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Self-esteem and Counterproductive Behaviors: A Meta-analytic Review

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Abstract

Understanding the correlates of counterproductive work behavior is of increasing importance in organizational literature both because of its relation with job performance and because of its collective cost to individuals and organizations. Inconsistent results have been found concerning the relation between self-esteem and counterproductive behavior. This meta-analysis cumulates the results of previous research (17 correlations, $N = 4,302$) on self-esteem and counterproductive behavior. The estimated population correlation was -0.25 . Two moderator analyses were performance. Age appeared to moderate the relation between self-esteem and counterproductive behavior in that it is stronger in samples of older individuals. Organization based self-esteem appeared to have a different relation with counterproductive behavior than did global self-esteem.

The study of counterproductive work behavior has grown in importance within organizational literature because of its relation with job performance, the cost it can incur upon organizations, and the harm it may cause people. There are currently three hypothesized dimensions to job performance (Rotundo & Sackett, 2002; Dalal, 2005): task performance, defined as the effectiveness with which an individual contributes to an organization's goals (Borman and Motowidlo, 1997; Berry, Ones, and Sackett, 2007); organizational citizenship behavior, defined as any intentional employee behavior that is discretionary and improves the functioning of an organization (Organ, 1988); and counterproductive work behavior, defined as any intentional behavior on the part of an organizational member viewed by the organization as contrary to its legitimate interests (Gruys & Sackett, 2003). As a result of the decline in performance, the financial cost of counterproductive behaviors to organizations and economies has been estimated in the billions of dollars (Levinson, 2010; Taylor, 2007). Beyond job performance, counterproductive behaviors at work can also take a large toll on the people who are victims of counterproductive behavior. In the extreme, counterproductive behavior can involve acts of physical aggression and violence against other people in the work environment. Between the years 1997-2008, 1,260 people were killed by work associates in the United States alone (Bureau of Labor Statistics, 2010). Victims of less severe forms of counterproductive behavior, such as harassment, suffer from decreased well being (Duffy, Ganster, & Pagon, 2002), life satisfaction, job satisfaction and increased incidence of depression and anxiety (Bowling & Beehr, 2006). Taken together, counterproductive behaviors can affect nearly all aspects of an organization from the day-to-day interactions of the people working in them to the total costs reported on a balance sheet.

Self-esteem is defined as the overall positive or negative evaluation of oneself (Brown, 1993) and has been connected to several outcomes. For example, high self-esteem is associated with self-efficacy, job performance (Judge & Bono, 2001), life-satisfaction (Campbell, 1981), conscientiousness, extroversion, and emotional stability (Robins, Trzesniewski, Potter, & Gossling, 2001). There have been inconsistent results with respect to the relation between counterproductive behavior and self-esteem (Baumeister, Campbell, Krueger, & Vohs, 2003; Ferris, Brown, Lian, & Keeping, 2009). Consistency theory and ego defense have emerged from the literature as competing theories that pose different motivations for acting in a counterproductive manner.

Theoretical Debate. Theories that purport to show a negative relation between self-esteem and counterproductive behaviors often rely on consistency theory to support their hypotheses (Korman, 1970). Within this view, individuals have motivation to believe and act in certain ways that run parallel with their views of self. Korman (1970) wrote that “individuals will be motivated to perform on a task or job in a manner which is consistent with (their) self-image” (p. 32). In other words, they align their level of performance with their self-concept (Pierce & Gardner, 2004). The Korman view implies that people with high self-esteem would outperform those with low self-esteem because, as noted in the introduction, counterproductive behavior is a component of job performance, which is similarly considered in job performance ratings (Viswesvaran, Schmidt, & Ones, 2005). Thus, for individuals trying to maximize their performance to be consistent with their self-image, consistency theory predicts high self-esteem individuals would engage in fewer counterproductive behaviors.

In additional support of the negative relation between counterproductive behavior and self-esteem is the relation between self-efficacy and self-esteem. One predictor of performance

has been self-efficacy, which has consistently shown a positive relation with self-esteem. Relying on Bandura's (2001) social cognitive theory and self-efficacy theory, much work has supported the relation between performance and self-efficacy (Gist & Mitchell, 1992, Stajkovic & Luthans, 1998). More specifically, feelings of efficacy arise through personal agency and high feelings of efficacy increase the likelihood that individuals will undertake and persist in achieving difficult goals. It should be noted that both generalized self-efficacy and task specific self-efficacy have a positive relation with work performance.

Though people have argued contrary to this viewpoint (Chen, Gully & Eden, 2004), it has been suggested and empirically investigated, through the theory of core self-evaluations (Judge, Locke & Durham, 1997; Judge, Erez, Bono & Thoresen, 2002), that generalized self-efficacy and self-esteem load onto a single higher order construct. Regardless of the higher level relationship between self-efficacy and self-esteem, the two constructs have a positive relation with each other, which implies a positive relation between self-esteem and job performance.

The theory of core self-evaluations also includes neuroticism along with self-esteem and self-efficacy, which again points to the negative relation between self-esteem and deviance. Recent research has shown a strong negative relation with self-esteem and neuroticism (Gardner & Pierce, 2010). In turn, neuroticism has been shown to be positively related to counterproductive behavior (Hastings & O'Neill, 2009). Taken together, it can be inferred that self-esteem would have a negative relation with counterproductive behavior.

On the other end of spectrum, ego-defense has been the primary theory put forth for the positive relation between counterproductive behavior and self-esteem. Many psychological conceptualizations of ego consider it to be the "self" or how ones views oneself (Leary, Terry, Allen, & Tate, 2009). Ego threat occurs when an environmental condition conflicts with the

existing view one has of themselves. In this sense, a CWB is a manifestation of the self's (ego's) rejection of esteem-threatening evaluations received from the environment (Bushman & Baumeister, 1998). Baumeister, Smart, and Boden (1996) examined aggression (a form of counterproductive behavior) as a means to reconcile internal and external views of the self. In this line of thought, "threats to self-esteem are more apt to be perceived as unjustified if one's self-concept is positive than if one's self-concept is negative and unjustified threats are more likely to prompt anger" (Kernis, Grennemann, & Barclay, 1989, p. 1014). Consequently, high self-esteem individuals would be more likely to engage in behaviors that bring these discrepant views back into line with one another, which may be some form of counterproductive behavior.

Though consistency theory could predict a negative relation between self-esteem and counterproductive behavior (Ferris, Brown, Lian, & Keeping, 2009), alternative viewpoints illustrate how high self-esteem could lead to more counterproductive behavior (Baumeister et al., 1996). This may explain why the empirical results have not found a conclusive answer to the relation between self-esteem and counterproductive behavior. Some studies have found negative, positive, or no relation between the two constructs (Ferris, Brown, & Heller, 2009, Baumeister et al., 2003).

Despite the controversy, no systematic review has integrated this literature to estimate the magnitude and direction of the self-esteem and counterproductive behavior relation. Our research seeks to estimate the relation between counterproductive behavior and self-esteem and we offer the following:

Hypothesis 1: Self-esteem will have a negative correlation with counterproductive behavior.

Deviance has a strong relation with age in that it peaks between the ages of 16 to 18 and then decreases thereafter into old age (Sampson & Laub, 1992). Self-esteem, on the other hand, increases after the ages of 18 to 22 and holds relatively steady between the ages of 23 to 49 before increasing to the age of 69 (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Because self-esteem is fairly stable for the ages being studied, and counterproductive behavior will naturally decrease, the relation between self-esteem and counterproductive behavior is hypothesized to be closer to zero or slightly positive for the younger age groups.

Hypothesis 2: The strength of relation between self-esteem and counterproductive behavior will be greater, and negative, in older populations.

There has been support to think of self-esteem as a multidimensional construct. Two separate dimensions in the self-esteem literature are global-self esteem and contingent self-esteem. Contingent self-esteem occurs when self-worth is derived from success in a particular domain (Ferris, Brown, Lian, & Keeping, 2009). This differs from global self-esteem which is the overall positive or negative evaluation of oneself. High levels of contingent self-esteem do not indicate that an individual has a high level of global self-esteem. Indeed, it has been found that the relationship between contingent and global self-esteem is low (Crocker, Luhtanen, Cooper, & Bouvrette, 2003).

One type of contingent self-esteem is organization based self-esteem (OBSE). OBSE is defined as the degree to which an individual believes themselves to be a capable, significant, and worthy organizational member (Pierce & Gardner, 2004). In some respects, OBSE measures whether or not someone feels that they matter to their organization and contribute to it. Whereas high global self-esteem individuals may not rely on work for their feelings of self-worth and, thus, may not care if they endanger their job performance by engaging in counterproductive

behaviors, high OBSE people derive specific psychological benefits from their relationship with the organization and would be less likely to endanger this relationship by engaging in CWB.

Hypothesis 3: The strength of relation between self-esteem and counterproductive behavior will be greater, and negative, for organization based self-esteem when compared to global self-esteem.

Method

Literature search. A variety of strategies were used to locate relevant studies. Searches were performed in Web of Science (ISI), ABI/Inform, Google Scholar, and JStor. Search items for counterproductive behaviors were deviance, counterproductive, aggression, violence, alcoholism, undermining, bullying, harassment, dysfunctional, noncompliance, retaliation and sabotage. Self-esteem searches included self-esteem, self-worth, and self-like. Searches were also performed using well known scales from the literature (Rosenberg, 1965; Bennett & Robinson, 2000) by performing a forward citation analysis whereby all articles that could be located that had cited a particular scale were checked to see if they fit the aforementioned criteria. Additionally, the bibliographies of previously identified papers were searched to find other relevant studies. Further, review or meta-analysis papers that dealt with either self-esteem or deviance were similarly searched to identify studies for inclusion. Finally, using the OB-Listserv and HR-Listserv, of the Academy of Management, we solicited unpublished manuscripts that relate to self-esteem and organizational deviance or counterproductive work behavior.

Decision Rules. To be included in the meta-analysis, studies needed to include measures of self-esteem and counterproductive behavior at work and at the individual level. Self-esteem is

typically measured using the scale developed by Rosenberg (1965); however, one study used positive self-concept, which was included because it fit the definition of self-esteem. Another several studies used OBSE, they were also included. The study of counterproductive behavior has a large variety of behaviors subsumed within it. Buss (1961) created a typology that is still widely accepted today to describe different forms of aggression (Neuman & Baron, 2005).

Buss's typology ranges from homicide to talking behind someone's back or refusing to answer the phone. As is obvious, not all of these behaviors are overtly aggressive, but they are certainly counterproductive. For the purposes of this study, deviant behavior and counterproductive behavior were defined analogously. Many researchers utilized Bennett and Robinson's (2000) 19-item deviance scale which measures deviant and counterproductive behaviors and has a large amount of overlap with Buss's aggressive typology; however, many researchers looked at a specific type of deviant or counterproductive behavior such as absenteeism, group undermining, or intended retaliation. Using disparate deviant behaviors as representative of CWB does not pose a problem because individuals engaging in a single deviant behavior frequently engage in other deviant behaviors (Bennett and Robinson, 2000).

Further inclusion and exclusion criteria were applied to the identified studies. The studies were required to deal with counterproductive behaviors at work, which means the studies needed to look at behaviors that occur in the work environment. This is to say things like group undermining, which were studied with undergraduate students, were included in the analysis; however, studies that looked at adolescent aggression were not included. There were no time restrictions on the studies included. Duffy, Shaw, Scott, and Tepper (2006) examined the relationship between self-esteem and absenteeism; however, absenteeism was measured in terms of self-reported class attendance. This paper was excluded.

Empirical links between self-esteem, self-regulation, and self-defeating behaviors have been hypothesized and found. This line of thought purports that people with higher self-esteem and higher self-efficacy may persist in attempting to complete an activity that cannot successfully be performed. As a result, self-esteem could be related to self-defeating behaviors. However, because this type of behavior is not intentional, studies that looked at this relation were not coded and not included in the meta-analysis.

All studies found were of a survey design, but had different collection and respondent recruitment methods. The population of studies included undergraduates, graduates, blue-collar workers, professionals, university alumni, and attempts at cross sections of the working population. The recruitment methods included in-class extra credit, newspaper ads, online recruitment, and workplace sampling. All recruitment methods were included in the analysis.

Finally, three articles included multiple measures of either counterproductive behavior or self-esteem. A single article included multiple counterproductive behaviors in their two studies (Burton, Mitchell, & Lee, 2005). In this case, the more severe counterproductive behavior was included in the meta-analysis. In study 1, overt aggression was used over obstructionism and expressions of hostility. In study 2, the overt aggression measure was not taken, but instead both direct and indirect measures of expressions of hostility and obstructionism were measured. This study chose direct expressions of hostility, which is the more severe of the counterproductive behaviors measured. Duffy et al. (2006) examined individual and group undermining as their measures of deviance. Here, individual undermining was used because group undermining was an aggregate measure of people's individual responses to whether or not they had participated in undermining behavior. Lastly, Ferris, Spence, Brown, and Heller (in press) included "trait" and "daily" organization based self-esteem measures. Daily measures of self-esteem were obtained

by asking self-esteem related questions that were specific to daily events, whereas trait self-esteem measured more general and enduring opinions about oneself. This analysis used the trait self-esteem to avoid daily fluctuations in self-esteem.

With the combined search methods, a total of 17 independent samples, comprising a total of 4,302 individual, met the decision rules.

Analysis. This study used psychometric meta-analysis (Hunter & Schmidt, 2004) in which correlations were individually corrected for measurement error, but not range restriction/enhancement. We offer both results based on the observed correlations and the individually corrected correlations (i.e., estimates of the population correlation from each study). Because various measures were used with non-comparable standard deviations and because of a lack of information on a population standard deviation, no range restriction/enhancement corrections were included in the analysis. The psychometric meta-analysis was conducted in SPSS using code by Banks (2010), which provides comparable results to the Schmidt and Le (2005) software.

In the (6 of 17) cases where reliability information was not reported, the information was imputed based on the weighted average of the identical or similar measures. Keller (1983) and Raelin (1994) did not report the reliability for self-esteem. These studies used Rosenberg's 1965 scale and a weighted average of the 10 other studies was used for the reliability. The weighted average reliability for self-esteem was 0.82. Counterproductive behavior is sometimes conceptualized as a formative measure and, as such, it is not always considered appropriate to provide reliabilities for these measures (Ferris et al., forthcoming, Edwards & Bagozzi, 2000). However, many counterproductive or deviance scales do provide reliabilities and in cases where no reliability was given, a weighted average of other included reliabilities was used. In this case,

the weighted average reliability of the counterproductive measure was 0.89. Finally, Kessler, Singla, Galperin, & Spector (2009), used both supervisor and self-report items in their measure of counterproductive work behavior. Accordingly, the article reported alpha's of 0.95 (self-report) and 0.98 (supervisor-report); consequently, an average of these was taken and an alpha of 0.965 was used in the psychometric meta-analysis.

Results

The analyses are based on 17 samples that encompassed 4,302 individuals, 15 studies were published, one study is in press, and one was presented at a conference (Burton et al., 2005, Cohen-Charash & Mueller, 2007, Chang & Smithikrai, 2010, Duffy, et al., 2006, Ferris, Brown, & Heller, 2009, Ferris, Brown, Lian, & Keeping 2009, Hui & Lee, 2000, Inness, Barling, & Turner, 2005, Harvey & Keashly, 2003, Keller, 1983, Marcus & Schuler, 2004, Raelin, 1994, Renn & Prien, 1995, Ferris et al., in press, Kessler et al., 2009). The studies contributing data to the meta-analysis are listed in Table 1 and the results from the meta-analysis are in Table 2.

Tables 1 and 2 here

The estimated population correlation was -0.25 with an 80% credibility interval of -0.49 to -0.01. The percent of variance accounted for by artifacts, including sampling error and differences across studies in measurement error, is only 12.0%, which suggests that moderators are likely present. Another analysis was conducted without the Chang and Smithikrai (2010) correlation. This study had a high negative correlation ($r = -0.39$) between self-esteem and counterproductive behavior and included 1,662 individuals. Removing the correlation resulted in an estimated population correlation -0.12. The 80% credibility interval without the study is -0.28

to 0.05 and the percent of variance accounted for by artifacts is 33.6%. No compelling evidence of publication bias (McDaniel, Rothstein & Whetzel, 2006) was found. However, given the lack of robustness of some publication bias methods to heterogeneous data (data sets in which all variance cannot be attributed to sampling error), publication bias analyses should be re-conducted in moderator sub-groups after sufficient future data become available.

Hypothesis 2 addressed the age moderator. For the moderator analysis, the mean age of the sample was used to split between young and old based on average population age. All groups with an average age under 30 were included in the younger group and the remaining studies were assigned to the older group. Marcus and Schuler (2004) did not include an average age group and were not included in the moderator analysis. The estimated population mean correlations were -0.04 for the younger group and -0.33 for the older group. The difference between these point-estimates shows that age is a likely moderator of the relation between self-esteem and counterproductive behaviors such that the relation is stronger in older groups. We also correlated the estimated population correlation from each sample with its mean age resulting in a correlation of -0.19, which is consistent with the conclusion of the sub-group analysis.

Hypothesis 3 examined the relation between global self-esteem and organization based self-esteem. Global self-esteem included only those studies that used Rosenberg's scale for self-esteem. Marcus and Schuler (2004) used positive self-concept in their research and was, consequently, excluded from this analysis. Study 2 performed by Duffy et al. (2006), used a self-esteem scale created by Pelham and Swann (1989) and was also excluded. Duffy et al. (2006) used the Rosenberg scale in study 1, which was included in this moderator analysis. Results show that, excluding the Chang & Smithikrai (2010) study, OBSE has a stronger relationship

with CWB than did GSE. However, including the Chang & Smithikrai (2010) study showed that GSE has a stronger relationship with CWB.

Discussion

The results of this meta-analysis indicate that there is a negative correlation between self-esteem and counterproductive behavior with a point-estimate of -0.25, which indicates support for the Korman (1970) interpretation of consistency theory. Age moderated the effect such that the relationship between self-esteem and counterproductive behavior was stronger for older people. As mentioned, deviance occurs at a higher rate in younger ages, thus having a weaker negative correlation between self-esteem and deviance in the younger age group is not particularly surprising. Additionally, the magnitude of the relationship with CWB is different for GSE and OBSE. Because Chang and Smithikrai (2010) was an outlier and because of the relatively small number of effect sizes, this relation should be further examined as research becomes available.

Knowing that lower self-esteem people are more likely to engage in counterproductive behavior is beneficial because of the influence that organizations and managers have on the self-esteem of their employees. Gardener and Pierce (2010) showed that perceived autonomy and task significance have a strong correlation with organization based self-esteem. Other research has shown that the relationship between manager and employee, in terms respect displayed, (Pierce, Gardner, Cummings, & Dunham, 1989) and quality of leader-member relationship (Sekiguchi, Burton, & Sablynski, 2008) influences the self-esteem of an employee. By placing emphasis on manager and employee relationships and by creating a more autonomous work environment, organizations may increase individual level self-esteem and the compliment of benefits associated with it including lower amounts of counterproductive behavior.

Additional Issues, Weaknesses, and Future Research. A more robust understanding of self-esteem and counterproductive behaviors in the work environment is needed. The construct counterproductive behavior is multidimensional and deviant behaviors can take many forms (Sackett & Devore, 2001). Like counterproductive behavior, the construct self-esteem includes multiple dimensions, such as: global (Rosenberg, 1965) organization based (Pierce, et al., 1989) or contingent/non-contingent (Crocker et al., 2003). The multidimensionality of these constructs could be accounting for the variance in results that have been found relating self-esteem to deviant and counterproductive behaviors. Research needs to continue in order to understand the relation between deviance and self-esteem. In particular, the dimensionality of each construct should be assessed with their potentially unique relation to the dimensions of the other variable.

Some research concerning self-esteem and counterproductive behavior has already begun. Baumeister et al. (1996) reviewed data that linked egoism to aggressive behavior and stated that egoism can be marked by excessive and unfounded self-esteem; however, other counterproductive behaviors were not assessed. Ferris, Brown, and Heller (2009) looked at organization based self-esteem and how it mediated the relation between organizational support and organizational deviance, though deviance was measured as a whole and was not broken out by any particular group of behaviors. With new research on the horizon, opportunities could exist to examine varying scales of self-esteem and their potentially unique relationship with different types of deviant and counterproductive behaviors.

Deviance and counterproductive behavior have some confusing semantic underpinnings. First, deviance has been described as one of three subsets of counterproductive behaviors, which also includes absenteeism and unsafe behavior (Sackett & Devore, 2001). Deviance is commonly defined as behavior which violates organizational norms (Bryant & Higgins, 2010) and, as such,

its definition would shift across organizations. The aforementioned definition used for counterproductive behavior in this paper remedies any confusion, but much of the literature has not made fully clear the distinctions and overlap between the two. As a result, there is a need for further refinement and adoption of the definitions underlying deviance and counterproductive behavior.

In conclusion, this meta-analysis points to three key conclusions. First, there is a negative relation between self-esteem and counterproductive behavior. Second, the variance in results highlights the need for further research that is designed to examine the different dimensions of the two constructs. Finally, counterproductive behavior and deviant behavior need to be further defined in terms of their nomological net.

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Table 1
Studies Included, Correlation, Participants, and Reliabilities

Authors	Year	r	N	α_{SE}	α_{Dev}	Avg. Age	Age Group
Keller	1983	-0.22	174	0.82	0.89	36.0	Older
Raelin	1994	-0.16	84	0.82	0.89	33.0	Older
Hui & Lee	2000	-0.11	378	0.88	0.89	44.0	Older
Inness, Barling, & Turner	2005	0.20	105	0.86	0.89	37.0	Older
Cohen-Charash & Mueller	2007	-0.15	72	0.86	0.90	36.0	Older
Ferris, Brown, & Heller	2009	-0.16	230	0.91	0.68	42.5	Older
Ferris, Brown, Lian, & Keeping	2009	-0.34	123	0.89	0.92	37.6	Older
Chang & Smithikrai	2010	-0.39	1,662	0.80	0.93	31.2	Older
Ferris, Spence, Brown, & Heller	In Press	-0.20	100	0.88	0.89	32.1	Older
Renn & Prien	1995	0.05	57	0.80	0.89	28.5	Younger
Harvey & Keashly	2003	-0.17	115	0.86	0.89	21.5	Younger
Burton, Mitchell, & Lee - Study 1	2005	-0.11	152	0.85	0.78	22.1	Younger
Burton, Mitchell, & Lee - Study 2	2005	0.08	185	0.85	0.81	21.4	Younger
Duffy, Shaw, Scott, & Tepper - Study 1	2006	-0.04	333	0.81	0.81	23.8	Younger
Duffy, Shaw, Scott, & Tepper - Study 2	2006	0.07	291	0.76	0.95	21.9	Younger
Kessler, Singla, Galperin, & Spector	2009	-0.26	96	0.85	0.97	21.3	Younger
Marcus & Schuler	2004	-0.31	145	0.80	0.88	N/A	N/A

r = observed correlation, N=number of participants, α_{SE} = self-esteem coefficient alpha, α_{Dev} =deviance coefficient alpha
 Where studies reported ranges in the number of participants, the lower number was used.

Table 2

Analysis Results for the Correlation Between Self-Esteem and Deviant Behavior

	<i>N</i>	<i>No. rs</i>	<i>Mean r</i>	σ_r	Psychometric Results		
					ρ	σ_ρ	80% CV
All Studies	4,302	17	-0.13	0.16	-0.25	0.19	-0.49 to -0.01
Leave one out*	2,016	16	-0.11	0.15	-0.12	0.13	-0.28 to 0.13
Age							
Older Group	2,928	9	-0.17	0.17	-0.33	0.16	-0.53 to -0.13
Older Group*	1,266	8	-0.14	0.15	-0.17	0.11	-0.31 to -0.03
Younger Group	1,229	7	-0.04	0.09	-0.04	0.09	-0.15 to 0.08
Self-Esteem Type							
GSE	3,158	12	-0.13	0.17	-0.29	0.13	-0.54 to -0.04
GSE*	1,496	11	-0.10	0.16	-0.11	0.19	-0.28 to 0.06
OBSE	708	3	-0.16	0.05	-0.16	0.00	-0.16 to -0.16

Note: No. rs = number of correlations; σ_r = estimated standard deviation of r; 80% CV = 80% credibility value