Human Resource Management Review 21 (2011) 342–352

Contents lists available at ScienceDirect

Human Resource Management Review

journal homepage: www.elsevier.com/locate/humres

The relationship of personality to counterproductive work behavior (CWB): An integration of perspectives

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ARTICLE INFO

Keywords:
Aggression
Counterproductive work behavior
Personality
Temperament
Workplace

ABSTRACT

The workplace literature relating personality to CWB is integrated with complimentary literatures from other disciplines including developmental and social psychology. The literature is reviewed showing how both broad-based personality dimensions reflected in integrity tests and measures of the five factor model, and specific personality traits relate to counterproductive work behavior (CWB). A model is developed showing how different personality variables shown to relate to aggression and/or (CWB) might affect different steps in the process linking behavior to precipitating environmental conditions or events. Specifically Hostile Attribution Bias and Narcissism are most relevant to appraisal and attributions, Negative Affectivity and Trait Anger connect to negative emotions, and Locus of Control and Self-Control are thought to play a CWB inhibiting role. Distinctions among reactive, proactive, and relational aggression are extended to CWB.

The study of potential antecedents of counterproductive work behavior (CWB, defined broadly as behavior that harms organizations and/or people in organizations; cf Sackett & DeVore, 2002; Spector & Fox, 2005) in its many forms (e.g., aggression, deviance, retaliation, and revenge) has been widespread. The workplace literature has found linkages of CWB with both environmental conditions and personality (Berry, Ones, & Sackett, 2007; Hershcovis et al., 2007). On the personality side it has been shown that both individual traits such as trait anger (Douglas & Martinko, 2001; Fox & Spector, 1999), and Five Factor Model (FFM, Digman & Takemoto-Chock, 1981) factors such as agreeableness and emotional stability (Berry, Ones, et al., 2007) are related to CWB. Although this literature has shown linkages between personality and CWB, it has not fully integrated findings and theories from other domains to provide a more complete picture of how personality might relate to such behaviors (MacLane & Walmsley, 2010). Furthermore, for the most part theories of CWB have focused on emotion-motivated or reactive acts, without fully considering other forms. The Spector and Fox (2005) stressor-emotion model, for example, posits CWB as a reaction to stressful work conditions that induce negative emotions, with personality traits playing an important role. However, this model does not allow that CWB might occur for reasons other than a response to stressful conditions, and might therefore have more than one set of antecedents.

The role of personality in the overlapping concept of aggression has been well studied in other disciplines that are concerned with understanding antisocial and maladaptive behavior. These literatures make distinctions about different forms of behavior both in terms of their nature and underlying motives, and offer insights into the role of personality that can inform the workplace literature. In order to more completely explore personality relationships with CWB, I will consult the literatures in nonwork disciplines that study similar phenomena, most notably Clinical Psychology, Criminology, Developmental Psychology, Personality, and Social Psychology. The developmental literature is particularly relevant, given its tradition of conducting field studies, and utilizing multiple sources of data, much like the methods used in organizational research. I will provide an integration of work on aggression from a variety of disciplines that might advance our understanding of such behaviors in the workplace.

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doi:10.1016/j.hrmr.2010.10.002

1. The nature of CWB and aggression

1.1. CWB and related constructs

CWB has been defined from two different perspectives. Sackett and DeVore (2002) took an organizational perspective in defining CWB as acts that run counter to an organization's legitimate interests. The specific behaviors that they list mainly target organizations, although they also include inappropriate verbal (coworker harassment) and physical (attack coworker) acts. Spector and Fox's (2005) definition takes more of an employee perspective in noting that CWB consists of behavior that harms or intends to harm others or organizations. There is no requirement that CWB harm the organization itself, at least directly, which is perhaps the major difference in the definitions.

There are a number of constructs in the workplace literature that overlap with CWB including from the actor side, aggression (Neuman & Baron, 1997; Spector, 1975), deviance (Robinson & Bennett, 1995), revenge (Bies & Tripp, 2005), retaliation (Skarlicki & Folger, 1997), and from the target side emotional abuse (Keashly & Harvey, 2005; Keashly, Trott, & MacLean, 1994), bullying (Rayner & Keashly, 2005), and mobbing (Knorz & Zapf, 1996; Zapf & Einarsen, 2005). Studies from the actor perspective that assess behaviors done by subjects of study have more often than not included both interpersonal and noninterpersonal acts in the same index of behavior. Interestingly, whereas early studies distinguished behaviors by target (Chen & Spector, 1992; Hollinger, 1986, 1991; Hollinger, Slora, & Terris, 1992; Spector, 1975; Storms & Spector, 1987), as did Robinson and Bennett's (1995) influential paper on deviance, the majority of more recent studies combined a wide variety of behaviors with different targets. Although distinguishing organization from person target is sometimes done (cf a meta-analysis of such studies by Berry, Ones, et al., 2007), rarely are behaviors broken down into more fine grained categories (for an exception see Spector et al., 2006).

The definition of CWB overlaps considerably with aggression in that it consists of acts that harm (or are intended to harm) others. Both are acts that harm, although CWB references organizations as the setting and/or target. A distinction is that CWB is not limited to acts directed toward people, but includes acts that harm organizations. In many studies aggression is buried in CWB measures that assess other forms of behavior, and even if we allow that sometimes aggression toward an individual is manifest as destruction of that individual's property, it is far from clear how many acts directed toward property, tangible or intangible, is displaced aggression from a human target.

1.2. Aggression

Although aggression might seem to be a simple concept, there is a lack of consensus about its precise definition. Some have defined aggression in terms of the actor's intent. For example, Bettencourt, Talley, Benjamin, and Valentine (2006) define aggression as behavior intended to harm another who is motivated to avoid that harm. Note that their definition does not require that harm actually occurred, so that an unsuccessful attempt to harm someone would be considered aggression. Anderson and Bushman (2002) offer a similar definition, but add to it that the actor must believe that the target will be harmed, and that accidental harm or harm caused incidentally by an action not intended to harm (pain during a dental procedure) is not aggression (cf. Spector & Fox, 2005 for a parallel argument concerning CWB). Other authors have argued that intent should not be part of the definition. For example, Loeber and Hay (1997) defined aggression purely in terms of the effects, that is, it is behavior that causes or threatens harm. They rejected intention as part of the definition because intent is not observable and actors sometimes even deny intent. It should also be noted that intention is rarely if ever assessed in aggression or CWB studies. Rather studies assess the behavior or the result of the behavior.

An aspect of aggression that distinguishes it from CWB is the human target. The Anderson and Bushman (2002), Bettencourt et al. (2006), and Loeber and Hay (1997) definitions all note that aggression is targeted toward people. Loeber and Hay specifically stated that acts toward property should be treated independently of aggression, although they can be related to aggression. Whether or not to consider acts toward property as aggression is not as straight-forward as it might seem, as it is possible to injure someone through the proxy of their property, both tangible and intangible. Thus attacks on a person might include attacks on their personal property, as well as attacks on their reputation. Although acts directed toward property might well be part of an effort to harm an individual, there are reasons to consider them separately, as they can have different causes (Loeber & Hay, 1997), and it is not always clear when an act is intended to harm a target and when there are different motives.

In the workplace literature, Spector (1978) extended the concept of aggression to the organization, suggesting that aggressive acts could be directed toward social entities other than individual people. He defined organizational aggression as acts intended to harm organizations, and such acts could be directed toward people in the organization as well as organizational property, production, or the organization's well being (e.g., damaging reputation). Thus an organizational analog to interpersonal aggression directs the target from the individual to a higher-level collective. It does, however, consist of acts that are directed in some cases to individual people, so that individual aggression can be part of organizational aggression.

There are two aspects to organizational aggression that should be considered. First, organizational aggression might be nothing more than displaced individual aggression. An actor who wishes to harm an individual might be reluctant to aggress directly toward that individual because of fear of retaliation, so he or she will displace that aggression to a safer target (Dollard, Doob, Miller, Mowrer, & Sears, 1939; Marcus-Newhall, Pedersen, Carlson, & Miller, 2000). In some cases the actor might inflict harm by damaging property belonging to the target (e.g., planting a computer virus in the supervisor's computer), so in a real sense harm has been inflicted upon an individual, but by the proxy of tangible (a computer) or intangible (reputation) property. This makes infliction of harm more complex than the direct physical or verbal attack on a person.

Second, if organizational aggression is a parallel to interpersonal aggression, then it should be demonstrated that actors do in fact consider the organization itself to be the entity to which harm is intended. It has been argued that supervisors are seen by employees to be agents of organizations (Frone, 2000), and therefore employees are likely to get back at supervisors via the proxy of the organization. Evidence for this comes from Bruk-Lee and Spector (2006) who showed that conflict with the supervisor was more strongly related to aggression (assessed as CWB) directed toward the organization than other people. This difference was maintained when conflict and aggression were assessed with different sources (self-report and coworker-report). Unfortunately, little evidence is available that acts directed toward the organization are intended to harm the organization rather than specific individuals within the organization, or that harm was intended at all. For example, theft of organization property might have nothing to do with intending to cause harm, and to the contrary, actors might convince themselves that the organization will not miss the stolen items. Rationalization might even allow an actor to consider an act of theft to be beneficial, for example, stealing a laptop from work might allow one to more efficiently do important work from home.

Both workplace studies with adults (e.g., Berry, Ones, et al., 2007) and nonworkplace studies with children (e.g., Barnow, Lucht, & Freyberger, 2005) indicate that aggression and other forms of counterproductive (with adults) or delinquent (with children) behavior are related. Furthermore, different types of aggression, such as physical and relational (see discussion in the next section) are related, as well (Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). Furthermore, in many cases they have similar correlations with potential antecedents (Barnow et al., 2005; Hershcovis et al., 2007), although not in all cases (Vitaro, Barker, Boivin, Brendgen, & Tremblay, 2006). Workplace studies have not been completely consistent in showing similar relationships between aggression and other forms of CWB (Berry, Ones, et al., 2007; Bruk-Lee & Spector, 2006; Frone, 2000; Spector et al., 2006). Although it is possible that personality might relate differently to various forms of CWB including aggression, there is at least some evidence that there is a set of underlying personality variables that tend to relate not only to aggression, but to other forms of antisocial and deviant acts, both inside and outside of the workplace (Barnow et al., 2005; Berry, Ones, et al., 2007; Hershcovis et al., 2007).

1.3. Types of aggression

Aggression has been divided into types based on underlying causes and motives. Aggression that occurs in response to provocation that induces anger or other negative emotions is termed hostile aggression in the social psychology literature (e.g., Anderson & Bushman, 2002) or reactive aggression in the developmental literature (Crick & Dodge, 1996; Vitaro, Brendgen, & Tremblay, 2002). The response in such cases is often immediate and impulsive, with the proximal goal of harming another person (or organization with CWB). Aggressive acts that are not generally a response to anger or other negative emotions, that have an ultimate motive that is something other than harm, and that are calculative rather than impulsive are considered instrumental (Anderson & Bushman, 2002) or proactive (Crick & Dodge, 1996; Vitaro et al., 2002). For example, an armed robbery is planned, conducted without anger, and any harm done to victims is incidental to the objective of obtaining money. Finally, relational aggression consists of acts that harm or threaten harm to friendships or relationships (Crick, Grotpeter, & Bigbee, 2002). Such behaviors can be reactive or proactive in nature, and include threats to end a friendship if a friend doesn't comply with a request, using social exclusion as a reaction to anger, or getting peers to reject a target of aggression (Crick et al., 2006).

Although the distinction between reactive and proactive aggression is conceptually clear-cut, considering individual aggressive acts as falling cleanly into one of these two categories based on the three characteristics of anger (or other negative emotion), impulsivity, and motive for harm has been problematic (Bushman & Anderson, 2001). Bushman and Anderson argue that a given act of aggression can have multiple motives, so that one might decide to engage in an act to both hurt another and attain some additional objective. For example, sometimes a provocation that induces anger can result in a calculated and planful nonemotional revenge with not only the motive to harm but the motive to restore justice and obtain benefits (cf Bies, Tripp, & Kramer, 1997 for discussion of the social regulatory function of revenge).

The three types of aggression: reactive, proactive, and relational can be extended to the broader concept of CWB. Individuals might engage in any act of CWB, whether they are directed toward organizations or people, for reactive or proactive motives, or the combination. Thus an individual might steal an item he or she does not want for the sole purpose of hurting the organization (reactive) or because he or she wants the item but does not wish harm (proactive). Relational aggression is directed toward people rather than property or organizations, as only people have relationships that can be damaged. The relationship in an organizational setting can be personal, but it can also be professional. Thus an employee might damage or threaten to damage another's reputation at work, which hurts the target's working relationship with others in the organization, such as the immediate supervisor.

2. Basic framework for aggression and CWB

Contemporary models of aggression (Anderson & Bushman, 2002; Berkowitz, 1998) and CWB (Spector & Fox, 2005) view behavior as an interaction of the person with the environment. Fig. 1 illustrates the basic framework in which individuals are exposed to the environment, appraise that environment and make attributions for the causes of events and the intentions of actors, respond emotionally, and engage in behavior. It is the combination of cognition and emotion in interaction with personal factors that result in the decision to engage in an aggressive or counterproductive act. For reactive aggression and CWB, exposure to something unpleasant (Berkowitz, 1990) or stressful (Spector & Fox, 2005) can serve as a trigger for aggression. Individuals exposed to unpleasant events go through an attribution process in which they try to determine the cause of the situation. If the

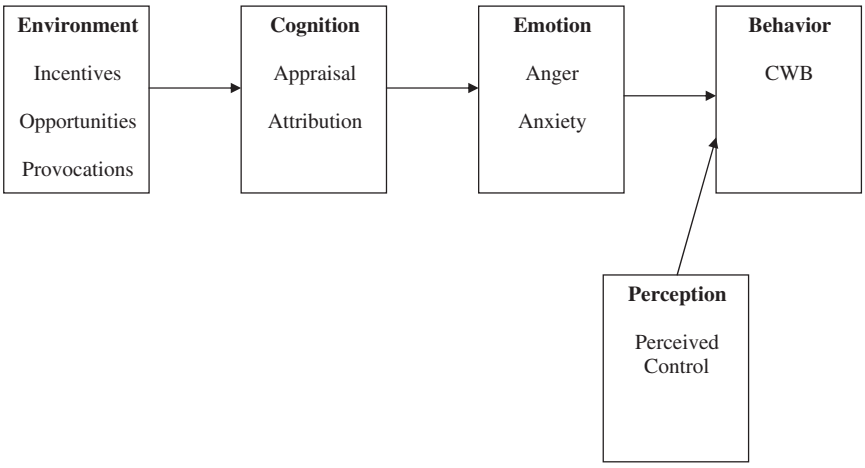

Fig. 1. CWB model without personality variables.

cause is seen as being under another individual's control and harm was intentional, the likelihood of anger and a subsequent aggressive response is heightened (Betancourt & Blair, 1992).

Proactive acts are engaged in for the purpose of achieving a goal or objective (e.g., obtaining an item through theft) where the harm might be incidental to the goal. CWB is not so much a reaction to adverse situations, but rather is a response to incentives (wanting something) and opportunities for achieving goals (Anderson & Bushman, 2002). Fox and Spector (2010) present a model of proactive CWB that is based largely on the Theory of Planned Behavior (Ajzen, 1991). According to this model, CWB arises from goals and intentions that are formed through interaction with the environment. Important elements are opportunities to achieve goals (though engaging in a CWB act), norms of relevant groups, as well as the individual's attitudes and values. This model minimizes the importance of emotions, although it is certainly reasonable to suppose that emotions are important in goal selection. For example, an individual might be envious of what another person has and use CWB to attain it.

Regardless of type, the expression of aggression can be inhibited by two factors: perceived control over the situation (Spector & Fox, 2005) and fear of punishment (Marcus-Newhall et al., 2000). Individuals who perceive they have control are likely to attempt constructive actions intended to positively cope with the situation, for example, fixing the cause of an adverse condition (computer malfunction) so it does not reoccur, or working overtime to make enough money to buy a desired item. Fear of punishment might completely inhibit an impulse to engage in CWB or it might lead to displaced aggression toward other, presumably safe targets (Marcus-Newhall et al., 2000), which might be inanimate.

Personality can play a role in several points along this process. Such individual differences can affect attributions, people's thresholds for anger and other negative emotions, their tendencies to inhibit aggressive impulses, and their likelihood to perceive control. This presumes that there are individual differences in people's tendencies to engage in aggression and CWB. Furthermore, it is presumed that personality can interact with the environment such that given the same conditions or situations, people will vary in their tendency to respond with CWB.

3. Are there individual differences in aggression?

It has been shown that individuals vary in their propensity to engage in aggression. Aggressive behavior in general has been shown to be related over time within individuals (Loeber & Hay, 1997), suggesting a trait-like nature of the behavior. Dill, Anderson, and Deuser (1997) report as much as 25% of the variance in aggressive behavior is within person. Furthermore, scales of aggressive and hostile tendencies have been developed, such as Buss and Perry's (1992) Aggression Questionnaire, and the California Psychological Inventory Hostility (H) scale (Adams & John, 1997) that have been shown to relate to aggressive behavior. This research has established that individuals differ in their aggressive predispositions, although they do not provide a great deal of insight into the underlying personality mechanisms.

3.1. Temperament and aggression

The developmental literature has identified dimensions of temperament that are presumed to be the precursors to later adult personality (Rothbart, 2007), and that have been linked to aggression and other forms of problem behavior that might be considered forerunners of CWB. Basic temperaments become elaborated during a child's development, influencing specific personality characteristics that we see in adults (Berdan, Keane, & Calkins, 2008). Such temperaments are assumed to have a biological basis whereas later personality is the result of interactions between biology and experience (Rothbart, 2007). Infants can be distinguished along a broad dimension of difficultness with the "difficult temperament" being characterized by emotionality, fussiness, and reactivity to the environment (Bates, Freeland, & Lounsbury, 1979). Such temperaments in toddlers have been

shown to predict subsequent aggression in school over a period of years (Vitaro et al., 2006), thus showing a clear link between presumably biologically based individual differences and subsequent aggression.

Rothbart (2007) reviewed the structure of child temperament, noting three important dimensions that link to later adult personality. These are Negative Affectivity (NA: tendency to experience negative emotions), Effortful Control (EC: ability to plan future actions and inhibit inappropriate responses), and Extraversion/Surgency (E/S: activity level, shyness, and affiliation with others). These three temperament dimensions are associated with the FFM dimensions of Emotional Stability, Conscientiousness, and Extraversion, respectively. Of the three, only the first two seem to play an important role in aggression. Individuals high on NA tend to be reactive to the environment, and are likely to respond emotionally to provocations someone low on NA would not. Thus we would expect high NA individuals to be more likely to engage in aggression due to their tendency to experience aggression-eliciting emotions. EC relates to the ability of an individual to consider options and inhibit impulses. Thus the child who is low on this dimension will be more likely to impulsively engage in an aggressive act that a high EC counterpart will be careful to avoid.

Developmental studies provide support for these suppositions in research where temperament and aggression are collected from independent sources, such as parents, teachers, and observers. NA relates to reactive aggression (Joussemet et al., 2008; Vitaro et al., 2006), but not proactive aggression (Vitaro et al., 2006). EC (operationalized as impulsivity) has been shown to relate to aggression in adolescents (Eklund & Klinteberg, 2005; Fite, Goodnight, Bates, Dodge, & Pettit, 2008). Similar results have been found with adults outside of the workplace with NA (Ramirez & Andreu, 2006) and EC (see meta-analysis by Morgan & Lilienfeld, 2000), specifically impulsiveness (Houston & Stanford, 2005; Stanford et al., 2003; Stanford et al., 2009).

The developmental literature shows that there are broad dimensions that are precursors to aggression and other behaviors that are analogs to CWB. The results with temperament are suggestive that at least some individual differences likely have a biological basis. One must be careful in drawing such conclusions, however, as there is evidence showing that parental practices play an important role in these behaviors (Joussemet et al., 2008; van Zeijl et al., 2007; Vitaro et al., 2006), and it is likely that temperament has an impact on parenting practices. Thus it might be the parental practices rather than temperament that lead to aggression.

4. Are there individual differences in CWB?

In the workplace it has been shown that personality can predict CWB. Some of that research has taken a broad-based view of personality, combining measures of lower-level specific traits into higher-order dimensions. Often the research goal is not so much to understand the role of individual differences, but rather to validate potential selection tools in efforts to avoid hiring individuals predisposed to engage in counterproductive behaviors, such as theft or withholding of performance (e.g., MacLane & Walmsley, 2010; Marcus & Wagner, 2007). An example of this approach is the personality-based integrity test that has become widely used in organization hiring efforts.

4.1. Integrity tests and CWB

Integrity tests are perhaps the broadest-based measures of personality that have been used to predict CWB. Such tests are often developed with a criterion-based empirical approach whereby items (or scales) are chosen for their ability to predict CWB rather than to reflect theoretical a priorí personality dimensions (Berry, Sackett, & Wiemann, 2007). Such tests by design can reflect a number of individual personality traits (Marcus, Hoft, & Riediger, 2006). Some have suggested that they largely reflect the FFM dimensions of Agreeableness, Conscientiousness, and Emotional Stability (Berry, Sackett, et al., 2007), although others argue that they include other aspects of personality as well (e.g., Marcus, Lee, & Ashton, 2007).

Even though the integrity testing literature does not provide a great deal of insight into the CWB process, it does provide evidence that personality relates to CWB. Reviews have shown that these tests can predict CWB assessed as a broad composite as well as more specific behaviors, such as absence (Berry, Sackett, et al., 2007; Ones, Viswesvaran, & Schmidt, 1993).

4.2. Five factor model and CWB

The FFM is a useful scheme that allows the combining of lower-level specific traits into higher-order personality dimensions. It has become a dominant framework in the study of personality among organizational researchers in general, although the study of CWB itself has maintained a balance between FFM studies and studies of specific traits. A meta-analysis by Berry, Ones, et al. (2007) summarized results of studies correlating CWB with personality from a FFM perspective. As shown in Table 1, Berry et al. found that only Agreeableness, Conscientiousness, and Emotional Stability related significantly to CWB, divided by target (organization versus people). As can be seen, the biggest differences between targets were that Agreeableness related more strongly with CWB directed toward people than organizations, whereas Conscientiousness related more strongly to CWB directed toward organizations than people. Emotional stability related about the same to both.

Although the FFM studies have shown a link between personality and CWB, some researchers have argued that broad dimensions are insufficient for fully demonstrating the relationship between personality and CWB. Hastings and O'Neill (2009) reported correlations of CWB with both broad FFM dimensions and the component individual traits. Their results suggested that combining narrow traits into higher-order dimensions obscured important differences. For example, the correlation of CWB with Neuroticism (reverse scored Emotional Stability) was a nonsignificant 0.12, whereas the individual component of anger was a significant 0.28. Furthermore, the relationship of CWB with Extraversion was a nonsignificant −0.06, although some of the

Table 1
Mean correlations of FFM dimensions with CWB directed toward organizations and people from the Berry, Ones, et al. (2007) meta-analysis.

Dimension	Organizational CWB	Person CWB
Agreeableness	−0.25	−0.36
Conscientiousness	−0.34	−0.19
Emotional stability	−0.19	−0.20
Extraversion	−0.07	0.02
Openness to experience	−0.03	−0.07

individual components had significant relationships, although in opposite directions that might have cancelled out the overall Extraversion score correlation.

5. Where personality fits in the CWB process

Personality has the potential to affect the CWB process illustrated in Fig. 1 at every step. It can affect people's perceptions and appraisal of the environment, their attributions for causes of events, their emotional responses, and their ability to inhibit aggressive and counterproductive impulses. A handful of specific personality traits have been shown to relate to CWB. I will expand the CWB model to include the potential role of personality traits at each stage. It should be kept in mind, however, that although relationships of personality traits with CWB have been established; it is not entirely clear what the underlying mechanisms for such relationships might be. Alternative explanations for the relationship of personality to CWB will be discussed after the expanded model is presented.

Fig. 2 illustrates the general CWB model with that addition of six personality variables: Hostile Attribution Bias (HAB), Narcissism, Negative Affectivity (NA), Trait Anger (TA), Effortful Control, and Locus of Control (LOC). HAB and Narcissism mainly affect appraisals and attributions of a situation, making its likely influence early in the CWB process. NA and TA concern emotional responsivity that mainly affects emotional reactions to perceived situations once they have been appraised. Effortful Control and LOC mainly influence the connection between impulses to act and behavior. Effortful Control concerns the inhibition of aggressive and counterproductive impulses, and LOC relates to perceptions of control, where those perceptions might influence an individual's choice of response.

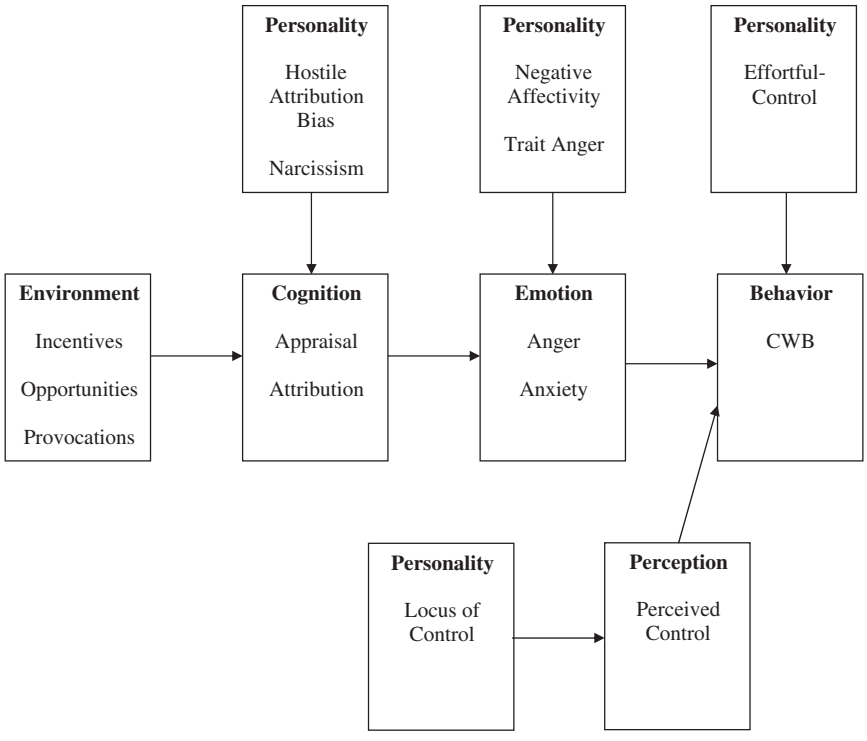

Fig. 2. CWB model with personality variables.

5.1. Hostile attribution bias

As noted earlier, attributions can play an important role in aggression, particularly when it is reactive. An individual who encounters a stressful or unpleasant situation will likely engage in an attributional process in order to understand the underlying cause of that situation. If the attribution is made that another person is responsible and has intentionally created the unpleasant situation, anger and subsequent aggression are likely consequences (Bettencourt et al., 2006). Hostile Attribution Bias (HAB) is a personality variable that reflects the tendency for people to make such attributions to others for unpleasant conditions. It has been shown to relate to aggression and CWB.

In a series of studies, aggressive children were shown to differ from non-aggressive children in their tendencies to attribute hostility to others in ambiguous situations (e.g., Crick & Dodge, 1996; Crick et al., 2002; Dodge & Crick, 1990). In these studies children are classified as being high or low in aggressive behavior in school, based on ratings of observers or teachers. HAB is assessed as responses to scenarios in which the child is asked to explain the reasons for an event occurring to a child in which something unpleasant occurred. These multi-source studies clearly suggest that children's aggressive behavior is associated with HAB, although only when that aggression is reactive (Dodge & Crick, 1990). HAB does not seem to play a role in proactive aggression.

Whereas some personality variables are assumed to reflect basic temperament that has a biological basis, HAB appears to be primarily learned. A series of studies with children has shown, for example, that it is associated with having been physically abused (Dodge, Pettit, Bates, & Valente, 1995). Thus the child learns from experience that others do in fact have hostile intentions. Furthermore, Dodge and Crick (1990) describe HAB as being much like an ability, with those high on HAB having a deficit in social information processing, that is, they misread social cues. If true this suggests that HAB might be reduced through training (Dodge & Newman, 1981).

Studies conducted in the workplace are consistent with the developmental literature in suggesting a role for HAB in aggression (Douglas & Martinko, 2001), abusive supervision as a form of aggression (Hoobler & Brass, 2006), and CWB (Chiu & Peng, 2008; Goh, 2006). Chiu and Peng (2008)showed that HAB related to CWB targeting both organizations and people. Goh's (2006) multi-source study showed that HAB related to both self- and coworker-reported CWB. Furthermore, she showed that HAB moderated the relationship between workplace stressors and CWB. Individuals high on HAB showed a stronger CWB response to stressors.

5.2. Narcissism

It has been noted that among the many provocations that can lead to anger and subsequent aggression are attacks on a person's self-esteem (Baumeister, Smart, & Boden, 1996). This could occur through verbal insults or other events that somehow undermines an individual's belief in their own self-worth. Baumeister et al. (1996) suggested that individuals who are high in self-esteem have that esteem more easily threatened than individuals who are low, and would more likely see an insult as inconsistent with their self-view. Thus we might expect that high self-esteem individuals would be more vulnerable to ego-threat, and thus would be more likely to interpret events in ways that would lead to anger and subsequent aggression. Subsequent research on the relationship of self-esteem with anger and aggression suggest a more complex story. It is not self-esteem itself but rather an exaggerated and unrealistic self-esteem that is vulnerable to threat (Bushman & Baumeister, 1998). Such an exaggerated self-image is characteristic of those who are high on the trait of Narcissism.

Narcissism in the CWB model would be expected to influence how an individual might interpret events that have the potential to threaten their self-esteem. Those high on Narcissism would be more likely than those low to interpret criticism and insults as threats, and therefore they would see the social world as potentially more threatening. This heightened sensitivity to criticism and ego-threat would make them more likely to experience anger, and subsequent CWB.

There have been a handful of studies that have shown a correlation between Narcissism and CWB that supports this possibility (Judge, LePine, & Rich, 2006; Penney & Spector, 2002). Interestingly, Judge et al. (2006) found the Narcissism related more strongly to supervisor ($r = 0.24$) than self-reports ($r = 0.12$) of CWB. Penney and Spector (2002) showed that Narcissism moderated the relationship between a stressor (organizational constraints) and CWB, suggesting that those high on Narcissism were more reactive to the environment. Thus there is evidence that both HAB and Narcissism serve as filters of stressful work conditions, and are most relevant to reactive rather than proactive CWB.

5.3. Negative affectivity

Negative affectivity (NA) is the predisposition to experience negative emotion across time and situations (Watson & Clark, 1984). It presumes that there is an overall tendency for individuals to experience a variety of negative emotions, including anger, anxiety, and depression. Thus measures of overall NA contain items that reflect a variety of emotions, making NA a higher-order dimension that is comprised of individual trait components. It is not clear that NA is really distinct from measures of ES or the closely related construct of neuroticism, as measures of these different constructs tend to be highly related (Watson & Clark, 1984). Workplace CWB studies have tended to distinguish NA from trait anger, even though NA measures often include some anger items. On the other hand, some studies have assessed trait anxiety as a measure of NA distinct from anger and other emotions (Fox & Spector, 1999; Fox, Spector, & Miles, 2001).

If we presume that NA reflects individuals' emotional sensitivity to the environment, it would follow that individuals high on this personality trait would be more likely to respond to provocation emotionally than would individuals who are low. Thus given

the same perceived event, with the same appraisal and attribution, those high versus low on NA would be likely to experience negative emotion and subsequent CWB.

In their meta-analysis, Hershcovis et al. (2007) reported mean correlations for NA with CWB distinguished by organization versus person target of 0.24 and 0.22, respectively. The mean correlation across two studies using measures specifically of trait anxiety were approximately the same for personal CWB (mean r = 0.225) and somewhat higher for organizational CWB (mean r = 0.34). All of these correlations were with self-reports of both personality and CWB. Penney and Spector (2005) reported relationships of NA with CWB distinguished by target. Their self-report ratings yielded correlations very close to the Hershcovis et al. meta-analysis. Peer ratings of CWB showed correlations somewhat lower (r = 0.20 versus 0.16 for organization and person targets, respectively). However, their results suggest that the relationship between CWB and NA cannot be attributed to shared biases within subjects completing all measures.

5.4. Trait anger

Trait anger is the tendency for an individual to experience anger. Since anger itself is seen as a central variable in the aggression process (Anderson & Bushman, 2002; Berkowitz, 1990), the predisposition to experience anger should play an obvious role in reactive aggression and CWB. Similar to NA if we assume that individuals high versus low in trait anger are more emotionally sensitive, it would follow that they would experience more anger and subsequent CWB. In their meta-analysis Hershcovis et al. (2007) found a mean correlation of trait anger with organizational CWB of 0.28, and personal CWB of 0.37. Given that organizational CWB is more aligned with proactive acts whereas personal CWB is more closely aligned with reactive acts, it is not surprising that the latter correlation is larger. It should be kept in mind that the studies noted here have been done with self-reports of both trait anger and CWB. O'Brien and Allen (2008) included both a self and coworker CWB measure, finding that the latter yielded stronger relationships than the former with a measure of trait anger. This suggests that the relationship between trait anger and CWB cannot be attributed to shared biases among measures within subjects who completed the same measures.

5.5. Effortful Control

As noted earlier, Effortful Control is one of the main dimensions of child temperament. As described by Rothbart (2007), Effortful Control consists of several components including the capacity to focus and shift attention, and the capacity to plan future action and inhibit inappropriate behaviors. This latter component is perhaps most relevant to CWB as it concerns an individual's ability to inhibit aggressive and counterproductive impulses, as well as the ability to plan constructive reactions to conditions and events that may have aroused negative feelings.

There have been a few studies that have showed a relationship of Effortful Control and related self-control variables with workplace aggression or CWB (Douglas & Martinko, 2001; Marcus & Schuler, 2004; Marcus & Wagner, 2007). Henle (2005) found a similar relationship between CWB and Impulsivity, a personality variable that is similar to Effortful Control. Furthermore, it has been argued that at least in part Conscientiousness reflects Effortful Control (Rothbart, 2007), although not all of the component traits necessarily are part of Effortful Control. Of the six components of Conscientiousness reported by Hastings and O'Neill (2009), Self Discipline and Cautiousness would seem to come closest to reflecting Effortful Control, and both related significantly with CWB.

5.6. Locus of control

As originally defined by Rotter (1966) Locus of Control is the tendency for individuals to believe they control events and rewards in their lives (internals) versus factors external to themselves (externals). We would expect that internals would be more likely than externals to perceive that they have control over events at work, and such control perceptions would be expected to inhibit tendencies toward aggression and CWB in favor or more constructive means of dealing with environmental provocation and negative emotions. The limited research linking Locus of Control to CWB finds support for the expected relationship between Locus of Control and CWB, with somewhat stronger relationships for organization rather than person targets (Fox & Spector, 1999; O'Brien & Allen, 2008). Furthermore, Locus of Control was found to moderate the relationship between feelings of frustration at work and CWB (Storms & Spector, 1987), supporting the idea that internality is inhibiting CWB.

6. Implications for human resource management

The idea that CWB is related to employee personality has informed HR recruitment and selection practices, most notably in the use of integrity tests. Such tests are generally used to help screen from hiring individuals with predispositions to engage in theft and other potentially harmful behaviors. The use of such tests is often based on pure empiricism, choosing tests that have been shown to have predictive validity for criteria of interest. The results of this review suggest that it might be productive to take a more theory-driven approach in deciding what sorts of measures might be most helpful in predicting who is and who is not likely to engage in CWB. In particular it would be helpful to move beyond the Five Factor Model and consider individual traits that have been shown to relate to CWB. Specifically, measures of Hostile Attribution Bias, Trait Anger, and Effortful Control are most promising.

An awareness of the connection between personality and CWB by supervisors is potentially useful in customizing leadership practices to the needs of individual employees. Such awareness might be provided in supervisory training focused on understanding why employees engage in CWB, and the sorts of strategies that can be helpful in dealing with employees of different personalities. Individuals who are high on Hostile Attribution Bias, for example, are likely to assume injustice in situations where the reasons for actions are unclear. Thus for an employee high in HAB, supervisors should make extra efforts to explain and justify actions so the reasons are unambiguous and not easily attributed to favoritism. Employees high on Trait Anger can be over-reactive to provocation. Supervisors might be careful when possible to avoid placing such individuals in high-stress situations where provocation is likely to result in angry reactions, such as dealing with disagreeable customers. Individuals low in Effortful Control tend to be impulsive and might not do a good job of inhibiting their impulses. Supervisors of such employees could provide extra structure that helps control behavior externally for those who have trouble with their own internal controls.

7. Where do we go from here?

This paper took a broad view in integrating literatures from beyond organizations to provide additional support for some of the conclusions concerning personality. There is remarkable consistency in findings from these different literatures. At the same time, these literatures show a few areas that have been neglected in the organizational realm. A great deal of attention has been paid to affect-related dimensions and traits (Emotional Stability, NA, and Trait Anger). Less attention has been given to personality variables that relate to appraisals and attributions, although a few studies have explored HAB. Less attention has been paid to Effortful Control and the mechanisms by which people regulate both their emotions and subsequent behavior. Furthermore, much of our literature is concerned with establishing direct relationships and potential personality moderators. Needed are studies that explore more deeply how personality might affect the processes that lead to CWB. The developmental literature reviewed offer some interesting examples (e.g., Dodge & Newman, 1981).

Although there is mention of the distinction between reactive and proactive (angry versus instrumental) aggression, the idea has not been fully developed in the CWB arena. It might be worth exploring the distinction between reactive and proactive CWB, as the same behavior might be done for different reasons. A step in that direction is Penney, Spector, Goh, Hunter, and Turnstall (2007) who investigated motives for CWB. Distinguishing types of CWB will likely require a more episodic approach than is typically used whereby chronic conditions and personality are related to frequency of engaging in CWB.

Finally, the construct of relational aggression from the developmental literature might be productively applied to the workplace. It seems likely that employees engage in relational aggression with one another. Measures might be adapted from developmental studies to see if adults engage in many of the same types of behaviors. Likely relational aggression is hidden in more global measures of CWB from the actor side, and from the target side, measures of abuse, bullying and other related constructs.

Much of the literature I reviewed shows that various personality measures relate to measures of CWB. This has been shown clearly with single source self-report studies, and in at least some cases multi-source studies in which subjects were not the source of data on CWB. Theoretically the various traits would play a role in different steps in the CWB process. We should be cautious, however, in not overinterpreting the role of personality. Whereas some individuals might be more inclined to respond with CWB than others, relationships of personality with CWB do not directly establish the proposed mechanisms. Thus we should not assume that individuals who engage in CWB are necessarily dispositionally programmed to do so, whereas individuals who do not engage in such behaviors are dispositionally disinclined. Such views fail to consider the greater complexities of interplay between individuals and the environment.

It has been argued in the personality literature that personality effects can be overshadowed by strong situational demands, that is, a person is only free to engage in behaviors consistent with his or her personality when the environment is not overly constraining (Mischel, 1973). Smithikrai (2008) investigated the impact of situational strength on the relationship between personality and CWB. Using a survey design, Smithikrai operationalized situation strength as the strength of norms concerning desirability of CWB. The correlations of CWB with Agreeableness and Conscientiousness were smaller under strong situation strength ($r = -0.31$ and -0.24, respectively) than under weak situation strength ($r = -0.49$ and -0.58, respectively). Thus norms can either inhibit or reinforce an individual's personality tendencies.

Most of the studies in the workplace and many in the nonworkplace literatures use nonexperimental designs in which conclusions are drawn from observed relationships among aggression/CWB, personality, and other variables. Although such designs can show connections both cross-sectionally and prospectively, they cannot establish the mechanisms by which variables are related. Furthermore, we should not assume that environmental exposure is more or less random among individuals. Clearly there is an interaction between individuals and their environments as people choose the situations they encounter (Mischel, 1977). For example, Spector, Zapf, Chen, and Frese (2000) discussed evidence that NA was related to people's objective job characteristics, and that some of this was possibly due to NA differences in employment interview performance that relegated those high in NA to more stressful jobs. If true, this would suggest that at least some of the reason that NA relates to CWB is because individuals high in NA are exposed more than their low NA counterparts to emotionally distressing conditions at work that would lead to CWB. Thus it might not be just that individuals high in NA respond negatively to the same situations, but rather that situations differ according to NA. All this is to say that the role of personality in CWB is likely to be more complex than described in Fig. 2, and that this model is not the complete story. Nevertheless, there is a growing literature that has shown that people vary in their levels of CWB and that CWB is related to a number of personality variables. We need to go further that just showing connections and attempt to understand more completely the role of personality in these important workplace behaviors.

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