihood that an individual with trait aggression will engage in deviant behavior. By no means will it eradicate it, but at a minimum it may serve as a buffer to decrease the likelihood of engagement. Findings of this nature may have implications across multiple contexts and may prompt organizations (e.g., schools, businesses) to implement interventions to decrease behavior contrary to each organization's legitimate interest; particularly if the organization employs students or employees with aggressive proclivities. A potential avenue of intervention would be an ethics training course. For example, Jones (2009) observed a significant increase in principled moral reasoning after a short education program in business ethics relative to students in a control group without such training. Other studies reported similar findings, but involved training programs with longer durations (e.g., Abdolmohamadi & Reeves, 2000; Dellaportas, 2006; Fraedrich, Cherry, King, & Guo, 2005). Unfortunately, many organizations lack an abundance of time to offer extensive ethics training programs; thus, a short

training program similar to Jones' (2009), which includes a novel pedagogical approach to case-analysis assignments, could serve as a fruitful avenue of implementation.

Additional findings stemming from this research include a replication of trait aggression's relationship with deviant behavior (Bing et al., 2007). Indeed, the predictability of engagement in deviant behavior significantly increases when JMs associated with implicit aggression are firmly established *and* there is a conscious awareness of the need to act aggressively. The interaction of these two facets of trait aggression provides insight not only into the predictability of deviant behavior, but also the means by which the behavior will likely be manifested (James & Mazerolle, 2002). That is, if individuals views themselves as aggressive and have well established JMs to support the aggression, the deviant behavior will likely be expressed in an overt manner. In contrast, if individuals have an aggressive proclivity yet they did not view themselves as aggressive, the deviant behavior will likely be expressed by more subtle means (i.e., passive aggression).

Furthermore, previous research demonstrates personality traits as distal variables that influence behavior through the mediating effects of proximal motivational processes (Barrick, Mount, & Strauss, 1993; Judge & Ilies, 2002; Kanfer, 1990; Mount, Ilies, & Johnson, 2006). Given this, as a more proximal process to trait aggression than deviant behavior, we investigated trait aggression's influence on the motivational aspect of an individual's moral judgment; that is, an individual's cognitive moral development and ethical ideology. First, our findings suggest that both aspects of trait aggression (i.e., implicit and explicit) influence an individual's cognitive moral development. As previously outlined, through the early stages of CMD, an individual has a self-serving point of view with respect to what is deemed right and wrong. Progression through latter stages represents an outward shift to others and society to determine right and wrong,

eventually leading to universal principles dictating their distinction. When individuals are trait aggressive, our findings suggest that the JMs associated with implicit aggression influence their stage progression. Indeed, the proclivity to frame someone as more deserving of aggression based on perceived wrongdoing (i.e., retribution bias) or victimization (i.e., victimization by powerful others bias) implies an individual with a greater inclination to have immature moral reasoning. With this immature moral reasoning, judgments would be influenced by their effect on the self over their effect on others. Conversely, latter stages of CMD would represent adherence to principles that put the interest of society and even universal principles at the forefront; ultimately demonstrating reasoning incongruent with trait aggression. However, not all implicitly aggressive individuals view themselves as aggressive (i.e., low explicit aggression); thus, their CMD may very well progress to the moral standards of society. Yet, progression to principled moral reasoning associated with post-conventional moral development remains highly unlikely. Their proclivity to engage in aggressive acts, including passive forms, while still viewing themselves as not aggressive leads to the conclusion that their CMD will not rise above the society standards of, but will remain at or near the level of, those standards so as to maintain the view of themselves as being not aggressive.

In addition to our findings related to trait aggression's impact on CMD, we also found an influence on ethical ideology. Specifically, our study revealed that implicit and explicit aggression significantly influenced idealism, whereas only implicit aggression demonstrated a significant influence on relativism. How this translates with regard to idealism is that the more implicitly and explicitly aggressive individuals are, the less likely they are to seek outcomes that result in positive consequences for all involved. Their need for dominance demonstrates their desire to ensure their self-interest is taken care of, even at the expense of others. Trait

aggression's relationship with idealism has a similar undertone to its relationship with CMD. Indeed, viewing situations requiring a determination of right and wrong, a higher order of adherence to universal principles is more likely to be demonstrated by an individual with lower levels of trait aggression as compared to higher levels.

Curiously, in regards to relativism, only the implicit aspect of trait aggression was shown to have significant influence, indicating that an individual's rejection of universal moral principles and accompanying circumstantial approach to judging right and wrong is solely influenced by aggressive cognitions held outside of conscious awareness. Moreover, conscious assessment of aggressive tendencies does not determine how circumstantial or non-circumstantial their judgments of right and wrong will be. Once again, we can see JMs come into play with each bias associated with implicit aggression representing a rationalization that is both subjective and dependent on circumstance. Therefore, it takes little stretch of the imagination to understand that higher levels of implicit aggression will lead to a greater tendency to make moral judgments from a relativistic viewpoint.

Before we move to moral judgment's influence on deviant behavior, we are going to explore and further the discussion of the relationship between CMD and ethical ideology. Previously, Forsyth (1980) claimed no relationship between the two schools of thought and his view has since been reinforced by Ishida (2006); contrasting this claim though, Ho et al. (1997) did demonstrate an existing relationship between the two, but only when participants were in the conventional stage of CMD. This study extends this discussion by siding with Ho et al. (1997), but unlike Ho et al., the relationship is not reliant on a specified level of CMD. Our findings posit that a relationship does exist and that a greater development of principled moral judgment—represented by latter stages of CMD—will lead to an increased tendency to view

situations involving moral ambiguity from an idealistic perspective and less from a relativistic perspective. Therefore, hindered progression of moral development in early stages increases an individual's likelihood of judging situations of a moral nature from a more circumstantial and self-directed viewpoint; whereas, progression to the latter stages of principled moral development leads to determinations for the greater good and benefit of all involved. Hence, it appears that discussion of the relationship between these two avenues of moral judgment has not reached its conclusion.

Returning to the prediction of deviant behavior, we can see that two out of the three measured aspects of moral judgment were indeed significant predictors: CMD and idealism. It is interesting to note that both predictors are based on the premise of adherence to universal moral principles and seeking the benefit of others. Intuitively, this makes sense given that individuals guided by these orientations would seek to avoid behavior which results in harming others. However, a more interesting discussion comes from relativism lacking a relationship with deviant behavior. Perhaps this is attributed to the broad spectrum of individual differences affecting subjective judgments of morally ambiguous situations. Individuals with this orientation may very well show an increased likelihood of engaging in such behavior, whereas others with the same orientation may not. Simply having a greater relativistic orientation will not precede the behavior; instead, with a greater presence of moral absolutes, the idealistic orientation has an increased likelihood of influencing actual behavior. Hastings and Finegan (2011) previously demonstrated findings similar to this; that is, their findings concluded that in order for relativism to be considered a significant predictor of organizational deviance, relativism was in fact dependent on additional predictors (i.e., both idealism and organizational justice). On its own, relativism was not enough to lead to deviance. Unfortunately in the present study, even when

tested with an interaction with idealism, relativism still fell short of providing any predictive power of deviant behavior.

**Study Limitations**

Although the present study found support for multiple statistically significant paths in the model, multiple limitations accompany this research. First, this study used a cross-sectional design, which suggests that the data may potentially be influenced by method variance associated with the measurement method. Moreover, the cross-sectional nature of this study does not allow for causal inferences and any insinuations of this nature should be made with extreme caution. However, the method by which the data was analyzed combined with empirical evidence for the causational nature of the associated variables provide a reasonable basis for which causal attributions could be made with the results presented in this study.

A second limitation of this study comes as a result of using self-report methods of measurement. Self-reported information measuring explicit aggression, moral judgment, and deviant behavior may be subject to response distortion such as social desirability bias or additional demand characteristics associated with the study. However, not all variables measured were subject to these biases given that implicit aggression was measured via a method of conditional reasoning, thus concealing from participants the true construct of interest.

An additional limitation of the study involves the generalizability of the findings. First, findings for participants at one university may not translate to other universities and regions. Second, the deviant behavior addressed in this study was in reference to deviant student behavior, which may or may not necessarily generalize to deviant behavior observed in business organizations. Thus, organizations should be cautious in their extension of these findings to their places of work. Third, given that a large number of participants was dropped from the analysis

due to completion faster than reasonably acceptable and answering above the acceptable number of illogical items in the CRT-A, the resulting pool of participants used for analyses may have featured a higher level of conscientiousness than can be expected in the general population.

**Future Research**

In light of the aforementioned study limitations, the present study offers several avenues of interest for future research. First, future research should employ a longitudinal design to examine the stability of the path model across time. One such design could include a longitudinal model comparing two groups—an experimental group and control group—with the experimental group being given a short ethics training course to influence cognitive moral development progression and the control group given no such training. This could serve three purposes: 1) to establish the stability of the model across time, 2) to provide the ability to make causal inferences, and 3) to test an ethics training intervention to observe its long-term effect on the trait aggression-deviant behavior relationship. A second avenue for future research consists of testing the current path model in a business organization setting. This would entail a different measure of deviant behavior more applicable to organizations. Finding applicability in the business world could provide multiple implications for organizations seeking to decrease workplace deviant behavior. Those implications may include adopting screening procedures for trait aggression or implementation of an ethics training course. A third avenue for future research is the continuance of the discussion regarding the relationship between cognitive moral development and ethical ideology. Not only should the existence of the relationship between the two variables be further tested, but perhaps a look should be taken at cognitive moral development's prediction of ethical ideology and the idealism-relativism interaction associated with Forsyth's (1980) typology. A fourth avenue for future research is to better understand why the interaction of implicit and

explicit aggression was only significant when predicting behavior. Indeed, no interaction existed with the prediction of the two domains of moral judgment—cognitive moral development and ethical ideology. Resulting findings could give greater understanding of trait aggression's influence on processes more proximal to personality traits than behavior. Lastly, as the subject of morality has been thrown into the mix of the trait aggression-deviant behavior relationship, perhaps an exploration of alternative measures involving morality could result in a promising influence on this relationship. One suggestion is the testing of moral disengagement (Bandura, 1990). At a quick glance, moral disengagement appears to entail justifications which could overlap with implicit aggression. If such a relationship were to exist, then perhaps a greater understanding of what leads to deviant behavior would ensue.

# CONCLUSIONS

The current study advances the literature of both trait aggression and deviant behavior with regard to their relationship with moral judgment and each other. Specifically, in addition to trait aggression's reaffirmed positive relationship with deviant behavior, trait aggression was also found to have an indirect effect on deviant behavior through its influence on cognitive moral development. Moreover, consequences of trait aggression beyond deviant behavior now include decreased cognitive moral development and idealism, with a subsequent increase in relativism. Additionally, principled moral reasoning and an idealistic orientation decrease the likelihood of engaging in deviant behavior. Finally, as the current research demonstrates the existence of mediators and moderators to the trait aggression-deviant behavior relationship, it is important for researchers to continue to investigate additional mediators and moderators that could shed light on means by which deviant behavior may be reduced.

## REFERENCES


Abdolmohammadi, M. J., & Reeves, M. F. (2000). Effects of education and intervention of business students' ethical cognition: A cross sectional and longitudinal study. *Teaching Business Ethics, 4*, 269–284. doi:10.1023/A:1009834727902.

Abdolmohammadi, M., J., & Sultan, J., (2002). Ethical reasoning and the use of insider information in stock trading. *Journal of Business Ethics, 37*, 165-173.

Anderson, E. (1994, May). The code of the streets. *Atlantic Monthly,* pp. 81-94.

Ashkanasy, N. M., Windsor, C. A., & Treviño, L. K. (2006). Bad apples in bad barrels revisited: cognitive moral development, just world beliefs, rewards, and ethical decision-making. *Business Ethics Quarterly*, *16,* 449-473.

Averill, J. R. (1993). Illusions of anger. In R. B. Felson & J. T. Tedeschi (Eds.), *Aggression and violence: Social interactionist perspectives* (pp. 171-192). Washington, DC: American Psychological Association. doi:10.1037/10123-007

Bandura, A. (1990). Selective activation and disengagement of moral control. *Journal of Social Issues*, *46*, 27-46. doi:10.1111/j.1540-4560.1990.tb00270.x

Barnett, T., Bass, K., & Brown, G. (1996). Religiosity, ethical ideology and intentions to report a peer's wrongdoing. *Journal of Business Ethics, 15*, 1161-1174.

Barnett, T., Bass, K., Brown, G., & Hebert, F. J. (1998). Ethical ideology and the ethical judgments of marketing professionals. *Journal of Business Ethics, 17*, 715-723.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. *Aggressive Behavior*, *22*, 161-173. doi:10.1002/(SICI)1098-2337(1996)22:3<161::AID-AB1>3.0.CO;2-Q

Baron, R. A., & Richardson, D. R. (1994). *Human aggression.* New York, NY: Plenum Press.

Barrick, M. R., & Mount, M. K. (1996). Effects of impression management and self-deception on the predictive validity of personality constructs. *Journal of Applied Psychology, 81*, 261-272. doi:10.1037/0021-9010.81.3.261

Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, *78*, 715-722. doi:10.1037/0021-9010.78.5.715

Bass, K., Barnett, T., & Brown, G. (1998). The moral philosophy of sales management and its influence on ethical decision making. *Journal of Personal Selling & Sales Management*, *18*(2), 1-17.

Baumeister, R. F., Dale, K., & Sommer, K. L. (1998). Freudian defense mechanisms and empirical finding in modern social psychology: Reaction formation, projection, displacement, undoing, isolation, sublimination, and denial. *Journal of Personality, 66,* 1081- 1124.

Baumeister, R. F., Smart, L., & Boden, J. M. (1999). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. In R. F. Baumeister (Ed.), *The self in social psychology* (pp. 240-284). New York, NY: Psychology Press.

Bennett, R. J. (1998). Taking the sting out of the whip: Reactions to consistent punishment for unethical behavior. *Journal of Experimental Psychology: Applied*, *4*(3), 248-262. doi:10.1037/1076-898X.4.3.248

Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York, NY: Mcgraw-Hill Book Company.

Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology, 92*, 410-424. doi:10.1037/0021-9010.92.2.410

Bersoff, D. M. (1999). Why good people sometimes do bad things: Motivated reasoning and unethical behavior. *Personality and Social Psychology Bulletin, 25,* 28-39.

Bies, R. J., Tripp, T. M., & Kramer, R. M. (1997). At the breaking point: Cognitive and social dynamics of revenge in organizations. In R. A. Giacalone & J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 18-36). Thousand Oaks, CA: Sage.

Bing, M. N., Burroughs, S. M., Whanger, J. C., Green, P. D., & James, L. R. (2000, August). The integrative model of personality assessment for aggression: Implications for personnel selection and predicting deviant workplace behavior. In J. LeBreton & J. Binning (Co-chairs), *Recent issues and innovations in personality assessment.* Symposium conductd at the 108th Annual Convention of the American Psychological Association, Washington, DC.

Bing, M. N., Stewart, S. M., Davison, H. K., Green, P. D., McIntyre, M. D., & James, L. R. (2007). An integrative typology of personality assessment for aggression: Implications for predicting counterproductive workplace behavior. *Journal of Applied Psychology, 92*, 722-744. doi:10.1037/0021-9010.92.3.722

Bornstein, R. F. (2002). A process dissociation approach to objective-projective test score interrelationships. *Journal of Personality Assessment*, *78*, 47-68. doi:10.1207/S15327752JPA7801_04

Bowler, M. C., Woehr, D. J., Bowler, J. L., Wuensch, K. L., & McIntyre, M. D. (2011). The impact of interpersonal aggression on performance attributions. *Group & Organization Management*, *36*, 427-465. doi:10.1177/1059601111408897

Brunstein, J. C., & Maier, G. W. (2005). Implicit and self-attributed motives to achieve: Two separate but interacting needs. *Journal of Personality and Social Psychology*, *89*, 205-222. doi:10.1037/0022-3514.89.2.205

Chang, C., & Lyons, B. J. (2012). Not all aggressions are created equal: A multifoci approach to workplace aggression. *Journal of Occupational Health Psychology*, *17*, 79-92. doi:10.1037/a0026073

Chang Yuan, L., & Jin Boon, W. (2009). Matching the 'knowing what to do' and the 'doing what you know' in ethical decision-making. *Australasian Accounting Business & Finance Journal*, *3*(2), 36-47.

Christensen, S. (2008). The role of law in models of ethical behavior. *Journal of Business Ethics*, *77*, 451-461. doi:10.1007/s10551-007-9359-7

Colby, A., Kohlberg, L., Gibbs, J., & Lieberman, M. (1983). A longitudinal study of moral judgment. *Monographs of the Society for Research in Child Development*, *48*(1-2), 1-124. doi:10.2307/1165935

Cortina, L. M., Magley, V. J., Williams, J., & Langhout, R. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, *6*, 64-80. doi:10.1037/1076-8998.6.1.64

Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory and NEO Five-Factor Inventory professional manual* . Odessa, FL: Psychological Assessment Resources.

Cotter, J. W., & Greif, T. (2007). Ethical decision-making in a fast changing world. *International Journal of Business Research*, *7*(5), 48-68.

Cramer, P. (2006). *Protecting the self: Defense mechanisms in action.* New York, NY: Guilford Press.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, *115*, 74-101. doi:10.1037/0033-2909.115.1.74

Dalton, D. R., & Mesch, D. J. (1991). On the extent and reduction of avoidable absenteeism: An assessment of absence policy provisions. *Journal of Applied Psychology*, *76*, 810-817. doi:10.1037/0021-9010.76.6.810

Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. *Journal of Business ethics, 65,* 391-404. doi:10.1007/s10551-006-0020-7

Douglas, P. C., Davidson, R. A., & Schwartz, B. N. (2001). The effect of organizational culture and ethical orientation on accountants' ethical judgments. *Journal of Business Ethics, 34*, 101-121.

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. doi:10.1037/0021-9010.86.4.547

Finnegan, W. (1997, December 1). The unwanted. *New Yorker*, pp. 61-78.

Forsyth, D. R. (1978). *Moral attribution and the evaluation of action* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (Order No. 7907741)

Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology, 39*, 175-184. doi:10.1037/0022-3514.39.1.175

Forsyth, D. R. (1985). Individual differences in information integration during moral judgment. *Journal of Personality and Social Psychology*, *49*, 264-272. doi:10.1037/0022-3514.49.1.264

Forsyth, D. R. (1992). Judging the morality of business practices: The influence of personal moral philosophies. *Journal of Business Ethics, 11*, 461-470.

Fox, S., & Spector, P. E. (1999). A model of work frustration-aggression. *Journal of Organizational Behavior*, *20*(6), 915-931. doi:10.1002/(SICI)1099-1379(199911)20:6<915::AID-JOB918>3.0.CO;2-6

Fraedrich, J., Cherry, J., King, J., & Guo, C. (2005). An empirical investigation of the effects of business ethics training. *Marketing Education Review, 15*(3), 27– 36.

Fritzsche, D. J. (2000). Ethical climates and the ethical dimension of decision making. *Journal of Business Ethics*, *24*, 125-140.

Frost, B. C., Ko, C., & James, L. R. (2007). Implicit and explicit personality: A test of a channeling hypothesis for aggressive behavior. *Journal of Applied Psychology*, *92*, 1299-1319. doi:10.1037/0021-9010.92.5.1299

Furnham, A. F. (1997). Knowing and faking one's Five-Factor personality score. *Journal of Personality Assessment*, *69*, 229-243. doi:10.1207/s15327752jpa6901_14

Gay, P. (1993). *The cultivation of hatred*. New York, NY: W. W. Norton.

Goolsby, J., & Hunt, S. D. (1992). Cognitive moral development and marketing. *Journal of Marketing, 56,* 55-68.

Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of pay cuts. *Journal of Applied Psychology*, *75*, 561-568. doi:10.1037/0021-9010.75.5.561

Greenberg, J. (2002). Who stole the money, and when? Individual and situational determinants of employee theft. *Organizational Behavior and Human Decision Processes*, *89*, 985-1003. doi:10.1016/S0749-5978(02)00039-0

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*(1), 4-27. doi:10.1037/0033-295X.102.1.4

Grumm, M., Hein, S., & Fingerle, M. (2011). Predicting aggressive behavior in children with the help of measures of implicit and explicit aggression. *International Journal of Behavioral Development*, *35*, 352-357. doi:10.1177/0165025411405955

Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, *11*, 30-42. doi:10.1111/1468-2389.00224

Hakstian, A., Farrell, S., & Tweed, R. G. (2002). The assessment of counterproductive tendencies by means of the California Psychological Inventory. *International Journal of Selection and Assessment*, *10*, 58-86. doi:10.1111/1468-2389.00194

Hartikainen, O., & Torstila, S. (2004). Job-related ethical judgment in the finance profession. *Journal of Applied Finance*, *14*(1), 62-76.

Hastings, S. E., & Finegan, J. E. (2011). The role of ethical ideology in reactions to injustice. *Journal of Business Ethics*, *100*, 689-703. doi:10.1007/s10551-010-0704-x

Henle, C. A., Giacalone, R. A., & Jurkiewicz, C. L. (2005). The role of ethical ideology in workplace deviance. *Journal of Business Ethics, 56*, 219-230.

Hepworth, W., & Towler, A. (2004). The effects of individual differences and charismatic leadership on workplace aggression. *Journal of Occupational Health Psychology*, *9*, 176-185. doi:10.1037/1076-8998.9.2.176

Hershcovis, M., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., & ... Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology*, *92*, 228-238. doi:10.1037/0021-9010.92.1.228

Ho, F. N., Vitell, S. J., Barnes, J. H., & Desborde, R. (1997). Ethical correlates of role conflict and ambiguity in marketing: The mediating role of cognitive moral development. *Journal of the Academy of Marketing Science, 25,* 117-126.

Hogan, R., Hogan, J., & Roberts, B. W. (1996). Personality measurement and employment decisions: Questions and answers. *American Psychologist*, *51*, 469-477. doi:10.1037/0003-066X.51.5.469

Hollinger, R. C. (1986). Acts against the workplace: Social bonding and employee deviance. *Deviant Behavior*, *7*(1), 53-75.

Hollinger, R. C., & Clark, J. P. (1982). Formal and informal social controls of employee deviance. *The Sociology Quarterly, 23,* 333-343.

Hollinger, R. C., & Clark, J. P. (1983a). Deterrence in the workplace: Perceived certainty, perceived severity and employee theft. *Social Forces, 62,* 398-418.

Hollinger, R. C., & Clark, J. P. (1983b). *Theft by Employees.* Lexington, MA: Heath.

Huessman, L. R. (1988). An information processing model for the development of aggression. *Aggressive Behavior, 14,* 13-24.

Huesmann, L., Eron, L. D., & Dubow, E. F. (2002). Childhood predictors of adult criminality: Are all risk factors reflected in childhood aggressiveness? *Criminal Behaviour and Mental Health*, *12*(3), 185-208. doi:10.1002/cbm.496

Ishida, C. (2006). How do scores of DIT and MJT differ? A critical assessment of the use of alternative moral development scales in studies of business ethics. *Journal of Business Ethics*, *67*(1), 63-74. doi:10.1007/s10551-006-9005-9

James, L. R. (1998). Measurement of personality via conditional reasoning. *Organizational Research Methods*, *1*, 131-163. doi:10.1177/109442819812001

James, L. R., & LeBreton, J. M. (2010). Assessing aggression using conditional reasoning. *Current Directions in Psychological Science*, *19*(1), 30-35.

James, L. R., & LeBreton, J. M. (2012). *Assessing the implicit personality through conditional reasoning*. Washington, DC: American Psychological Association.

James, L. R., & Mazerolle, M. D. (2002). *Personality in work organizations.* Thousand Oaks, CA: Sage.

James, L. R., & McIntyre, M. D. (2000). *Conditional Reasoning Test of Aggression Test Manual.* Knoxville, TN: Innovation Assessment Technology.

James, L. R., McIntyre, M. D., Glisson, C. A., Bowler, J. L., & Mitchell, T. R. (2004). The conditional reasoning measurement system for aggression: An overview. *Human Performance*, *17*, 271-295. doi:10.1207/s15327043hup1703_2

James, L. R., McIntyre, M. D., Glisson, C. A., Green, P. D., Patton, T. W., LeBreton, J. M., & ... Williams, L. J. (2005). A conditional reasoning measure for aggression. *Organizational Research Methods*, *8*(1), 69-99. doi:10.1177/1094428104272182

Jones, D. (2009). A novel approach to business ethics training: Improving moral reasoning in just a few weeks. *Journal of Business Ethics*, *88*, 367-379. doi:10.1007/s10551-008-9969-8

Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, *87*, 797-807. doi:10.1037/0021-9010.87.4.797

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette, L. M. Hough (Eds.). *Handbook of industrial and organizational psychology, Vol. 1 (2nd ed.)* (pp. 75-170). Palo Alto, CA US: Consulting Psychologists Press.

Kessler, S. R. (2007). *The effects of organizational structure on faculty job performance, job satisfaction, and counterproductive work behavior* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (Order No. 3260070)

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, *95*(1), 1-31. doi:10.1037/a0017103

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Eds.), *The Handbook of Socialization Theory and Research* (pp. 347-480). Chicago, IL: Rand McNally.

Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior*. New York, NY: Holt, Rinehart, & Winston.

Kohlberg, L., & Candee, D. (1984). The relationship of moral judgment to moral action. In W. M. Kurtines & J. L., Gerwitz (Eds.). *Morality, moral behavior, and moral development* (pp. 52-73). New York, NY: Wiley.

LeBreton, J. M., Barksdale, C. D., Robin, J., & James, L. R. (2007). Measurement issues associated with conditional reasoning tests: Indirect measurement and test faking. *Journal of Applied Psychology, 92*(1), 1-16. doi:10.1037/0021-9010.92.1.1

Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, *127*, 267-286. doi:10.1037/0033-2909.127.2.267

Marnburg, E. (2001). The questionable use of moral development theory in studies of business ethics: empirical findings and discussion. *Business Ethics, 4*, 275-283.

Marques, P., & Azevedo-Pereira, J. (2009). Ethical ideology and ethical judgments in the Portuguese accounting profession. *Journal of Business Ethics*, *86*, 227-242. doi:10.1007/s10551-008-9845-6

McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review*, *96*, 690-702. doi:10.1037/0033-295X.96.4.690

McCord J. (1983). A longitudinal study of aggression and antisocial behavior. In K. T. Van Dusen & S. A. Mednick (Eds.). *Prospective studies of crime and delinquency* (pp. 269–275). Boston, MA: Kluwer-Nijhoff.

Michael J., O., & Buttetfield, K. D. (2005). A review of the empirical ethical decision-making literature: 1996-2003. *Journal of Business Ethics*, *59*, 375-413. doi:10.1007/s10551-005-2929-7

Millon, T. (1990). The disorders of personality. In L. A. Pervin (Ed.), *Handbook of personality theory and research* (pp. 339–370). New York, NY: Guilford Press.

Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, *59*, 591-622. doi:10.1111/j.1744-6570.2006.00048.x

Mudrack, P. E. (2005). *Utilizing moral reasoning: The role of deference to authority.* Proceedings of the Administrative Sciences Association of Canada, Toronto, Ontario, Canada.

Murphy, K. R. (1993). *Honesty in the workplace*. Belmont, CA: Brooks/Cole.

Murray-Close, D., Crick, N. R., & Galotti, K. M. (2006). Children's moral reasoning regarding physical and relational aggression. *Social Development*, *15*, 345-372. doi:10.1111/j.1467-9507.2006.00346.x

Neuman, J. H., & Baron, R. A. (1997). Aggression in the workplace. In R. A. Giacalone & J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 37-67). Thousand Oaks, CA: Sage.

O'Leary-Kelly, A. M., Griffin, R. W., & Glew, D. J. (1996). Organization-motivated aggression: A research framework. *The Academy of Management Review*, *21*, 225-253.

Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology, 78*, 679-703. doi:10.1037/0021-9010.78.4.679

Palmer, E. J. (2003). An overview of the relationship between moral reasoning and offending. *Australian Psychologist*, *38*, 165-174. doi:10.1080/00050060310001707177

Palmer, E. J. (2005). The relationship between moral reasoning and aggression, and the implications for practice. *Psychology, Crime & Law*, *11*, 353-361. doi:10.1080/10683160500255190

Palmer, E. J., & Hollin, C. R. (2001). Sociomoral reasoning, perceptions of parenting and self-reported delinquency in adolescents. *Applied Cognitive Psychology*, *15*(1), 85-100. doi:10.1002/1099-0720(200101/02)15:1<85::AID-ACP691>3.0.CO;2-6

Pearson, C. M., Andersson, L. M., & Wegner, J. W. (2001). When workers flout convention: A study of workplace incivility. *Human Relations*, *54*, 1387-1419. doi:10.1177/00187267015411001

Penney, L. M., & Spector, P. E. (2002). Narcissism and counterproductive work behavior: Do bigger egos mean bigger problems? *International Journal of Selection and Assessment*, *10*, 126-134. doi:10.1111/1468-2389.00199

Penney, L. M., & Spector, P. E. (2005). Job stress, incivility, and counterproductive work behavior (CWB): The moderating role of negative affectivity. *Journal of Organizational Behavior*, *26*, 777-796. doi:10.1002/job.336

Perlow, R., & Latham, L. L. (1993). Relationship of client abuse with locus of control and gender: A longitudinal study in mental retardation facilities. *Journal of Applied Psychology*, *78*, 831-834. doi:10.1037/0021-9010.78.5.831

Piaget, J. (1965), *The moral judgment of a child* (M. Gabain, translator). New York, NY: The Free Press (originally published in 1932).

Rest, J. R. (1979). *Development in judging moral issues*. Minneapolis, MN: University of Minnesota Press.

Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York, NY: Praeger. doi:10.1037/0012-1649.11.6.738.

Rest, J. R. (1990). *DIT Manual* (3rd ed.). Minneapolis, MN: University of Minnesota Press.

Rest, J. (1993). *Guide for the defining issues test: How to use the optical scan forms and the center's scoring service.* Minneapolis, MN: University of Minnesota Press.

Rest, J., Thoma, S., & Edwards, L. (1997). Designing and validating a measure of moral judgment: Stage preference and stage consistency approaches. *Journal of Educational Psychology*, *89*(1), 5-28. doi:10.1037/0022-0663.89.1.5

Rimkus, L. K. (2012). *A new measure of counterproductive student behavior* (Master's thesis). Available from ProQuest Dissertations and Theses. (Order No. 1510546)

Roberts, J., & Wasieleski, D. (2012). Moral reasoning in computer-based task environments: Exploring the interplay between cognitive and technological factors on individuals' propensity to break rules. *Journal of Business Ethics*, *110*, 355-376. doi:10.1007/s10551-011-1196-z

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *.Academy of Management Journal*, *38*, 555-572. doi:10.2307/256693

Rosse, J. G., Stecher, M. D., Miller, J. L., & Levin, R. A. (1998). The impact of response distortion on preemployment personality testing and hiring decisions. *Journal of Applied Psychology*, *83*, 634-644. doi:10.1037/0021-9010.83.4.634

Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124*, 262-274. doi:10.1037/0033-2909.124.2.262

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, *82*, 434-443. doi:10.1037/0021-9010.82.3.434

Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal*, *42*, 100-108. doi:10.2307/256877

Stams, G., Brugman, D., Deković, M., van Rosmalen, L., van der Laan, P., & Gibbs, J. C. (2006). The moral judgment of juvenile delinquents: A meta-analysis. *Journal of Abnormal Child Psychology*, *34*, 697-713. doi:10.1007/s10802-006-9056-5

Tansey, R., Brown, G., Hyman, M. R., & Dawson, L. R. (1994). Personal moral philosophies and the moral judgments of salespeople. *Journal of Personal Selling & Sales Management*, *14*(1), 59-75.

Toch, H. (1993). Good violence and bad violence: Through self-presentations of aggressors accounts and war stories. In R. B. Felson & J. T. Tedeschi (Eds.), *Aggression and violence: Social interactionist perspectives* (pp. 193-206). Washington, DC: American Psychological Association. doi:10.1037/10123-008

Todorov, A., & Bargh, J. A. (2002). Automatic sources of aggression. *Aggression and Violent Behavior*, *7*(1), 53-68. doi:10.1016/S1359-1789(00)00036-7

Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, *32*, 951-990. doi:10.1177/0149206306294258

Treviño, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology*, *75*, 378-385. doi:10.1037/0021-9010.75.4.378

Turiel, E. (1998). The development of morality. In N. Eisenberg (Ed.), *Handbook of child psychology, 5th ed.: Vol 3. Social, emotional, and personality development* (pp. 863-932). Hoboken, NJ: John Wiley & Sons.

Vardi, Y., & Weitz, E. (2004). *Misbehavior in organizations: Theory, research, and management*. Mahwah, NJ: Lawrence Erlbaum Associates.

Viswesvaran, C., & Ones, D. S. (1999). Meta-analyses of fakability estimates: Implications for personality measurement. *Educational and Psychological Measurement*, *59*, 197-210. doi:10.1177/00131649921969802

Vorrath, H. H., & Brendtro, L. K. (1985). *Positive peer culture* (2nd ed.). Hawthorner, NY: Aldine.

Westen, D. (1990). Psychoanalytic approaches to personality. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 21-65). New York, NY: Guilford Press.

Westen, D. (1991). Social cognition and object relations. *Psychological Bulletin*, *109*(3), 429-455. doi:10.1037/0033-2909.109.3.429

Westen, D. (1998). Unconscious thought, feeling, and motivation: The end of a century-long debate. In R. F. Bornstein & J. M. Masling (Eds.), *Empirical perspectives on the psychoanalytic unconscious* (pp. 1-43). Washington, DC: American Psychological Association. doi:10.1037/10256-001

Westen, D. G., & Gabbard, G. O. (1999). Psychoanalytic approaches to personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 57-101). New York, NY: Guilford Press.

Wimbush, J. C. (1999). The effect of cognitive moral development and supervisory influence on subordinates' ethical behavior. *Journal of Business Ethics*, *18*, 383-395.

Winter, D. G., John, O. P., Stewart, A. J., Klohnen, E. C., & Duncan, L. E. (1998). Traits and motives: Toward an integration of two traditions in personality research. *Psychological Review, 105,* 230–250. doi:10.1037/0033-295X.105.2.230

Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, *12*, 237-268. doi:10.1016/S1053-4822(02)00048-7

Table 1

*Means, Standard Deviations, and Zero-Order Correlations of Variables in the Path Analysis* (*N* = 328)

| Variable | *M* | *SD* | IA | EA | M | I | R | D |
|---|---|---|---|---|---|---|---|---|
| IA | 4.84 | 2.17 | -- | | | | | |
| EA | 22.07 | 4.77 | .28*** | -- | | | | |
| M | 8.35 | 4.24 | -.30*** | -.26*** | -- | | | |
| I | 3.55 | .59 | -.25*** | -.24*** | .30*** | -- | | |
| R | 3.46 | .62 | .27*** | .19** | -.23*** | .13* | -- | |
| D | 7.53 | 1.22 | .42*** | .26*** | -.31*** | -.25*** | .19*** | -- |

*Note.* IA = Implicit Aggression; EA = Explicit Aggression; M = Moral Development; I = Idealism; R = Relativism; D = Deviant Behavior. *$p < .05$ ** $p < .01$ ***$p < .001$

Table 2

*Decomposition of Effects From the Path Analysis*

| Effect | Standardized Estimate | *SE* | *t* | $R^2$ |
|---|---|---|---|---|
| Moral Dev. | | | | .13*** |
| on IA | -.25 | .054 | -4.62*** | |
| on EA | -.20 | .053 | -3.73*** | |
| Idealism | | | | .14*** |
| on M | .23 | .051 | 4.51*** | |
| on IA | -.14 | .056 | -2.51* | |
| on EA | -.13 | .055 | -2.40* | |
| Relativism | | | | .11** |
| on M | -.16 | .054 | -2.93** | |
| on IA | .19 | .059 | 3.27** | |
| Deviant | | | | .27*** |
| on I | -.13 | .058 | -2.23* | |
| on M | -.15 | .060 | -2.45* | |
| on IA | .30 | .070 | 5.76*** | |
| on EA | .11 | .044 | 2.60** | |
| on IAxEA | .17 | .045 | 3.69*** | |
| Relativism w/ Idealism | .25 | .050 | 5.10*** | |

*Note.* IA = Implicit Aggression; EA = Explicit Aggression; M = Moral Development; I = Idealism; *$p < .05$ ** $p < .01$ ***$p < .001$

Table 3

*Decomposition of Indirect Effects From the Path Analysis*

| Indirect Effects | Standardized Estimate | *SE* | *t* |
|---|---|---|---|
| IA→M→I | -.06 | .018 | -3.23** |
| IA→M→R | .04 | .017 | 2.33* |
| EA→M→I | -.05 | .016 | -2.78** |
| IA→M→D | .04 | .017 | 2.19* |
| EA→M→D | .03 | .015 | 1.96* |

*Note.* IA = Implicit Aggression; EA = Explicit Aggression; M = Moral Development; I = Idealism; R = Relativism; D = Deviant Behavior. *$p < .05$ ** $p < .01$ ***$p < .001$

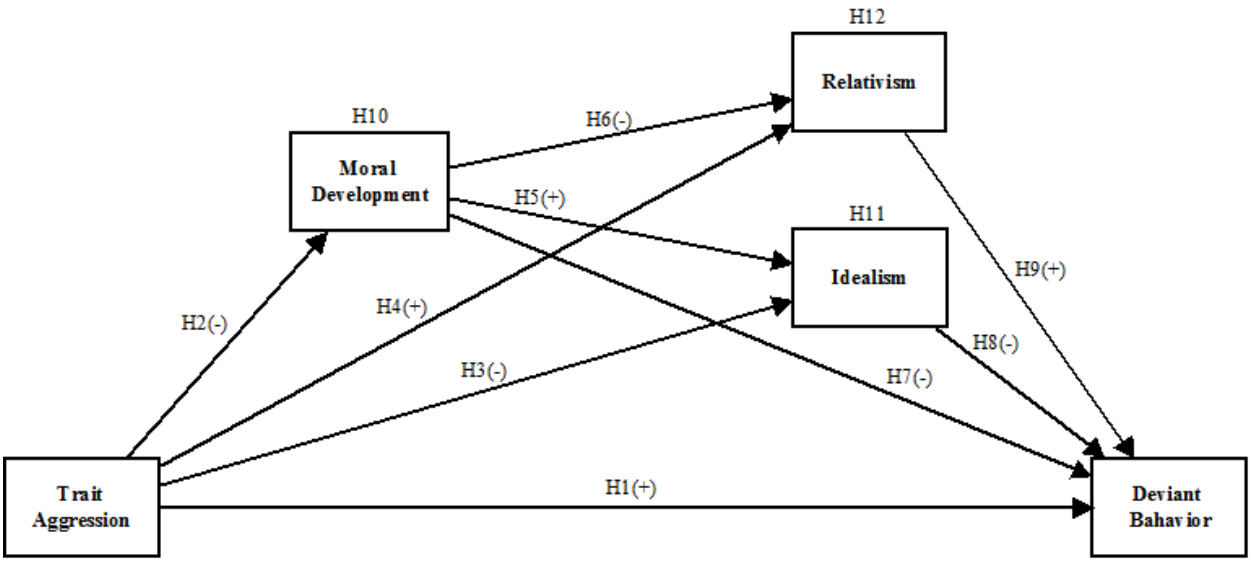


*Figure 1*. Hypothesized path model.

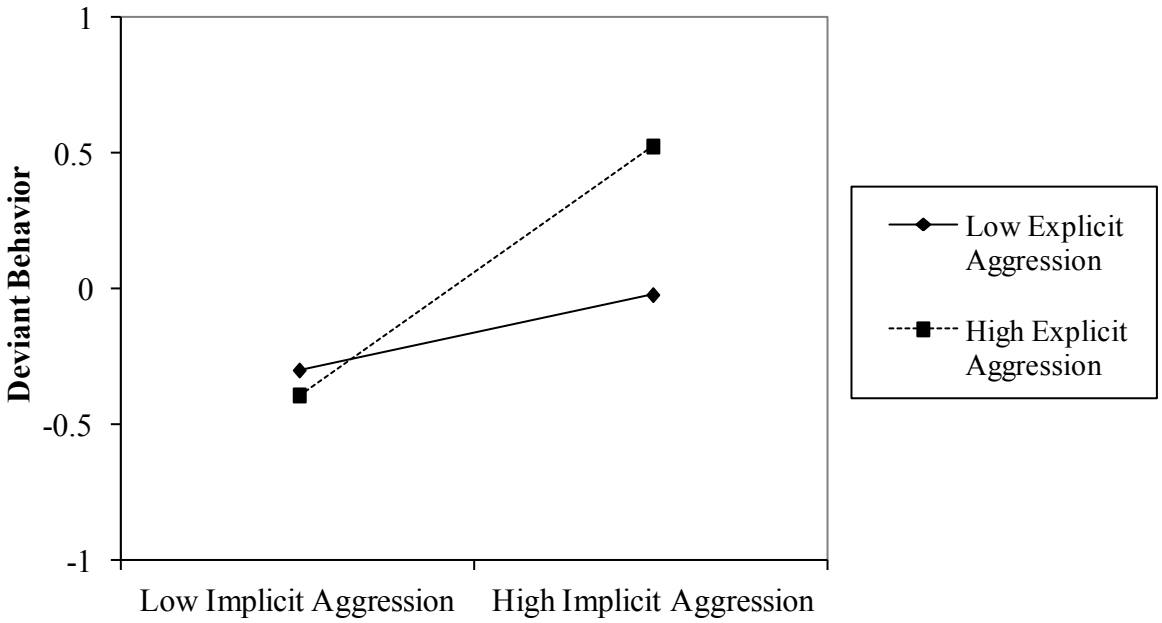


*Figure 2.* Interaction effects of implicit and explicit aggression when predicting deviant behavior.

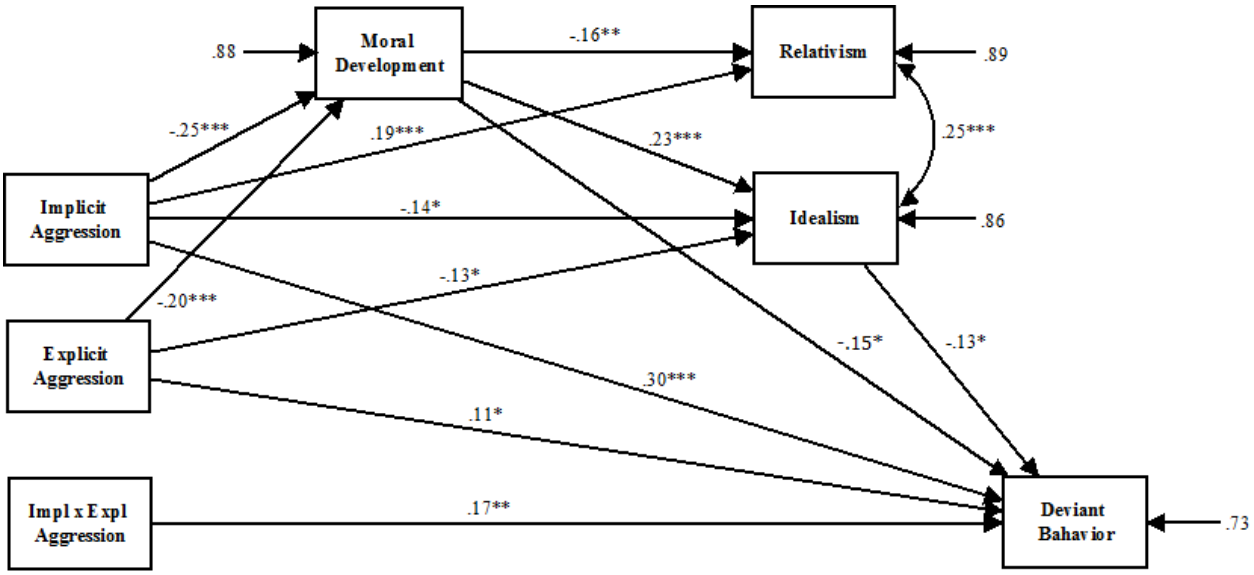


*Figure 3.* Measurement model including only significant paths. *$p < .05$ ** $p < .01$ ***$p < .001$

## Appendix: IRB Approval

**EAST CAROLINA UNIVERSITY**
**University & Medical Center Institutional Review Board Office**
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · **www.ecu.edu/irb**

# Notification of Exempt Certification

From: Social/Behavioral IRB
To: Mark Bowler
CC:

Date: 4/10/2014
Re: UMCIRB 13-002491
Aggressive Behavior

I am pleased to inform you that your research submission has been certified as exempt on 4/10/2014 . This study is eligible for Exempt Certification under category #2 .

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.
This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.
The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.
The Chairperson (or designee) does not have a potential for conflict of interest on this study.