ABSTRACT

Substantial recent research examines the follower consequences of leader (mis)alignment of words and deeds, but no research has quantitatively reviewed these effects. This study examines extant research on behavioral integrity (BI) and contrasts it with two other constructs that focus on (mis)alignment: moral integrity and psychological contract breaches. We compare effect sizes between the three constructs, and find that BI has stronger effects on trust, in-role task performance and citizenship behavior (OCB) than moral integrity and stronger effects on commitment and OCB than psychological contract breach. These stronger attitudinal consequences run counter to our initial expectations, but they provide evidence of important conceptual distinctions and mechanisms that we articulate. BI theory suggests that BI's greater performance impact is due to the notion that BI affects communication clarity in addition to attitudes. Results of meta-analytic structural equation modeling are consistent with this proposed dual path of BI's impact. We highlight avenues for future research on BI and discuss how our findings inform the broader research on leader (mis)alignment.

Keywords: leader integrity, behavioral integrity, moral integrity, psychological contracts, meta-analysis.

HOW LEADER ALIGNMENT OF WORDS AND DEEDS AFFECTS FOLLOWERS: A

META-ANALYSIS OF BEHAVIORAL INTEGRITY RESEARCH

Talking the Talk is easy, the achievement is when one's Talk is reflected in their own Walk.

Always practice what you preach or what you preach may fall on deaf ears.

— Eugene Nathaniel Butler

In 2011, a televised report on the CBS show "60 minutes" detailed numerous well-timed stock trades by members of congress, and how the timing of these trades was informed by data accessible only to the legislators. Of course, insider trading is illegal, and the show sparked public outrage, which was echoed by President Obama in his state of the union address and by numerous legislators speaking on the floor. Congress responded by writing and passing the Stop Trading on Congressional Knowledge ("STOCK") Act in April 2012, and praised the act in a bipartisan fashion. However, since passing that law, congress and its legal counsel have vigorously and successfully resisted any attempts at securing the release of information that might incriminate sitting members of congress for exactly the practices prohibited by the act. In 2013, both houses of congress voted unanimously and without debate to suspend the STOCK Act's requirement that congressional staffers post their financial positions online (Lawder and Cowan, 2013). People's capacity for speaking one way and acting in another is indeed impressive.

In an age of increased digital transparency, ethical scandals and management malfeasances have become more visible (Bennis et al., 2007) and have sparked a growing interest in the study of leader integrity and its impact on follower outcomes. Palanski and Yammarino (2007) examined the different formulations of leader integrity and encouraged a focus on alignment as a parsimonious construct to study leader integrity, an approach that is

exemplified by Simons' (2002) Behavioral Integrity ("BI") formulation. Simons defined BI as the perceived pattern of alignment between an actor's words and deeds or the extent to which actors are seen to keep promises, "walk the talk" and "practice what they preach". Scholars have argued and shown that leader BI is important in eliciting favorable follower attitudes towards their leader (e.g. trust in and satisfaction with their leader), follower attitudes towards their work (e.g. affective organizational commitment, work engagement, job satisfaction, and intent to stay), and in fostering both follower in-role and extra-role performance (see Simons et al. (2011) for a recent review).

In the current study, we test BI theory (Simons, 1999; 2002; 2008) by meta-analytically summarizing the impact of leader BI on follower trust in leaders, organizational commitment, citizenship behavior (OCB), and in-role task performance. Additionally, we compare these results with those for related constructs on leader alignment: psychological contract breaches and moral integrity. Psychological contract breaches reflect perceived violations of the employment agreement (Rousseau and McLean Parks, 1993) and moral integrity reflects the consistent adherence to moral or socially accepted values (Mayer et al., 1995). Both constructs demonstrate substantial conceptual overlap with BI in that both focus on issues of alignment. However, both also demonstrate important distinctions. Previous meta-analyses have already been applied to moral integrity (Colquitt et al., 2007) and psychological contract breaches (Zhao et al., 2007). In this study, we contrast the theoretical models and effect sizes of these prior meta-analyses with our own meta-analytical results for BI.

This study contributes to previous literature by quantitatively reviewing research on BI and contrasting it with related concepts on leader alignment. This contrast is important as prior research has argued that the different conceptualizations for leader integrity hinder the

comparability of research findings and thus the advancement of the field of leader integrity as an integrated whole (Palanski and Yammarino, 2007). As an example of this problem, a prior meta-analysis on leader BI (Davis and Rothstein, 2006) looks at leader BI as a combination of measures of psychological contract breaches and moral integrity in the form of the perceived leader integrity scale (Craig and Gustafson, 1998), and includes no studies that actually measure the BI construct. While Davis and Rothstein (2006) provide a generalized overview of the effects of leader integrity in different formulations, they confound the distinct effects that these constructs can have on follower outcomes. In contrast to this earlier meta-analysis, the current study summarizes previous research using the relatively narrow definition of leader BI. At the same time we highlight its similarities to and distinctions from similar concepts of moral integrity and psychological contract breaches. In this way this study not only summarizes previous research, but also works toward a more integrated perspective that disentangles the different facets of leader integrity. It is necessary to differentiate these related constructs because they differ in their practical and conceptual implications. While BI and moral integrity represent a trait ascribed to a leader or other target, psychological contract breach describes an event. Further, the constructs differ in which cues would be relevant in forming the observers' judgment. The constructs also differ proscriptively, in suggesting whether relevant management techniques and interventions should involve primarily training or policy, whether they are value-neutral, and whether they belong primarily in the realm of human resources management or leadership development. For example, whereas BI may be relevant as a general tool for promoting manager or leader effectiveness (Dineen et al., 2006), moral integrity may be discussed more in the specific context of business ethics and psychological contract breaches will be most relevant in the context of human resource management.

THEORY AND HYPOTHESES

Concepts of behavioral integrity, moral integrity, and psychological contract breaches

In an overview of leader integrity research, Palanski and Yammarino (2007) identified different concepts that all include integrity as an element of their theoretical frameworks: perceived leader integrity (e.g. Craig and Gustafson, 1998), ethical leadership (e.g. Brown et al., 2005), authentic leadership (e.g. Avolio and Gardner, 2005), moral integrity (e.g. Mayer et al., 1995), and BI (e.g. Simons, 2002). In a call for a more rigorous and researchable definition of leader integrity, they urged future research to focus on consistency between words and actions (Palanski and Yammarino, 2011).

Leader BI is defined as the perceived pattern of alignment between the leader's words and deeds (Simons, 2002) and will be the focus of our study. Simons (2002) argued that moral integrity and psychological contract breaches are similar to BI as both focus on (mis)alignment and both have been argued to be a key antecedent of trust. There are, however, also a number of distinctions that can be made between BI and these related concepts.

Moral integrity, following Mayer et al. (1995), describes a prevalent common-language notion of integrity as consistent adherence to a set of moral standards that the observer finds acceptable. It differs in a few important ways from BI. First, moral integrity requires that the enacted values are socially acceptable (Mayer et al., 1995) and moral (Becker, 1998; Colquitt et al., 2007). In contrast, BI explicitly excludes evaluation of moral content from the construct (Simons, 2002). Furthermore, moral integrity does not emphasize that the actor has voiced their values (Gentile, 2010), but rather that moral values are consistently adhered to in action. BI, in contrast, requires the values in question to be voiced by the leader, so that the perceived alignment focuses on leaders' words and actions, regardless of moral content. This distinction is

important as Simons (2002) argues that the observer's own values (both moral as well as profit-oriented) may bias perceptions of integrity.

Psychological contracts are "individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization" (Rousseau, 1995, p. 9). They are typically experienced as a "promise", and so the following or breaking of that subjectively experienced agreement closely resembles the promise-keeping aspect of BI. Psychological contracts differ from BI in that psychological contracts describe perceived commitments that are central to the employees' work and livelihood, while BI encompasses responses to commitments both proximal and distal, important and trivial (Simons, 2002). Whereas psychological contract breaches focus on specific instances of misalignment regarding work, BI focuses on a more general perceived pattern of misalignment (or alignment). Breaches in psychological contracts are likely to evoke strong mistrust or distrust (Zhao et al., 2007), and evoke the emotional response of profound feelings of violation (Morrison and Robinson, 1997). BI, on the other hand, is a judgment about the leader or organization rather than the event, and can be a hallmark of leader character (Gentry et al., in press). Like moral integrity, psychological contracts differ from BI in that they do not require the leader to ever have voiced the promise. It seems likely, however, that this latter distinction is subjectively blurred when an employee experiences contract breach: The subjective experience of psychological contract breach is that of a promise broken or violated (Morrison and Robinson, 1997).

There are theoretical reasons to expect each construct to exert stronger relative impact in some domains and weaker in others. As one specific case, we argue that leader BI is less strongly related to follower attitudes than psychological contract breaches and moral integrity, but is more strongly related to follower performance than the other two constructs. We imagine other

contexts and outcomes where one or another construct could be expected to exert special influence. Because of these differences, and the practical implications of companies' efforts to manage psychological contracts through HRM policies or BI through leader development, it is important to examine similarities and differences in their empirical consequences.

In what follows, we will first use BI theory and research to hypothesize how leader BI relates to follower trust in leaders and organizational commitment. We contrast those consequences with those proposed for moral integrity and psychological contract breach, and compare the effect sizes between the three constructs. Next, we describe the consequences of BI for in-role performance and OCB, again, contrasted with those of the similar constructs. Finally, we explore the mechanism of BI's performance impact, again as contrasted to the performance impact mechanism proposed and empirically supported for those other constructs.

Leader behavioral integrity and follower trust in the leader

Followers' perceptions of the pattern of word-action alignment or misalignment on the part of their leaders – their BI – are likely to have profound attitudinal consequences (Simons, 2002). Unsurprisingly, follower attitudes towards their leader represent one of the most studied correlates of leader BI (Simons et al., 2011). Simons (2002) first argued that employees' perceptions of leader BI would support trust in the leader, which, in turn, would have positive behavioral consequences. Trust can be defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Rousseau et al., 1998). Leader BI supports the willingness of the follower to be vulnerable in that a leader who consistently adheres to espoused values and keeps promises becomes more predictable. Such perceived behavioral reliability will incite a sense of certainty on the follower's

part that the leader can be trusted to behave in accordance with the follower's expectations, thereby leading to increased trust in the leader (Simons, 2002).

Simons (2002) further argued that leader BI may enhance a follower's perception of value congruity with his leader. When leaders show a lack of BI, followers may infer that the leader does not trust them enough to tell them the truth and to honestly account for his or her behavior. From this, followers may in turn also infer that managers have goals or values which are incompatible or incongruent with those of the follower. Employees may thus infer value incongruence with their manager from their perception of their manager's word-deed misalignment, leading to lower trust in that manager. In line with this argumentation, followers' perceptions of leader BI have indeed been found to be positively related to their trust in the leader in several empirical studies (e.g., Kannan-Narasimhan and Lawrence, 2012; Palanski and Yammarino, 2011; Simons et al., 2007; Simons and McLean Parks, 2000).

Whereas psychological contract breach and moral integrity are also associated with trust, the mechanisms of their influence, and thus the magnitudes of association, can be expected to differ. Psychological contract breach is typically experienced as a personal "violation" (Morrison and Robinson, 1997) because the terms of employment are, for most employees, critical to their livelihood. BI, in contrast, reflects not only a leader's perceived adherence to the fundamental exchange agreement, but also to more trivial agreements such as starting meetings on time or espousing aspired-to values. While, as explained above, BI is also expected to affect follower trust, we argue that many of the perceived misalignment behaviors that affect leader BI will not carry the same level of emotional charge as a breach in the fundamental exchange agreement. Thus, psychological contract breaches' association with follower trust in the leader is likely stronger than that of leader BI with follower trust in the leader.

As for moral integrity's association with trust, our inference must be indirect. Most work on moral integrity has focused on the processes that affect actual moral behavior rather than responses to *others'* moral behavior, as is entailed in the judgment of a leader's moral integrity and responses to it (Shao et al., 2008). For instance, Kohlberg and his followers emphasize moral reasoning (Kohlberg, 1984, Reynolds et al., 2014) and have posited that to know the "right" thing is to be compelled to enact it. Aquino and Reed (2002) posited the concept of moral identity, which asserts that the notion that one is moral plays an important role in most people's self-concept. Taking another perspective, numerous scholars have sought to explain the prevalence of unethical behavior by presenting mechanisms that attenuate the compulsion of ethical awareness, such as moral disengagement (Bandura, 1999; Detert et al., 2008; Moore et al., 2012), which is driven by individual and situational differences. Based on this literature, we would expect that to the extent that moral identity is prevalent and important to followers, moral integrity will be strongly associated with trust, likely more so than BI. If, on the other hand, moral disengagement is prevalent, BI could be more strongly associated with trust than moral integrity.

In essence, our argument here is that psychological contract breach and moral integrity judgments are likely to carry greater affective charge than BI due to the rival constructs' unambiguously personal (psychological contract breach) or moral (moral integrity) nature relative to BI. Thus,

> *Hypothesis 1: Leader moral integrity and psychological contract breach are more strongly related to follower trust in the leader than is leader BI.*

Leader behavioral integrity and follower organizational commitment

Prior research has shown that employees' unmet expectations, which are likely related to their perceptions of leader BI (Simons et al., 2007), are negatively related to their affective organizational commitment (Wanous et al., 1992). Further, the leader is a personal representative of the organization (Simons, 2002) who does or does not embody the values espoused by that organization (Leroy et al., 2012a). When there is inconsistency in the representative's behavior, the organization itself becomes less desirable as an object of personal identification, and this identification forms the core of affective organizational commitment (Meyer et al., 2004). Where such identification exists, work motivation is more self-determined (Gagné and Deci, 2005) and personal engagement tends to follow (Meyer and Gagné, 2008). Several studies have begun to provide empirical evidence in favor of a positive relation between leader BI and follower organizational commitment (e.g., Hinkin and Schriesheim, 2009; Leroy et al., 2012a; Leroy et al., 2012b; Simons et al., 2007; Vogelgesang et al., 2013).

The mechanism by which psychological contract breach affects organizational commitment is similar to that of BI (we could not consider the relation with moral integrity as comparative data was unavailable). Leaders are often vivid representatives of their companies for employees (Simons, 2008, Leroy et al. 2012a), and therefore attitudes toward the leader are likely to spill over to attitudes toward the work and the company. Further, since trust in leadership has been demonstrated to affect organizational commitment (Tremblay et al., 2010; Cho and Park, 2011; Mahajan et al., 2012), we would expect a similar pattern as was demonstrated for trust. Further, psychological contract breach may have additional impact because the breach specifically regards the terms of the exchange relationship with the employer:

the nature of the employer's obligation to the employee, *in return for which the employee provides commitment and work to the company* (Rousseau, 1995).

> *Hypothesis 2: Psychological contract breach is more strongly related to follower affective commitment than is leader BI.*

Leader behavioral integrity and follower performance

"Employee Performance" represents both in-role task performance and organizational citizenship behaviors (OCB). All three of our examined constructs can be expected to influence follower in-role and OCB performance through the mediation of trust and organizational commitment. Trust in the leader may instigate perceptions of a positive and reciprocal social exchange between the leader and the follower (Blau, 1964) such that followers are willing to reciprocate with positive performance-oriented behaviors. Similarly, justice theory (Greenberg, 1990) argues that when leaders do not treat followers fairly (e.g. through a lack of BI) followers may see this as a distortion of the input-output relationship and so scale back their efforts. Likewise, affective commitment (Meyer et al., 2002) may be expected to affect employee performance because employees who personally identify with the organization are likely to work harder on its behalf. If, as several studies have shown, BI drives trust and commitment, and these positive attitudes support superior in-role and extra-role performance, then we can expect leader BI ultimately to enhance subordinates' performance.

As shown in Figure 1, psychological contract breaches (model A) and moral integrity (model B) are expected to exert their influence on follower behavior exclusively through their impact on follower attitudes, exemplified here as trust and commitment (Colquitt et al., 2007; Zhao et al., 2007). Simons (2008), however, proposed an additional mechanism whereby BI

enhances follower performance that does not follow the route of follower attitudes toward the leader and work. When leaders consistently follow through on values and commitments, they send unambiguous signals about desired and undesired behaviors. In so doing, followers get a clearer message about what is expected of them, which will translate into followers being better able to meet those expectations and to spend less effort struggling to figure them out. Hence, BI should affect follower performance not only through its influence on follower attitudes, but also through the mechanism of communication clarity, which reduces role ambiguity. While this dual-mediation hypothesis has driven related models of safety implementation that were supported in healthcare settings (e.g. Leroy et al, 2012b; Halbesleben et al., 2013), no published research has as yet directly tested this additional mechanism of impact (Simons et al., 2011).This additional mechanism of impact, we propose, augments BI's behavioral consequence to the point where it will outweigh the behavioral consequence of the other two constructs.

> *Hypothesis 3: Leader BI is more strongly related to follower performance (in-role and*
>
> *OCB) than is moral integrity and psychological contract breach.*

Overall theoretical model

Figure 1 provides an overview of the BI theoretical model for this study and two alternative theoretical models based on theory from psychological contract breaches and moral integrity. The origins, definitions, theoretical bases, and mechanisms of influence for these different conceptualizations can be found in Table 1. Whereas the different concepts all look at alignment, moral integrity looks at alignment of behavior with moral values, and psychological contract breach looks at alignment with regard to keeping the commitments entailed in the employment relationship. As detailed above, the different theoretical frameworks build on

similar mechanisms to explain the relationship of leader integrity to follower performance: perceptions of trust and justice, and a positive social exchange relationship between leader and follower. Literature on psychological contract breach further builds on affective events theory to argue that a breach may be seen as a particularly negative event that will result in negative affect toward the leader and consequentially negative attitudes toward work and reduced follower performance (Figure 1, Model A). Literature on moral integrity argues that both attitudes toward the leader and work may mediate the relationship between leader moral integrity and follower performance (Figure 1, Model B). As indicated earlier, we would argue that leader BI follows similar mechanisms to influence follower outcomes. However, we also indicated that leader BI may have an additional effect on follower performance because of reduced ambiguity of expectations. When leaders show alignment between value-oriented words and actions, this alignment may also enhance follower performance through greater clarity (or reduced ambiguity) of communication. Since this latter mechanism has not yet been quantified, it shows up as a direct or unmediated effect in addition to the effect that is mediated by trust and commitment. Therefore, we hypothesize Model C in Figure 1 as follows:

Hypothesis 4: The relationship between leader BI and follower performance will be partially mediated by follower trust in the leader and affective commitment.

Insert Figure 1 and Table 1 about here

METHOD

Literature search

The first step in developing the database for our meta-analysis was a computerized search in

January 2012 in specialized databases such as Web of Science and EBSCO using the keyword "behavioral integrity" and "behavioural integrity" (for European journals) for published articles on this topic. Second, we conducted a search on journals that have published BI research such as *Journal of Management, Journal of Applied Psychology, Organization Science*, *Leadership Quarterly*, *Human Relations*, *Harvard Business Review*, *Journal of Business Ethics, European Management Journal,* and *Journal of Organizational Change Management* from 1999 (the first publication on BI) to January 2012. Third, we collected all papers that cite the seminal BI Simons (1999) and Simons (2002) papers. Fourth, we collected papers from authors who had in the past 5 years presented papers on BI at the national conferences for Academy of Management or Society for Industry and Organizational Psychology Conferences. Fifth, to address publication bias (e.g., Rothstein et al., 2005), we sent out a general call for (working) papers on this topic through various Listservs (RM-net, OB-list, and LDR-net). Finally, we contacted authors who in the past published BI research to forward us any (yet) unpublished manuscripts and dissertations on the topic of BI. Through this process we accumulated 129 publications and seven unpublished manuscripts.

Criteria for inclusion

In order to be included studies had to (a) operationalize BI as the perceived pattern of alignment between words and deeds (Simons, 2002); (b) include a measure of follower trust in the leader, follower affective organizational commitment and/or follower performance; and (c) provide sufficient statistical information to compute effect sizes. Given the focus of this meta-analysis on leader BI, we excluded papers on BI of business associates (e.g. Simons and Hagen, 2006) or the organization as a whole (e.g. Steinbock and Simons, 2011). Further, we did not

include studies that looked at a single promise breach because BI refers to a pattern of alignment rather than to a single misalignment.

Of the 129 published articles, 51 are papers without an empirical component (such as theory papers and qualitative studies). 54 articles do not measure BI, or measure integrity with indicators that contain an ethical or moral component. Seven articles do not include an attitude or performance measure. Three remaining studies were excluded because the leader was not the focus of BI. Using these criteria, the final number of studies for this meta-analysis was 14 published studies representing 23 independent samples and seven unpublished studies representing 12 independent samples. As a result, we have a total of 35 samples that report the correlation between leader BI and follower consequences.

Coding of studies

All studies were examined three times. In a first phase all studies were coded by a research assistant. Subsequently, this coding was checked by two of the authors independently. Any discrepancies were discussed between both raters and resolved by reaching consensus. We use the correlation between two variables as the effect size metric. If a study reports other metrics (e.g. means and standard deviations), these were transformed into correlations according to the formulas in Hunter and Schmidt (2004). When a study reports more than one measure of BI or an outcome variable on the same sample (conceptual replication, e.g. Hinkin and Schriesheim, 2009), we calculate the average correlation of these measures with the other variables as the effect size for the study. The measurement reliability metric of this average correlation is calculated in accordance with the formulas of Hunter and Schmidt (2004, p. 437). If a study applies the same design in more than one, independent population (= full

replication; e.g. Dineen et al., 2006), the correlations of these different samples are considered to be independent data points for the purpose of this meta-analysis (Hunter and Schmidt, 2004).

Statistical procedure for meta-analysis

We applied the random-effect meta-analysis as described by Hunter and Schmidt (2004). Each of the correlations reported in the included studies was corrected for measurement error in both variables (as indicated by the reliability metrics of the measures). Some studies did not report a reliability measure for all variables. For instance, Basik (2010) measures follower in-role performance with a fitness score and does not report a Cronbach's alpha. In such cases, we follow the recommendation to impute a measurement reliability of 0.8 (Dalton and Dalton, 2005).

For every effect size, we calculated the mean population correlation as the average corrected correlation weighted by the sample size and the correction factor for measurement error. In addition, we report the 95% credibility intervals for all estimated population correlations. The credibility interval provides an estimate of the true variability within the population of the effect size. By contrast, the 95% confidence interval indicates potential measurement error in the estimated mean effect size. We also report the percentage of total variance in a correlation that can be explained by study artifacts such as sampling variance and measurement error. Hunter and Schmidt (2004) argue that when the variance due to artifacts accounts for more than 75% of the variation of effect sizes between studies, it is unlikely that there is any difference in effect size between different subgroups in the population. In addition, we report the Q-statistic as an alternative measure for the heterogeneity of the effect sizes (Hunter and Schmidt, 1990). We examine the credibility interval, variance due to artifacts, and

the Q-statistic in concert to investigate whether the effect size differs across subpopulations in our sample (Cortina, 2003).

Lastly, we report the fail safe k. The fail safe k indicates how many missed studies with an effect size of zero would be necessary to drive the meta-analytical effect size to non-significant. As such, it is also an indicator of the risk of publication bias or scholars leaving a study with a null effect in their drawer. A large fail safe k signifies that our results are robust to a large number of missing studies (Hunter and Schmidt, 2004). In addition to the traditional fail safe k calculation, we also report an adapted, more conservative fail safe k_+ (Rosenberg, 2005). This fail safe k_+ corrects for the number and precision of the studies in our dataset. In contrast to the traditional measure, the fail safe k_+ takes into account the sample size and measurement error of each study in our dataset. More specifically, fail safe k_+ estimates how many comparable studies with an average effect size of zero would need to be added to make the effect non-significant at the 5% significance level.

Comparison between constructs' effect sizes

For the comparison between BI, psychological contract breach and moral integrity, we calculate the test statistic $Z = (r_2 - r_1)/(S_2{}^2 + S_1{}^2)$ with r_1 and r_2 as the effect sizes and S_2 and S_1 as the standard errors of the effect sizes. The Z-statistic has a standard normal distribution under the assumption that both effect sizes are equal. The standard errors necessary for the significance tests are obtained from the reported confidence intervals in Zhao et al. (2007) and Colquitt et al. (2007).

Meta-analytic structural equation model

We further analyze the data with meta-analytical structural equation modeling in a two step-procedure as laid out by Cheung and Chan (2005). This analysis requires the correlations between BI and the outcome variables, and the correlations among the outcome variables. We focus the meta-SEM on four variables: leader BI, follower trust in leader, follower affective commitment, and follower performance where performance is a latent construct that consists of two indicators (i.e. in-role performance and OCB).[1]

When estimating the structural model, the integrated approach takes into account that some samples do not report correlations for all variables while it also allows for random effects (i.e. heterogeneity) of the correlations across samples (Cheung, 2008). In other words, the meta-SEM assumes that the samples in the analysis are drawn from a larger population of studies and estimates the uncertainty inherent in analyzing a subset of the larger population (Cheung, 2008; Hunter and Schmidt, 2004). In addition, the two-step procedure takes into account the potential heterogeneity of the meta-analytical effect sizes when testing the path model (Cheung and Chan, 2005).

The first step of the procedure estimates the population correlations between BI, trust, affective commitment, in-role performance and OCB as well as the covariance matrix of these estimates. The covariance matrix represents the estimated heterogeneity in the estimated population correlations. The second step uses the results of the first step to test the fit of a path model of the four variables (Cheung, 2013a). We test three different models. The first one is a full mediation model as in the meta-analysis on psychological contract breach of Zhao et al. (2007). The second one is a dual mediation model as proposed by Colquitt et al. (2007) in their meta-analysis on trust. The third model includes a partial mediation of the effect of BI on

follower performance and a direct effect of BI on follower performance. The metaSEM package (Cheung, 2013b) and R (R Development Core Team, 2014) are used to perform the analyses.

RESULTS

Main effects of Leader BI on Follower Outcomes

Table 2 presents the meta-analytic results for the relationships between leader BI and follower attitudes toward the leader and toward work, and follower performance. The meta-analytic results show that follower assessment of leader BI is strongly related to trust in leaders ($\bar{\rho} = 0.78$, p < 0.001) and to affective organizational commitment ($\bar{\rho} = 0.56$, p < 0.001). With regard to follower performance, results are also as expected, with evidence showing that leader BI is moderately related to in-role performance ($\bar{\rho} = 0.27$, p < 0.001) and OCB ($\bar{\rho} = 0.26$, p < 0.001).

The fail safe k (k_+) values indicate that the significance of these effect sizes is robust to the file drawer effect. Both calculations yield similar estimates. The BI-trust relation needs 281 (274) additional zero-effect studies to bring the significance level over 5%. For affective commitment, 68 (65) additional zero-effect studies will make the relation insignificant. Finally, 40 (41) studies are needed to make the BI- in-role performance relation insignificant while 24 (23) studies are needed for OCB.

As indicated by the wide credibility interval, the low variance due to artifacts, and the significant Q-statistic, the BI-trust relation exhibits strong heterogeneity across the population. Nevertheless, the lower bound of the credibility interval (0.52) indicates that leader BI is in most cases a strong predictor of the follower's trust in the leader. The relation between BI and affective commitment also shows heterogeneity in the effect sizes. The Q-statistic (Q = 87.7, p <

0.001) is significant, the credibility interval is wide, and study artifacts explain only 6% of the variation in the sample. The credibility intervals (CRI = [0.37; 0.75]) indicate that leader BI is at least moderately related to affective commitment in most subpopulations. Of the performance measures, in-role performance shows most heterogeneity (CRI = [0.02; 0.53], Q = 72.1, 19% Artifact Variance). The effect of leader BI on follower performance thus varies considerably across the total population. The influence of BI on the followers' OCB also shows signs of variation across the population (CRI = [0.19; 0.32], Q = 14.2, 52% Artifact Variance). As can be seen from the credibility interval, this variation is smaller though than the variation in the correlation between BI and in-role performance.

Taken together, the credibility intervals and fail safe k calculations show that even though the effect sizes of interest may vary between different populations, they are unlikely to become insignificant. These results provide additional confidence in the robustness of our effect size estimates.

Insert Table 2 here

Leader BI, Moral Integrity and Psychological Contract Breaches (Hypotheses 1, 2 & 3)

In Table 3 we compare the effect sizes reported in Table 2 with the effect sizes in previous meta-analyses of the related constructs of moral integrity and psychological contract breach and compute a Z-statistic to allow for comparison. In contrast to our expectation, Colquitt et al. (2007) report a significantly lower correlation between moral integrity and trust in the leader ($\bar{\rho}$ = 0.67) than our correlation between BI and trust in the leader ($\bar{\rho}$ = 0.78) (z = 2.44, p = 0.02). We can also compare our result with that of Zhao et al. (2007) who study the outcomes of

psychological contract breach. The effect of psychological contract breach on mistrust ($\bar{\rho} = 0.65$) is not significantly different from the correlation between BI and trust ($\bar{\rho} = 0.78$) (z = 1.32, p = 0.19). These results are not consistent with Hypothesis 1, that BI has a weaker effect on follower trust in the leader than moral integrity and psychological contract breaches. To the contrary, BI demonstrates a significantly stronger effect on trust than moral integrity.

Hypothesis 2 posits that psychological contract breach will be more strongly related to affective organizational commitment than BI. We find the reverse to be true: BI is more strongly correlated to affective commitment ($\bar{\rho} = 0.56$ vs $\bar{\rho} = 0.38$, z = 4.16, p < 0.01) than is psychological contract breach. This result fails to support Hypothesis 2, and finds a significant difference in the opposite direction.

Hypothesis 3 states that BI will be more strongly related to follower performance than moral integrity and psychological contract breach. If we compare the effect of leader BI on follower performance with the findings of Zhao et al. (2007) on psychological contract breach, we find that the effect on OCB is larger for BI ($\bar{\rho} = 0.26$ versus $\bar{\rho} = 0.14$, z = 3.16, p < 0.01). However, the relation between BI and in-role performance is comparable to the relation between psychological contract breach and in-role performance ($\bar{\rho} = 0.27$ versus $\bar{\rho} = 0.24$, z = 0.64, p = 0.33). These results provide partial support for Hypothesis 3 in that it is supported for OCB, but not for in-role performance.

Because Colquitt et al. (2007) do not report the effect size of moral integrity on follower performance we infer the effect size from their path model. We lack the standard errors to calculate p-values, but we can still compare whether the point estimates from Colquitt et al. (2007) fall in the confidence intervals of the relation between BI and follower performance. The correlation between moral integrity and in-role performance ($\bar{\rho} = 0.13$) falls outside of the 99%

confidence interval of the correlation between BI and in-role performance (CI = [0.17; 0.37]).

Similarly, the 99% confidence interval for the correlation between BI and OCB (CI = [0.17;

0.34]) does not contain the estimated correlation between moral integrity and OCB ($\bar{\rho} = 0.13$).

Thus BI shows a stronger association with both performance outcomes (in-role performance,

OCB) than does moral integrity, which supports Hypothesis 3.

Insert Table 3 about here

Theoretical model testing (Hypothesis 4)

In a final step we tested the structural relationships between BI, trust in the leader,

affective commitment and follower performance. To this end, we compared the hypothesized

model (mediation with a direct effect, as shown in Figure 1, Model C) to a fully mediated model

(Model A) and a dual or parallel mediator model (Model B) without direct effect. The results of

these models are presented in Table 3.

Insert Table 3 about here

The results demonstrate that a fully mediated model which assumes a causal chain

between leader BI, trust in the leader, affective commitment, and follower performance (in that

order) has a reasonable fit to the data but the other models have better fit. The model with a

direct effect shows the best fit with less parameters than the model with dual mediation. The fit

of the full mediation model can be significantly improved ($\Delta \chi^2(1) = 28.05$; $p < 0.01$) by adding

a direct link between leader BI and follower performance, thereby providing support to

hypothesis 4. The results for this model are shown in Figure 2.

Figure 2 shows a strong relation between BI and trust ($\beta = 0.72$, p < 0.01), a strong relation between trust and commitment ($\beta = 0.55$, p < 0.01), and a significant relation between commitment and performance ($\beta = 0.23$, p < 0.01). Next to this indirect path, BI also exhibits a direct relation with follower performance ($\beta = 0.27$, p < 0.01). This result provides evidence in support of Hypothesis 4, that the association between BI and performance will be only partially mediated by trust and commitment.

Insert Figure 2 here

DISCUSSION

Leader BI appears to have substantial associations with follower trust, affective commitment and performance. Our hypotheses that moral integrity and psychological contract breach would have stronger associations with trust and commitment than BI were not supported – in fact, we had significant results in the opposite direction. BI had stronger associations with trust than moral integrity, and stronger associations with commitment than psychological contract breach. Our hypothesis that BI would have stronger performance consequences than moral integrity and psychological contract breach was generally supported, and our hypothesis that the association between BI and performance would only be partially mediated by trust and commitment was also supported. The finding of partial mediation, in contrast to the fully mediated impacts of moral integrity and psychological contract breach as found in previous meta-analyses, helps to explain the stronger performance impact of BI. This because it suggests additional, unmeasured mechanisms of impact, such as the proposed communication clarity mechanism. This additional mechanism, of course, warrants further investigation.

We are left to explain why BI had stronger attitudinal impact than moral integrity and psychological contract breach when each of these two other constructs appears, on the surface, to be more affectively charged. The answer may lie in a mechanism that is logical rather than affective: BI judgments explicitly include the assessment of the reliability of the target's future utterances. BI is a trait assessment that directly points to the likelihood of future reliability (Simons, 2002), and is thus conceptually closer than the other constructs to a trust judgment, which is defined and measured as willingness to accept future vulnerability. In contrast, a psychological contract breach is a single breach, not a trait, and moral integrity is affected by behavior that might have little bearing in the relationship or type of vulnerability imagined. To the extent that the relationship between boss and subordinate entails vulnerability, direct and fully formed judgments about a leader's reliability provide a lot of information about trustworthiness. It is possible, then, that both psychological contract breach and moral integrity do carry more consistent levels of affective charge than does BI, but that this difference is offset by the fact that BI judgments carry direct information about how safe it would be to make oneself vulnerable to this leader – and thus how much one can trust them.

A second possible explanation for the greater attitudinal impact of BI relative to psychological contract breach and moral integrity entails the breadth of the BI construct. Though both moral integrity and psychological contract breach consider adherence to implicit or unspoken agreements while BI does not, it may be that this distinction does not truly hold up in practice – that spoken and unspoken agreements are in fact processed almost identically. Another distinction among the concepts is that both psychological contract breach and moral integrity are relatively specific in their realms: psychological contract breach is about adherence to the terms of the reciprocal employment exchange agreement, and moral integrity is about

behavioral adherence to a specifiable set of moral values. BI, on the other hand, is broadly about "how good is your word?" – including the employment exchange agreement and espoused moral values, but also such notions as showing up late to meetings or mismatching espousal and enactment of strategic values such as the relative importance of quality, customer service, employee satisfaction and efficiency. BI, in sum, is a broader basket.

In developing our hypotheses, we had argued that this added breadth, the fact that BI is affected by relatively trivial gaps as well as important ones, would diffuse the attitudinal impact of BI. We were wrong. It is possible that the added breadth of the BI "basket" causes BI to incorporate and perhaps combine the effect of the other two constructs. It seems reasonable to assert that a psychological contract breach would severely lower assessments of a leader's BI, and that a leader's severe ethical violation would have a similar impact. Perhaps BI, then, describes a combined consequence of both. The breadth of the BI construct might serve not to diffuse its impact, but to enhance it. Examining this notion would require a dataset that includes measures of all three constructs so that the nature and pathways of association between them may be empirically examined.

In sum, the present analysis confirms the importance of the parsimonious "behavioral integrity" formulation and demonstrates how its impact is distinct from two overlapping leader alignment constructs: moral integrity and psychological contract breach. By summarizing previous research on one specific conceptualization of leader integrity and contrasting it to other definitions, this study starts to unpack and examine each construct's unique elements. As a whole, this study thus helps start to build a more integrated perspective that disentangles the different facets of the overarching concept of leader integrity.

Limitations

Like any study, this one has limitations that justify some degree of caution in generalizing these results. First, while meta-analysis provides some clear advantages compared to narrative reviews, it does have some problems of its own. Studies that lacked significant results, for example, may have been excluded from consideration due to prevalent publication and review biases toward significant results. Moreover, given that meta-analysis is conducted at the study level of analysis, it is also subject to the limitations of the studies taken into consideration. For instance, the majority of the studies considered are cross-sectional in nature. Second, the meta-analysis was based on a relatively small sample size of 35 independent samples, due to the emergent nature of this field. However, the 35 samples provided an adequate sample size for a preliminary meta-analysis that assesses this important emergent stream.

Future research

This study directs towards several avenues for future research. First, our unexpected result regarding the relative attitudinal impact of BI compared to moral integrity and psychological contract breach – that BI had stronger relative impact rather than weaker – calls for further research to better articulate the relationship among the constructs. One or more datasets need to better measure the extent to which they are additive or substitutable and to examine the extent to which these different constructs influence each other. Second, the "unmediated path" that links BI to performance needs to be unpacked. Does it represent, as Simons proposed, an informational impact that is distinct from BI's attitudinal impact? Or does it, in fact, represent a different mechanism? Future research may want to further disentangle the effects of other constructs related to leader integrity such as authentic leadership, ethical leadership, and leadership character. The method described in this study may be a useful

approach to further clarify how these constructs are similar yet distinct from one another. For example, authentic leadership may differ from leader BI in that authentic leadership not only focuses on staying true to values in behavior (internalized moral perspective and self-awareness), but also the extent to which leaders communicate in an open and non-defensive manner. In this way, authentic leader behaviors may have a stronger impact on follower feelings of empowerment or engagement than leader BI. A similar reasoning was used by Leroy et al. (2012a) and further confirmed by Vogelgesang et al. (2013).

Another avenue for future research is to look at moderators of the relationship under investigation in this study. Theory on BI suggests that context can play an important role in the effects of leader BI on follower outcomes. What circumstances – national cultures, organization types, relationship elements – make BI more or less important? We know that some cultures emphasize universally applied rules and contracts while others determine appropriate behavior based more on specific relationships (Friedman et al., 2009). Some grant greater latitude to authority figures than others (e.g. power distance in Western versus Eastern cultures). It is reasonable to consider that these aspects of culture affect the importance ascribed to "keeping one's word." If BI operates partly through trust in leadership, then one might wonder whether trust (and thus BI) is more performance-critical in some industries than in others. The data collected for this study did not allow us to test the role of national or organizational context. As more research on BI emerges, future meta-analyses could look at the role of context on the relationship under investigation.

Finally, future research may take a broader perspective on BI that goes beyond direct supervisors in an organization (the focus of this study). For example, previous research has investigated BI as it applies in other settings (e.g. BI of teachers in primary schools), using

different referents (e.g. BI of followers, senior managers, business associates, or colleagues), and at different levels of analysis (e.g. BI of teams, organizations, a particular brand identity). All of these variables may have a substantial impact on the relationship between BI and the outcomes investigated in this study. Future meta-analyses should expand on the current meta-analysis to look at how these alternative areas of focus may impact the strength of the relationships. For this to be possible, however, more research needs to accumulate to allow for a meaningful assessment of these differences.

Practical implications

This study is important for practitioners as it demonstrates the performance-impact of leader BI. Previous research has argued that there is an "integrity dividend" to be reaped from leader BI (Simons, 2008) and this study provides evidence that leader BI affects follower performance. This result is important as it suggests that leader integrity is not only important for the sake of "doing good" but can also have an important impact on outcomes that are central to the sustainability of the organizations. BI as "walking the talk" further has a particularly intuitive appeal to practitioners, especially to middle managers who often find themselves "stuck in the middle": advocating values from the organization that they do not necessarily adhere to or embrace. The BI framework approaches integrity not only as an element of good character, but as a challenge that applies to all people who are confronted with diverse and sometimes conflicting role demands. It suggests that it is trainable in an organization by building awareness, skills, and habits, and by managing policy and espoused values carefully. Proposed practices include introspective values-clarification exercises, diligent maintenance of unified to-do lists, communication training designed to reduce misunderstood commitments, and systematic

collective examination of performance appraisal processes and other policies in light of espoused organizational values.

Conclusion

This meta-analysis affirms the importance and relevance of leader BI in eliciting favorable follower attitudes towards their leader, favorable follower attitudes towards their work and increased follower performance. More importantly, contrasting our results with those from previous meta-analyses on moral integrity and psychological contract breaches, respectively, shows BI to have a generally stronger impact on follower trust, commitment and performance. While BI's stronger impact on follower performance was anticipated, its stronger impact on trust and commitment was not. It is very possible that the relatively broader scope of the BI construct serves not to diffuse its association with attitudes, but rather to enhance it. Additional research is still warranted to more fully articulate the relationship between these three constructs.

Notes

1: To ensure that the estimation is successful, we have complemented our dataset with seven randomly chosen studies from the meta-analysis by LePine, Erez, and Johnson (2002) on OCB.

REFERENCES

* References marked with an asterisk indicate studies included in the meta-analysis.

*XXXX, Disentangling the moral integrity construct: Values congruence as a moderator of the behavioral integrity-citizenship relationship, Group & Organization Management, forthcoming [This was a paper peer reviewed by one of the authors for the journal. We have queried the editor and will complete the citation as promptly as possible]

Aquino, K., and Reed, II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83(6)*, 1423-1440.

*Avey, J., Mayer, D., Simons, T. and Palanski, M. (2014). What Happens to Employee Behavior When Ethical Leaders Do Not Practice What They Preach? Paper presented at Academy of Management Conference, Philadelphia, PA.

Avolio, B., J., and Gardner, W., L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly, 16*, 315-338.

Bandura, A. (1999) Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*, pp. 193-209

* Basik, K., J. (2010). *Expanding the boundaries of behavioral integrity in organizations*. Unpublished doctoral dissertation, Florida State University.

Becker, T., E. (1998). Integrity in Organizations: Beyond Honesty and Conscientiousness. *Academy of Management Review*, *23*(1), 154.

Bennis, W., Goleman, D., and O'Toole, J. (2007). *Transparency: How leaders create a culture of candor*. San Francisco: Jossey Bass.

Blau P. (1964). *Exchange and power in social life*. New York: Wiley.

Brown, M., E., Treviño, L., K., and Harrison, D., A. (2005). Ethical leadership: A social learning

perspective for construct development and testing. *Organizational Behavior and Human*

Decision Processes, *97*(2), 117-134.

Cheung, M., W.-L. (2008). A model for integrating fixed-, random-, and mixed-effects

meta-analyses into structural equation modeling. *Psychological Methods, 13*, 182-202.

Cheung, M., W.-L. (2013a). Multivariate Meta-Analysis as Structural Equation Models.

Structural Equation Modeling. *20,* 429-454.

Cheung, M., W.-L. (2013b). *metaSEM: Meta-analysis using structural equation modeling*. R

package version 0.8-4.

Retrieved from http://courses.nus.edu.sg/course/psycwlm/Internet/metaSEM/

Cheung, M. W.-L., and Chan, W. (2005). Meta-analytic structural equation modeling: a two-stage

approach. *Psychological methods, 10*(1), 40–64.

Cho, Y., and Park, H. (2011). Exploring the relationships among trust, employee satisfaction,

and organizational commitment. *Public Management Review, 13*(4), 551-573.

Colquitt, J., Scott, B., and LePine, J. (2007). Trust, trustworthiness, and trust propensity: A meta-

analytic test of their unique relationships with risk taking and job performance. *Journal of*

Applied Psychology, 92, 902-927.

Cortina, J.M. (2003). Apples and Oranges (and Pears, Oh My!): The search for moderators in

meta-analysis. *Organizational Research Methods, 6,* 415-435.

Craig, S., B., and Gustafson, S., B. (1998). Perceived Leader Integrity Scale: An instrument for

assessing employee perceptions of leader integrity. *The Leadership Quarterly, 9*, 127-145.

Dalton, D., R, and Dalton, C.M. (2005). Strategic management studies are a special case for

meta-analysis. *Research Methodology in Strategy and Management, 2,* 31-63.

Davis, A., and Rothstein, H. (2006). The effects of perceived behavioral integrity of managers on employee attitudes: A meta-analysis. *Journal of Business Ethics, 67*, 407-419.

Detert, R., Sweitzer, V., and Teviño, L. (2008). Moral disengagement in ethical decision making: A study of antecedents and outcomes. *Journal of Applied Psychology, 93*(2), 374-391.

* Dineen, B., R., Lewicki, R., J., and Tomlinson, E., C. (2006). Supervisory guidance and behavioral integrity: Relationships with employee citizenship and deviant behavior. *Journal of Applied Psychology, 91*, 622-635.

* Friedman, R., Simons, T., and Hong, Y. (2009). Culture's impact on behavioral integrity: When is a promise not a promise? *Paper presented at the Academy of Management Conference, Chicago, IL.*

Gagné, M., and Deci, E., L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*, 331-362.

Gentile, M., C. (2010). *Giving Voice to Values: How to Speak Your Mind When You Know What's Right.* Yale University Press.

Gentry, W. A., Cullen, K. L., Sosik, J. J., Chun, J. U., Leupold, C. R., and Tonidandel, S.(in press). Integrity's place among the character strengths of middle-level managers and top-level executives. *The Leadership Quarterly*.

* Greenbaum, R., L., Mawritz, M., B., and Piccolo, R., F. (2012). When leaders fail to "walk the talk": Supervisor undermining and perceptions of leader hypocrisy. *Journal of Management*. (doi: 10.1177/0149206312442386)

Greenberg J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of Management, 16*, 399–342.

* Halbesleben, J. B., Leroy, H., Dierynck, B., Simons, T., Savage, G. T., and McCaughey, D.

   (2013). Living Up to Safety Values in Health Care: The Effect of Leader Behavioral Integrity

   on Occupational Safety. *Journal Of Occupational Health Psychology, 18*(4), 395-405.

* Hinkin, T. R., and Schriesheim, C.A. (2009). The psychological contract at work: Testing a

   model of leader reinforcement practices, behavioral integrity, trust, and subordinate outcomes.

   Paper presented at the Academy of Management Conference, Chicago, IL.

Hunter, J., E., and Schmidt, F., L. (1990). *Methods of meta-analysis.* Newbury Park, CA: Sage.

Hunter, J., E., and Schmidt, F., L. (2004). *Methods of meta-analysis.* Newbury Park, CA: Sage.

* Kalshoven, K., Den Hartog, D., and De Hoogh, A. (2011) Ethical leadership at work

   questionnaire (ELW): Development and validation of a multidimensional measure. *The*

   Leadership Quarterly, 22, 51-69.

* Kannan-Narasimhan, R., and Lawrence, B. (2012). Behavioral Integrity: How Leader

   Referents and Trust Matter to Workplace Outcomes, *Journal of Business Ethics, 111*(2), 165-

   178.

Kohlberg, L. (1984). *The psychology of moral reasoning.* San Francisco, Harper & Row.

Lawder, D., and Cowan, R. (2013). *Congress quietly repeals plan for Internet financial*

   disclosures. Reuters. Retrieved July 31st, 2014, from

   http://www.reuters.com/article/2013/04/12/net-us-usa-congress-security-

   idUSBRE93B0ZJ20130412

LePine, J., A., Erez, A., and Johnson, D., E. (2002). The nature and dimensionality of

   organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied*

   Psychology, 87, 52–65.

* Leroy, H., Dierynck, B., Anseel, F., Simons, T., Halbesleben, J., R., B. McCaughey, D., Savage, G., and Sels, L. (2012b). Behavioral Integrity for Safety, Priority of Safety, Psychological Safety, and Patient Safety: A Team-Level Study. *Journal of Applied Psychology, 97*(6),1273-1281.

* Leroy, H., Palanski, M., and Simons, T. (2012a). How being true to the self helps leaders walk the talk: Authentic leadership and leader behavioral integrity as drivers of follower affective organizational commitment and work role performance. *Journal of Business Ethics, 107*, 255-264.

Mahajan, A., Bishop, J., and Scott, D. (2012). Does trust in top management mediate top management communication, employee involvement and organizational commitment relationships? *Journal of Managerial Issues, 24*(2), 173-190.

Mayer, R., Davis, J., and Schoorman, D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.

Meyer, J., P., Becker, T., E., and Vandenberghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model, *Journal of Applied Psychology, 89*, 991-1007.

Meyer, J., P., and Gagné, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Perspectives, 1*, 60-62.

Meyer, J.P., Stanley, D.J., Herskovitch, L., and Topolnytsky, L (2002) Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior, 61*, Pages 20‑52

Moore, C., Detert, J., Teviño, L., Baker, V., and Mayer, D. (2012). Why employees do bad
things: moral disengagement and unethical organizational behavior. *Personnel Psychology,
65*, 1-48.

Morrison, E., W.., and Robinson, S., L., (1997). When employees feel betrayed: How
psychological contract violation develops. *Academy of Management Review, 22*(1), 226-256.

* Palanski, M., Kahai, S., and Yammarino, F., J. (2011). Team virtues and performance: An
examination of transparency, behavioral integrity and trust. *Journal of Business Ethics*, *99*,
201-216.

* Palanski, M., and Vogelgesang, G. (2011). Virtuous creativity: The effects of leader behavioral
integrity on follower creative thinking and risk taking. *Canadian Journal of Administrative
Sciences, 28*, 259-269.

Palanski, M., E., and Yammarino, F., J. (2007). Integrity and leadership: Clearing the conceptual
confusion. *European Management Journal, 25,* 171-184.

* Palanski, M., E., and Yammarino, F., J. (2011) Impact of behavioral integrity on follower job
performance: A three-study examination. *The Leadership Quarterly*. *22*, 765-786.

*Park, H., Leroy, H., Dragoni, L., and Simons, T. (2014) The masks we share: how leaders' and
followers' impression management motives impact followers' performance. Working Paper…

R Development Core Team. (2014). R: A language and environment for statistical computing.
Vienna, Austria: R Foundation for Statistical Computing.

Reynolds, S., Dang, C., Yam, K., and Leavitt, K. (2014). The role of moral knowledge in
everyday immorality: What does it matter if I know what is right? *Organizational Behavior
and Human Decision Processes, 123*, 124-137.

Rosenberg, M. S. (2005), The file-drawer problem revisited: A general weighted method for calculating fail-safe numbers in meta-analysis. *Evolution, 59*, 464–468

Rothstein, H., R., Sutton, A., J., and Borenstein, M. (2005). *Publication bias in meta-analysis: Prevention, assessment and adjustments*. Sussex, England: Wiley.

Rousseau, D.M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements.* Newbury Park, CA: SAGE Publications, Inc.

Rousseau, D. and Parks McLean, J. (1993). The contracts of individuals and organizations. L. Cummings, B. Staw, eds. *Research in Organizational Behavior*, *15*. JAI Press, Greenwich, CT 13.

Rousseau, D., Sitkin, S., Burt, R., and Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*, 393-404.

Shao, R., Aquino, K., & Freeman, D. (2008). Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly, 18*, 513-540.Simons, T., L. (1999). Behavioral integrity as a critical ingredient for transformational leadership. *Journal of Organizational Change Management, 12*, 89-104.

Simons, T., L. (2002). Behavioral integrity: The perceived alignment between managers' words and deeds as a research focus. *Organization Science, 13*, 18-35.

Simons, T., L. (2008). *The integrity dividend: Leading by the power of your word*. San Francisco: Jossey Bass.

* Simons, T., R. Friedman, Liu, L. and Mc Lean Parks, J. (2007). Racial differences in sensitivity to behavioral integrity: Attitudinal consequences, in-group effects, and "trickle down" among black and non-black employees. *Journal of Applied Psychology, 92*, 650-665.

Simons, T. and Hagen, J. (2006). The impact of behavioral integrity in supply chain

management. *Paper presented at the annual meeting of the Academy of Management, Atlanta, GA.*

* Simons, T., and McLean Parks, J. (2000). The sequential impact of behavioral integrity on trust, commitment, discretionary service behavior, customer satisfaction, and profitability. *Paper presented at the Academy of Management Conference, Toronto, Canada.*

Simons, T., Tomlinson, E., and Leroy, H. (2011). Research on behavioral integrity: A promising construct for positive organizational scholarship. In K.S. Cameron and G.M. Spreitzer (eds), *Handbook of Positive Organizational Scholarship*. Oxford, UK: Oxford University Press.

Steinbock, K. and Simons, T. (2011). Behavioral integrity between strategy communication and strategic actions. *Paper presented at AOM Conference in Texas, US*.

Tremblay, M., Cloutier, J., Simard, G., Chênevert, D., and Vandenberghe, C. (2010). The role of HRM practices, procedural justice, organizational support and trust in organizational commitment and in-role and extra-role performance. *The International Journal of Human Resource Management, 21*(3), 405-433.

*Veestraeten, M., Sels, L., and Leroy, H. (2014) Introducing strength-oriented practices at work: The role of leader integrity. Paper presented at Academy of Management National Conference, Philadelphia, PA

* Vogelgesang, G. Leroy, H., and Avolio, B. (2013). How Leader Transparency Impacts Follower Engagement: The Mediating Effects of Behavioral Integrity and Participation in Decision-Making. *The Leadership Quarterly. 24*, pp. 405-413

Wanous, J.,P., Poland, T.,D., Premack, S.,L., Davis, K.,S. (1992). The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. *Journal of Applied Psychology, 77*, 288–297.

Zhao, H., Wayne, S., Giblowski, B., and Bravo, J. (2007). The impact of psychological contract breaches on work-related outcomes: a meta-analysis. *Personnel Psychology*, *60*, 647-680.

TABLE 1

Differences between Theoretical Frameworks on Leader Integrity.

	Moral Integrity	*Psychological Contract Breaches*	*Behavioral Integrity*
Key Authors	Mayer et al. (1995)	Rousseau and McLean Parks (1993)	Simons (2002)
Definition of the construct	Consistent adherence to values that are socially (morally) acceptable	Perceived breaches regarding terms of an exchange agreement between individuals and their organization	Perceived alignment between words and deeds regardless of moral content
Theoretical foundations	Literature on trust and justice perceptions.	Literature on trust, justice, social exchange, and affective events theory	Literature on trust, justice, social exchange, promise breaches, and communication clarity
Primary theoretical mechanisms in influencing follower outcomes	Trust as the willingness to be vulnerable Identification with leader and organization	Affective interpretation following violations further influencing follower attitudes toward work and thus follower performance.	Perceived predictability influences trust. Identification with leader and organization Clarity of communication
Corresponding meta-analysis	Colquitt et al. (2007)	Zhao et al. (2007)	This study