SELF-ESTEEM AND JOB PERFORMANCE: THE MODERATING ROLE OF SELF-ESTEEM CONTINGENCIES

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Although theoretical perspectives suggest self-esteem level (i.e., high/low) should have main and moderating effects on job performance, empirical and narrative reviews of the literature suggest such effects are either nonexistent or highly variable. To account for these mixed findings, we hypothesized that self-esteem level should only have main and moderating effects on job performance when one's self-esteem is not contingent upon workplace performance. Using multisource ratings across 2 samples of working adults, we found that the importance of performance to self-esteem (IPSE) moderated the effect of self-esteem level on job performance and moderated the buffering interaction between self-esteem level and role conflict in the prediction of job performance. Our results thus support IPSE as an important moderator of both main and moderating effects of self-esteem level.

Job performance, or "the set of behaviors that are relevant to the goals of the organization or the organizational unit in which a person works" (Murphy, 1989, p. 227), remains a primary concern for organizational behavior researchers; indeed, it has been suggested that improving job

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performance is one of, if not the, primary purposes for organizational researchers (Arvey & Murphy, 1998; Viswesvaran, 2001). The fascination job performance as a topic holds for both researchers and managers lies largely in the importance of such behaviors to the organization: Job performance has been shown to relate to an organization's profit, effectiveness, and survival (Johnson, 2003; Motowidlo, Borman, & Schmit, 1997).

Befitting its role as a key construct in organizational research, the antecedents of job performance have been the subject of much research (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Johnson, 2003; Tett & Burnett, 2003; Viswesvaran, 2001), with theoretical models suggesting its antecedents can be grouped into three categories: declarative knowledge, skills/procedural knowledge, and motivation (Campbell, 1990; Campbell, McClov, Oppler, & Sager, 1993). Within the motivational domain, one perspective that has been advanced is that self-esteem level, or one's overall positive or negative evaluation of oneself (Brown, 1993), should be related to job performance (Pierce & Gardner, 2004). Typically such suggestions evoke the notion that individuals with high self-esteem are motivated to do well on the job to maintain cognitive consistency with their high self-evaluations (i.e., a main effect of self-esteem level; Korman, 1970) or that high self-esteem provides a buffer against role stressors that would otherwise impede workplace motivation and performance (i.e., a moderating effect of self-esteem level; Brockner, 1988). More broadly, belief in the benefits of high self-esteem has gained considerable traction in mainstream America, as evidenced by the existence of such organizations as the National Association for Self-Esteem, whose purpose is "to fully integrate self-esteem into the fabric of American society so that every individual ... experiences personal worth and happiness" (National Association for Self-Esteem, 2009). Yet, contrary to this lay belief in the positive power of high self-esteem, empirical research on high self-esteem's beneficial effects has been decidedly mixed. For example, a narrative review suggests main and moderating effects of self-esteem level are weak to nonexistent (Baumeister, Campbell, Krueger, & Vohs, 2003); a meta-analysis of the main effect of self-esteem level on job performance similarly noted the relation was highly variable (Judge & Bono, 2001). Such findings have led to suggestions that the focus on high self-esteem is misplaced if not dangerous (Baumeister, Smart, & Boden, 1996).

Our position is that arguing over whether self-esteem level does or does not have main or moderating effects on job performance oversimplifies the question. In particular, we do not think another study showing either the presence or absence of main or moderating effects of self-esteem level will advance our understanding. Rather, to move the field forward, we need to examine *when*, or under what conditions, self-esteem level has main or moderating effects on job performance. As these empirical and theoretical reviews suggest, such an approach is warranted, as the accumulation of mixed findings necessarily points to the presence of moderator variables. More concretely, we believe that to better understand when self-esteem level will have a relation with job performance, one must take a broader view of the self and consider not only self-esteem *level* (i.e., high or low self-esteem) but also self-esteem *contingencies* (Crocker, Luhtanen, Cooper, & Bouvrette, 2003; Deci & Ryan, 1995; Kernis, 2003; see also Swann, Chang-Schneider, & McClarty, 2007).

Self-esteem contingencies represent the particular domains upon which one has staked one's global sense of self-worth (Crocker & Wolfe, 2001; Deci & Ryan, 1995). Self-esteem contingencies are thus separate from self-esteem level in that self-esteem contingencies do not speak to whether an individual's self-esteem level is high or low but instead outline the particular domains in life to which one's self-esteem level is most responsive. Importantly, when self-esteem is contingent upon a particular domain, one's behaviors in that domain hold greater implications for the self (compared to one's behaviors in domains upon which self-esteem is not contingent). As we shall argue, this observation is critical in outlining when self-esteem level should have main and moderating effects on job performance.

Below, we present two theoretical rationales for the effect of selfesteem level on job performance, examining self-consistency theory (Korman, 1970) for main effects of self-esteem level and behavioral plasticity theory (Brockner, 1988) for moderating effects of self-esteem level. We next propose that the extent to which self-esteem is contingent upon workplace performance acts as a boundary condition on both selfconsistency and behavioral plasticity theory predictions, outlining when such main and moderating effects will and will not occur. Finally, we present two multisource studies that test our hypotheses.

Self-Consistency Theory: A Main Effect Perspective

The notion that individuals seek consistency has been central to psychological thinking for decades, with researchers suggesting individuals seek cognitive consistency or balance between their attitudes and behaviors (e.g., Festinger, 1954, Heider, 1958; see also self-verification theory; Swann, 1992). One of the earliest integrations of this notion within organizational psychology was Korman's (1970) self-consistency theory. Self-consistency theory sought to provide a theoretical framework for organizational hypotheses regarding self-esteem level, with the general premise being that individuals with high self-esteem would be more satisfied and productive at work. In Korman's (1970, p. 32) words, "individuals will be motivated to perform on a task or job in a manner which is consistent with [their] self-image," suggesting a positive main effect of self-esteem level on job performance.

This theoretical framework has been the basis for a substantial amount of organizational research on self-esteem level (for a review, see Pierce & Gardner, 2004). However, a recent review of the literature concluded that, contrary to self-consistency theory predictions, the evidence is equivocal on whether or not high self-esteem is related to better performance (either school or job performance; Baumeister et al., 2003). Meta-analytic reviews (Judge & Bono, 2001) came to a similar conclusion, noting that although a positive relation exists overall between self-esteem level and job performance (larger in magnitude than the relation between job performance and generalized self-efficacy or Conscientiousness), the relation was highly variable, with the 80% credibility interval including zero (CV = [-.05, .57], k = 40, N = 5, 145). Based on these narrative and empirical reviews, the overall main effect of self-esteem level on job performance has been questioned (Baumeister et al., 2003).

Behavioral Plasticity Theory: A Moderating Effect Perspective

In contrast to self-consistency theory's proposed main effect of selfesteem level on job performance, an alternate perspective is that selfesteem level moderates the effect of other variables on job performance. This perspective has been labeled behavioral plasticity theory (Brockner, 1988), as it suggests that individuals who have low self-esteem levels are more reactive (exhibiting "plasticity" or malleability) to external variables. Behavioral plasticity theory is consistent with the notion that high selfesteem can act as a resource, providing a buffer against negative conditions and reducing their impact; individuals with low self-esteem lack such a buffer and hence are more adversely affected by negative circumstances (Brockner, 1988). Thus, the effect of negative circumstances on outcomes should be stronger for those individuals with low self-esteem, relative to those with high self-esteem.

Typically, self-esteem level has been examined as a moderator of the effects of role stressors such as *role ambiguity* (RA; the extent to which a role's goals and objectives are unclear or poorly defined) and *role conflict* (RC; the extent to which a role contains conflicting demands, requirements, and pressures); high levels of self-esteem are thought to weaken the relation between role stressors and their outcomes. Using a behavioral plasticity theory framework, researchers have examined self-esteem level as a moderator of role stressors on job satisfaction (Pierce, Gardner, Dunham, & Cummings, 1993), job strain (Grandey & Cropanzano, 1999; Mossholder, Bedeian, & Armenakis, 1982), and depression, frustration, and physical symptoms of distress (Jex & Elacqua, 1999). A

straightforward application of behavioral plasticity theory is thus to examine whether or not self-esteem level moderates the negative effect of role stressors on job performance; indeed, such an approach has been taken by different researchers (Mossholder, Bedeian, & Armenakis, 1981; Pierce et al., 1993).

At the same time, and similar to summaries of the research on the main effects of self-esteem level on job performance, researchers have found only mixed support (Mossholder et al., 1981) or no support for such predictions (using two-tailed significance tests; Pierce et al., 1993). The situation is mirrored when examining outcomes other than performance (e.g., satisfaction or strain as outcomes; Grandey & Cropanzano, 1999; Jex & Elacqua, 1999; Pierce et al., 1993), where mixed support for behavioral plasticity theory is also found. In summary, as was the case with main effects, support for moderating effects of self-esteem level on job performance is far from certain, with equivocal results found across studies (Baumeister et al., 2003).

Although these results may seem dispiriting for self-esteem researchers, more recent work has suggested that focusing simply on selfesteem level (i.e., high/low) may not provide a complete picture of the effects of self-esteem; other aspects of the self may serve to moderate the effects of self-esteem level (Crocker, Luhtanen, et al., 2003; Ferris, Brown, Lian, & Keeping, 2009; Kernis, 2003; Swann et al., 2007). This suggestion holds particular relevance for the relation between self-esteem level and job performance, given the accumulation of contradictory results suggests that unmeasured moderators may be present. Consistent with this, we argue that *self-esteem contingencies* play a crucial role as a boundary condition for predictions regarding the relation between self-esteem level and job performance. Below, we discuss and define self-esteem contingencies and provide a rationale for why such contingencies should act as a boundary condition for both self-consistency and behavioral plasticity theory predictions.

Self-Esteem Contingencies

Although we may encounter successes and failures in many different domains during our lifetime, it is likely that only a small subset of these outcomes will have the ability to influence how we feel about ourselves. For some individuals (e.g., students), failing a test can cause one to sink into a great depression, whereas burning cupcakes in an oven is likely to be shrugged off easily; for other individuals (e.g., chefs), the reverse would be true. In other words, our self-esteem is *contingent* upon some domains (e.g., work, school, sports, religion, popularity, cooking) but not others. This reflects the presence of *self-esteem contingencies*, which Crocker and Wolfe (2001, p. 594) define as "a domain or category of outcomes on which a person has staked his/her self-esteem, so that person's view of his/her value or worth depends on perceived successes or failures or adherence to self-standards in that domain." Self-esteem contingencies thus represent a form of ego-involvement in a particular domain (Deci & Ryan, 1995) such that one's actions and outcomes in that domain hold implications for one's broader sense of self, with failure in that domain threatening one's self-esteem level (Crocker, Luhtanen, et al., 2003; Crocker & Park, 2004; Crocker & Wolfe, 2001).

The notion of self-esteem contingencies can be traced back to James' (1890/1950) pioneering work on the self, where he noted that individuals stake their self-esteem to certain domains and ignore other domains. Invoking himself as an example, James wrote that his work as a psychologist was the domain on which he based his self-esteem; in this domain, "failures are real failures (and) triumphs real triumphs, carrying shame and gladness with them" (James, 1890/1950, p. 310). His proficiency in Greek (or lack thereof) was not a domain upon which he staked his self-esteem, noting his "deficiencies there give me no sense of personal humiliation at all" (James, 1890/1950, p. 310). However, although the notion of self-esteem contingencies has been with us for a long while, it is only recently that measures of self-esteem contingencies have emerged (see Crocker, Luhtanen, et al., 2003).

Differentiating Self-Esteem Contingencies From Self-Esteem Level

A natural question when discussing self-esteem contingencies is how they differ from self-esteem level. The relation between the two constructs can be described thus: Although self-esteem level (i.e., high or low selfesteem) refers to whether one feels positively or negatively about oneself, self-esteem contingencies indicate the domains upon which self-esteem level is responsive or contingent. This distinction applies regardless of whether self-esteem level is measured globally (e.g., trait self-esteem; Rosenberg, 1965), within a specific domain (e.g., self-esteem level based on how one perceives oneself in a specific domain, such as organizationbased self-esteem; Pierce, Gardner, Cummings, & Dunham, 1989), or even from moment to moment (e.g., state self-esteem; Crocker & Wolfe, 2001: Crocker & Park, 2004). Across these different forms (trait, domainspecific, and state), one thing remains in common: all assess whether or not one feels positively or negatively about oneself (overall, in a particular domain, or at a particular moment, respectively); at no point do these different assessments of self-esteem level indicate what self-esteem level is contingent upon, supporting the distinction between self-esteem level and self-esteem contingencies.

A corollary of this is that measures of self-esteem level and self-esteem contingencies should be largely independent of each other. Contingencies of self-esteem do not indicate whether one feels positively or negatively about oneself but rather indicate which domains have the potential to influence our positive or negative feelings about ourselves; similarly, feeling positively or negatively about oneself says nothing about what domains are important to one's self-esteem. Consistent with the notion that self-esteem level and self-esteem contingencies are independent, the two typically have low (or no) correlations with each other (Crocker, Luhtanen, et al., 2003; Kernis, 2003), supporting their distinctiveness.

Self-Esteem Contingencies and the Self-Enhancement Principle

The effects of self-esteem contingencies are typically considered within the broader motivational principle of self-enhancement (Crocker & Park, 2004; Pfeffer & Fong, 2005), which states that individuals are primarily self-enhancing and seek to maintain and enhance their self-esteem level (while also avoiding drops in self-esteem level). Self-esteem contingencies represent the specific domains in which individuals are strongly motivated to self-enhance and thus act as powerful influences on behaviors within such domains. That is, given that self-esteem contingencies delineate which domains influence an individual's self-esteem level, based on the self-enhancement principle, individuals should therefore (a) seek to excel and avoid failure in those domains, and (b) experience momentary self-esteem gains and losses corresponding to successes and failures in those domains. Both assertions have received support. For the former assertion, self-esteem contingencies predict the time one spends on activities: for those activities that are related to self-esteem contingencies, one invests more time and, presumably, more effort because one wants to succeed (or avoid failure) in that domain (Crocker, Luhtanen, et al., 2003). For the latter assertion, self-esteem level has been shown to be more strongly influenced by feedback when that feedback is within a domain upon which one's self-esteem is contingent, compared to when the feedback is within a domain upon which one's self-esteem is not contingent (Crocker, Karpinski, Quinn, & Chase, 2003).

Speaking more generally, it can be said that due to the desire to selfenhance, individuals will seek to do well in domains where one's selfesteem is contingent. Failure to excel in a contingent domain represents a threat to self-esteem level and brings about a sense of shame, which individuals are motivated to avoid (Crocker, Karpinski, et al., 2003; Deci & Ryan, 1995; Leary, Tambor, Terdal, & Downs, 1995; Pfeffer & Fong, 2005). Contingencies of self-esteem have thus been argued to both provide behavioral prescriptions and proscriptions in a given domain, as well as affective highs and lows in response to success and failure in that domain. Interestingly, an important corollary of this notion is that if self-esteem is *not* contingent on a particular domain, one's actions and behaviors in that domain hold no self-relevant implications and success is not likely to prove self-enhancing nor is failure likely to be perceived as shameful or threatening. This prediction has also received support (Crocker, Karpinski, et al., 2003).

Integrating Self-Esteem Contingencies and Self-Consistency Theory

Although there are no shortages of domains upon which self-esteem can become contingent (e.g., demonstrating virtue, being attractive, or demonstrating competence; Crocker, Luhtanen, et al., 2003), of primary interest to organizational researchers is when self-esteem is contingent upon workplace performance—or the importance of performance to selfesteem (IPSE). When self-esteem is contingent upon workplace performance, it can be said that IPSE is high; conversely, when self-esteem is not contingent upon workplace performance, it can be said that IPSE is low. Individuals with high IPSE will derive their sense of self-worth based on their performance in the workplace and will seek to avoid behaviors that might call their workplace performance into disrepute: such behaviors, as discussed earlier, would be threatening to the self and engender feelings of shame (Deci & Ryan, 1995). Thus, high IPSE individuals can be expected to be more motivated to perform well at work (based upon self-enhancement principles) and hence exhibit the hallmarks of motivated individuals (Kanfer, 1991), including orienting themselves towards work and exhibiting increased intensity and persistence (see also Crocker, Luhtanen, et al., 2003).

We submit that IPSE acts as an important boundary condition for selfconsistency and behavioral plasticity theory predictions. In particular, we believe that the self-consistency theory prediction that individuals with low self-esteem should be poor performers will hold *only when workplace performance is not important to an individual's self-esteem level*. In other words, a two-way interaction, not a main effect, is expected. High IPSE individuals will be guided by self-enhancement concerns in the work domains; as such, they will put forth the effort and persistence required for high job performance, given poor job performance would threaten one's sense of self and cause an individual to feel shame that they have failed to live up to the high performance standards associated with selfesteem contingencies. One would therefore expect that, contrary to selfconsistency theory, even individuals with low self-esteem will maintain high levels of performance when IPSE is high. Such a finding would be consistent with the self-enhancement principle, in that these individuals will seek to achieve the positive self-relevant implications associated with effective job performance and avoid the negative self-relevant implications associated with poor job performance.

However, for low IPSE individuals, poor job performance has no selfrelevant implications whatsoever and will have no positive or negative impact upon their self-worth. Without the burden of self-relevant implications associated with their performance, these individuals are free to engage in poor job performance, which is consistent with their selfesteem level, as self-consistency theory would suggest. Taken together, this suggests that IPSE should moderate the effect of self-esteem level on job performance such that the positive relation is stronger when IPSE is low. More formally, we predict:

Hypothesis 1: IPSE will moderate the relationship between selfesteem and job performance such that the relation between self-esteem and job performance will be more positively related when IPSE is low.

Integrating Self-Esteem Contingencies and Behavioral Plasticity Theory

The argument that when IPSE is high individuals will refrain from engaging in behaviors that might bring their performance into question can also be applied to behavioral plasticity theory predictions. As discussed earlier, the straightforward prediction based on behavioral plasticity theory is that self-esteem level should moderate the effects of role stressors on job performance such that the negative relation is stronger for individuals with low self-esteem. This represents a two-way interaction such that high levels of role stressors will result in low levels of performance but only for individuals with low self-esteem.

By integrating IPSE with behavioral plasticity theory, however, a more nuanced view is suggested: a three-way interaction, not a two-way interaction, would be expected. First, consistent with behavioral plasticity theory, one can assume that high self-esteem should act as a buffer against the negative impact of role stressors on performance. Whether or not workplace performance is important to self-esteem level should not affect the ability of high self-esteem to act as a resource; thus, regardless of IPSE, high self-esteem should weaken the negative relation between role stressors and job performance.

For individuals with low self-esteem, however, a different picture emerges. For individuals with low self-esteem, no such buffer exists, and as a result, they should be more influenced by role stressors, with high levels of role stressors being associated with poor job performance. However, as outlined earlier, for those individuals with high IPSE, poor performance would violate self-enhancement principles and be profoundly threatening and shameful to the self. Yet if IPSE is low, poor job performance would be neither enhancing nor threatening to one's self-worth. Consequently, although behavioral plasticity theory argues that individuals with low selfesteem should be more influenced by role stressors, we argue that this will hold only for those individuals whose IPSE is also low. Overall, this suggests a three-way interaction, such that role stressors have a negative relation with job performance only when self-esteem level *and* IPSE are low. Having either high self-esteem or high IPSE should serve to buffer or limit one's negative behavioral reactions (i.e., poor job performance) to role stressors.

To test this prediction, in this study we used measures of RA and RC to represent role stressors. These two measures were chosen both based on their representativeness of the role stressor construct (Jackson & Schuler, 1985) and in recognition that they are two of the most frequently used measures in role stressor research (Jex & Beehr, 1991), including research testing behavioral plasticity theory predictions (Mossholder et al., 1981, 1982; Pierce et al., 1993). Formally, we hypothesize the following:

Hypothesis 2:	IPSE will moderate the interaction between self-esteem
	level and role ambiguity in the prediction of job perfor-
	mance such that the relation between role ambiguity
	and job performance will be more strongly negative
	when both self-esteem level and IPSE level are low.

Hypothesis 3: IPSE will moderate the interaction between self-esteem level and role conflict in the prediction of job performance such that the relation between role conflict and job performance will be more strongly negative when both self-esteem level and IPSE are low.

Method

Participants and Procedures

We tested our hypotheses using two independent samples of participants. Sample 1 was used to test our first hypothesis; Sample 2 was used to replicate the findings from Sample 1 and provide a test of Hypotheses 2 and 3 using an alternate rating source for IPSE.

Sample 1. Participants in Sample 1 were recruited by trained student volunteers (from a university located in Ontario, Canada) who were asked to identify a full-time working adult (referred to as the "focal participant") who would be willing to complete an online survey. Student volunteers were enrolled in an organizational behavior course and recruited

participants in exchange for course credit. This recruitment method is similar to procedures used by others to collect data (e.g., Diefendorff & Richard, 2003; Eddleston, Veiga, & Powell, 2006; Liao, 2007; Payne & Webber, 2006) and yields data comparable to more traditional data collection techniques (Smith, Tisak, Hahn, & Schmieder, 1997). Focal participants and their work peers were entered into separate draws to win a \$100 cash prize.

Focal participants completed a single online survey assessing selfesteem level, IPSE, and participant demographics; at the end of the survey, participants were asked to provide the name and e-mail address of a work peer. Using this information, we next e-mailed the work peer with a link to an online survey where they completed a measure of the focal participant's job performance. Peers were used to assess job performance because selfratings of job performance are susceptible to numerous biases (Mabe & West, 1982). In order to maximize response rates, we sent up to three reminder e-mails (1 week apart) to individuals who had not completed the survey (Dillman, 2000).

We recruited 296 focal participants; of these 296 focal participants, 145 of their work peers completed the work peer survey, giving us 145 focal participant/work peer pairs who both completed the surveys.¹ Participants worked in a wide range of occupations, including managers, engineers, and accountants. The mean age of participants used in the analyses was 49.7 years (61% female); participants worked an average of 42.7 hour per week and had been working in the position an average of 137.4 months (approximately 11 years). Participants worked in a variety of industries, including financial (16%), sales (15%), education (11%), health care (10%), manufacturing (10%), and government (6%).

The mean age of work peers was 42.6 years (51% female), and they worked an average of 41 hours per week. To ensure the work peers were qualified to observe the focal participants' work behaviors, we asked participants to nominate a work peer with whom they worked closely and who knew them well. We also asked work peers how well they knew the focal participant; results indicated the work peers knew the focal participant fairly well (M = 5.3 on a 1–7 Likert scale where 1 = not at all and 7 = extremely well; SD = 1.3). In addition, in order to ensure coworkers actually responded to the survey, we also collected the

¹We conducted *t*-tests to examine whether the focal participants from Sample 1 whose work peers provided job performance ratings differed from focal participants who did not. No significant differences between the two groups were found for age (t = -.64, p > .10), gender (t = -.95, p > .10), and IPSE (t = -1.89, p > .05); however, participants who had a work peer complete the survey had slightly higher self-esteem (7.43 vs 7.07, t = -2.88, p < .05) and tenure (11.42 years vs. 9.08, t = 3.24, p < .01). Although these differences are significant, it is not readily apparent how such differences might explain our results.

work peer's name, e-mail address, and residential address to verify focal participants were not completing the work peer surveys themselves.

Sample 2. Participants in Sample 2 were working adults recruited through newspaper advertisements and recruitment posters placed in a variety of public places (e.g., coffee shops, bus shelters) in Ontario, Canada. Focal participants completed two online surveys 2 weeks apart. The initial survey assessed self-esteem level and focal participant demographics; focal participants also provided the researchers with the name and e-mail address of a work peer. The second survey included measures of RC and RA. We next e-mailed the work peer with a link to an online survey where they completed measures assessing the focal participant's job performance and IPSE. In order to maximize response rates, we sent up to three reminder e-mails (1 week apart) to individuals who had not completed the survey (Dillman, 2000). In return for completing each survey, focal participants and work peers were each paid \$10.

We recruited 332 participants for the first survey; 306 participants completed the second survey 1 week later. We next e-mailed a link to an online survey to the work peers of those participants who had completed the second survey; 191 responded.² One multivariate outlier was identified using externally studentized residuals and removed (Cohen, Cohen, West, & Aiken, 2003; results were essentially unchanged whether or not the participant was included in analyses or not). Participants worked in a variety of occupations, including managers, consultants, and administrators. The mean age of participants used in the analyses was 34.1 years (53% female); participants worked an average of 42 hours per week and had been working in the position an average of 49 months (approximately 4 years). Participants worked in a variety of industries, including financial (14%), computers and math-oriented occupations (13%), sales (10%), education (9%), health care (9%), manufacturing (9%), and government (6%).

The mean age of work peers was 36.8 years (60% female) and they worked an average of 40 hours per week. As with Sample 1, to ensure the work peers were qualified to observe the focal participants' work behaviors, we asked participants to nominate a work peer with whom they worked closely and who knew them well. We also asked work peers how

²In order to ensure our final sample of 191 participants from Sample 2 was representative of our original sample, we conducted *t*-tests to ascertain whether the individuals who had a work peer complete a survey differed from participants who completed the first survey. No significant differences between the two groups were detected on role ambiguity (t = .03, p > .10) or gender (t = -.10, p > .10); however, participants who did not have a work peer complete the survey were significantly older (34.11, vs 31.32; t = -2.75, p < .01), had slightly higher self-esteem (6.77 vs 6.45, t = -2.02, p < .05), and less role conflict (3.4 vs. 3.9, t = 3.24, p < .01). As with Sample 1, although these differences are significant, it is not readily apparent how such differences might explain our results.

well they knew the focal participant; results indicated the work peers knew the focal participants fairly well (M = 5.4 on a 1–7 Likert scale where 1 = not at all and 7 = extremely well; SD = 1.17). As with Sample 1, the work peer's name, e-mail address, and residential address were collected to ensure the work peer actually completed the survey.

The main difference between Sample 1 and Sample 2 was that in Sample 2 work peers, not the focal participant, provided IPSE ratings. We used work peers to assess IPSE in Sample 2 as it has been suggested that individuals may lack insight into their self-esteem contingencies (Anthony, Holmes, & Wood, 2007), which renders self-ratings of self-esteem contingencies problematic. In order to address this concern, our study used either self (Sample 1) or peer (Sample 2) ratings. As shall be seen, our results were similar regardless of whether self or peer ratings were used.

Measures

Role conflict and ambiguity. House, Schuler, and Levanoni's (1983) 18-item measure was used to assess RA (11 items) and RC (7 items). Participants responded to questions such as "I don't know what is expected of me" (ambiguity) and "I often get myself involved in situations in which there are conflicting requirements" (conflict) using a seven-point scale (1 = *strongly disagree* and 7 = *strongly agree*).

Self-esteem level. Rosenberg's (1965) 10-item measure was used to assess self-esteem level by having participants indicate their agreement on a nine-point scale (1 = very strongly disagree and 9 = very strongly agree) to questions such as "I take a positive attitude toward myself."

Job performance. Job performance was assessed using Williams and Anderson's (1991) 7-item in-role behavior scale. Participants indicated their agreement with such statements as "My work peer meets formal performance requirements of the job" using a 1 = strongly disagree to 5 = strongly agree scale.

IPSE. Crocker, Luhtanen, et al.'s (2003) five-item measure of academic competence-contingent self-esteem was adapted for the work context. In particular, items were reworded to focus on performance at work instead of performance in academia (e.g., changing "academic performance" to "workplace performance"; "at school" to "at work"; and "doing well academically" to "doing well at work"). Focal participants (Sample 1) and work peers (Sample 2) rated the extent to which workplace performance was important to the focal participant's self-esteem by responding to the following items (with the wording for self-ratings presented first, followed by the wording for work-peer ratings): "Doing well at work gives me a sense of self-respect/Doing well at work gives my work peer a sense of self-respect"; "My self-esteem is influenced by my workplace performance/My work peer's self-esteem is influenced by his/her workplace performance"; I feel better about myself when I know I'm doing well at work/My work peer feels better about himself/herself when he/she knows he/she is doing well at work"; "I feel bad about myself whenever my work performance is lacking/My work peer feels bad about himself/herself whenever his/her work performance is lacking"; and "My opinion about myself isn't tied to how well I do at work/My work peer's opinion about himself/herself isn't tied to how well he/she does at work" (reverse-coded). Responses were made on a seven-point scale (1 = *strongly disagree* and 7 = *strongly agree*).

Discriminant Validity of the IPSE Scale

Self-esteem contingency measures have primarily been used in social psychology studies; their use in organizational psychology research surfaces two unique issues with respect to discriminant validity. First, as a measure that taps into the importance of a work domain to an individual, IPSE is similar to other constructs that also tap into the importance of work, such as work involvement (Kanungo, 1982) and work centrality (Paullay, Alliger, & Stone-Romero, 1994). We believe that work involvement and work centrality likely share variance with IPSE (e.g., "Overall, I consider work to be very central to my existence," from Paullay et al.'s [1994] work centrality scale). However, we also believe measures of work involvement/centrality assess constructs other than the extent to which workplace performance is important to self-esteem level. For example, the item "the most important things that happen in life involve work," from Kanungo's (1982) work involvement scale, may reflect the fact that work takes up a large portion of one's time but is silent as to whether workplace performance is actually important to an individual's self-esteem level

Second, one may also wonder to what extent IPSE overlaps with measures of organization-based self-esteem (Pierce et al., 1989). We believe that IPSE is conceptually distinct from organization-based self-esteem, as organization-based self-esteem is a domain-specific assessment of one's self-esteem *level*, or how one feels about oneself within an organizational context (Pierce et al., 1989). In contrast, IPSE refers to whether or not the organizational context is a domain upon which one's self-esteem level is contingent. Thus, as has been shown with measures of global selfesteem level and self-esteem contingencies, we would expect little to no correlation between IPSE and organization-based self-esteem measures.

Whereas the above suggests constructs such as IPSE, organizationbased self-esteem, work centrality, and work involvement may be distinguished *conceptually*, studies have yet to show whether or not participant ratings on the measures are distinguishable *empirically*. Thus, we collected two additional data sets in order to demonstrate the discriminant validity of the IPSE measure from work involvement, work centrality, and organization-based self-esteem. Our first data set recruited working adults using a similar procedure to Study 1. In exchange for course credit, trained student volunteers from a university located in Singapore were asked to identify a full-time working adult who would be willing to complete an online survey. Working adults completed a single survey containing measures of IPSE, work centrality, and work involvement. Using this method, we were able to recruit 103 student volunteers who passed out survey packages to focal participants. Overall, we had 91 working adults respond to the survey, representing an 88% response rate. Participants worked an average of 46 hours per week and were, on average, 49.7 years old (53% female).

Our second data set recruited working adults using advertisements placed in public areas in Ontario, Canada. Participants were directed to an online web page where they could read more about the study and complete a short demographic questionnaire. Participants also provided their e-mail address for the researchers to subsequently contact them to participate. Participants were subsequently sent a link to a single online survey that assessed both IPSE and organization-based self-esteem; in return for their participation, participants were compensated \$10. In order to maximize response rates, we sent a reminder e-mail to individuals who had not completed the survey after 1 week (Dillman, 2000). Using this method, a total of 163 individuals were recruited and sent an e-mail with a link to the main survey; 127 responded (78% response rate). Participants (45% male) came from a diverse set of occupations (e.g., accountant, nurse, teacher, sales manager) and were employed in a variety of industries including financial (16%), government (15%), sales (9%), computers (8%), and education (8%). The mean age of participants was 35.3 years (SD = 9.6) and the average hours worked per week was 41.41 (SD = 8.0). Participants reported being employed in their current organization for an average of 5.8 years (SD = 7.2), having worked in their present position for 4.2 years (SD = 5.6), and having worked with their current supervisor for 3 years (SD = 4.4).

We measured IPSE using the adaption of Crocker, Luhtanen, et al.'s measure as described earlier ($\alpha = .73$ and .78 for the first and second data set, respectively). Work centrality was measured using Paullay et al.'s (1994) scale. Responses were made on a seven-point scale (1 = strongly disagree and 7 = strongly agree) to statements such as "If unemployment benefits were really high, I would still prefer to work" ($\alpha = .88$). Work involvement was measured using Kanungo's (1982) scale. Responses were made on a six-point scale (1 = strongly disagree and 6 = strongly agree) to statements such as "Work is something people should get involved

in most of the time" ($\alpha = .83$). Finally, Pierce et al.'s (1989) 10-item organization-based self-esteem measure was used. Participants responded to questions such as "I am important around here" on a 5-point Likert scale ($1 = strongly \ disagree$ and $5 = strongly \ agree$; a = .91).

To examine the discriminant validity of the IPSE measure, we examined its correlations with work centrality, work involvement, and organization-based self-esteem. Results indicated that IPSE correlated only moderately with work centrality (r = .48, p < .01) and work involvement (r = .34, p < .01), while the correlation between IPSE and organization-based self-esteem was low (r = .26, p < .01). Notably, these correlations are lower than the .70 correlation coefficient cut off that suggests two measures are not distinguishable (Nunally, 1978). Given these results support the discriminant validity of the IPSE measure, we therefore proceeded with tests of our hypotheses.

Results

Tables 1 and 2 present the alphas, intercorrelations, means, and standard deviations of the study variables for Samples 1 and 2, respectively. Consistent with other studies, which suggest the correlation between selfesteem level and contingencies is small or negligible (Kernis, 2003), we found only a small correlation between peer ratings of IPSE and selfesteem level (r = .21, p < .01, Table 2), and no relation between self-rated IPSE and self-esteem level (r = -.03, p > .10, Table 1). These results indicate that self-esteem level and self-esteem contingencies represent theoretically and empirically distinct constructs.

Hierarchical multiple regression was used to test our hypotheses. In the first step of each regression, we entered in our control variables (age, gender, and tenure); main effects (e.g., self-esteem level, IPSE, and the

	Mean	SD	1	2	3	4	5	6
1. Age	49.71	5.19	_					
2. Gender	.61	.49	08	-				
3. Tenure	137.43	109.52	.21*	10	_			
4. Self-esteem level	7.43	1.01	.18*	06	.03	.83		
5. IPSE	4.76	1.10	.01	02	.04	03	.76	
6. Performance	4.41	.53	.13	.03	.17*	.19*	01	.82

 TABLE 1

 Descriptive Statistics, Zero Order Correlations, and Alphas (Sample 1)

Note. IPSE = Importance of performance to self-esteem. Alphas are on the diagonal in bold.

		Descriptive	טואד לבחונווטונ							
	Mean	SD	1	2	ю	4	5	9	7	∞
	34.11	10.12	I							
	.53	.50	.15*	I						
	57.41	72.03	.34**	.08	I					
4. Self-esteem level	6.77	1.23	.18*	.04	07	.81				
	4.93	.91	.05	.11	03	.21**	.71			
	3.42	1.21	11	22^{**}	.01	39^{**}	11	8 8.		
7. Role ambiguity	3.06	1.16	21**	24^{**}	04	42**	24^{**}	.51**	.93	
8. Performance	4.16	.62	.25**	60.	.10	.47**	.45**	25**	28**	8 .

Note. IPSE = Importance of performance to self-esteem. Alphas are on the diagonal in bold. *p < .05, **p < .01.

relevant role stressor for Hypotheses 2 and 3) were entered in the second step. Two-way interactions were entered in the third step; the relevant three-way interaction was entered in the fourth step when testing Hypotheses 2 and 3. To reduce multicollinearity, all lower-order terms used in interactions were standardized (effectively centering the variables at their respective means).

Hypothesis 1 predicted a two-way interaction between self-esteem level and IPSE in the prediction of peer-rated job performance such that the positive relation between self-esteem level and job performance would be weaker if IPSE was high. Table 3 presents the results of our analyses, using self-(Sample 1) and peer (Sample 2) ratings of IPSE. For both samples, the interaction between self-esteem level and IPSE was significant

Variable	Sample 1	Sample 2
Step 1		
Age	.10 (.01)	.16 (.01)
Gender	.05 (.09)	.07 (.09)
Tenure	.15 (.00)	.15 (.00)
$\overline{R^2}$.04	.09**
Step 2		
Age	.07 (.01)	.03 (.00)
Gender	.06 (.09)	.04 (.07)
Tenure	.15 (.00)	.22** (.00)
SE	.17* (.05)	.40** (.04)
IPSE	01 (.04)	.37** (.04)
ΔR^2	.03	.33**
Step 3		
Age	.06 (.01)	.04 (.00)
Gender	.06 (.08)	.03 (.07)
Tenure	.16* (.00)	.23** (.00)
SE	.22** (.05)	.45** (.04)
IPSE	.08 (.04)	.34** (.04)
$SE \times IPSE$	34** (.04)	25** (.04)
$\overline{\Delta R^2}$.10**	.06**
Overall R ²	.17**	.48**

 TABLE 3

 Self-Esteem Level by IPSE Predicting Job Performance

Note. N = 145 and 190 for Samples 1 and 2, respectively. SE = Self-esteem. IPSE = Importance of performance to self-esteem. IPSE was self-rated in Sample 1 and rated by a peer in Sample 2. Values are standardized regression coefficients (standard error estimates listed in parentheses). All lower-order terms used in interactions were standardized prior to analysis.

 $p^* < .05, p^* < .01.$



Figure 1: Two-Way Interaction Predicting Job Performance (Self-Rated IPSE).

 $(\beta = -.34 \text{ and } -.25, \text{ both } p < .01, \text{ for Samples 1 and 2, respectively}).$ The interaction term significantly increased the overall explained variance for job performance ($\Delta R^2 = .10$ and .06 for Samples 1 and 2, respectively, both $f^2 = .12$ and p < .01). Figures 1 and 2 depict the interaction graphically for Samples 1 and 2, respectively. As can be seen, for both samples, the relation between self-esteem level and job performance was weaker when IPSE was high. Tests of the simple slopes indicated that the relation between self-esteem level and job performance was significant only when IPSE was low (Sample 1: t[138] = 4.13, p < .01; Sample 2: t[183] = 8.23,



Figure 2: Two-Way Interaction Predicting Job Performance (Peer-Rated IPSE).

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Step	1	2	3	4
Role ambiguity (RA)				
Age	.16	.03	.02	.02
	(.01)	(.00)	(.00)	(.00)
Gender	.08	.05	.02	.02
	(.09)	(.07)	(.04)	(.07)
Tenure	.15	.22**	.23**	.23**
	(.00)	(.00)	(.00)	(.00)
SE		.40**	.44**	.41**
		(.04)	(.04)	(.04)
IPSE		.38**	.35**	.33**
		(.04)	(.04)	(.04)
RA		.02	02	03
		(.04)	(.04)	(.04)
$SE \times IPSE$			24**	23**
			(.04)	(.04)
$SE \times RA$			09	08
			(.04)	(.04)
$IPSE \times RA$.07	.10
			(.04)	(.04)
$IPSE \times SE \times RA$			· /	07
				(.03)
$\overline{\Delta R^2}$.09**	.32**	.07**	.00

 TABLE 4

 Three-Way Interaction Among Role Ambiguity, Self-Esteem, and IPSE

 Predicting Job Performance

Note. N = 190. SE = Self-esteem. IPSE = Importance of performance to self-esteem. Values are standardized regression coefficients (standard error estimates listed in parentheses). All lower-order terms used in interactions were standardized prior to analysis.

**p < .01.

p < .01). Thus, across two samples and using self- and peer-rated measures, Hypothesis 1 was supported.

For Hypotheses 2 and 3, we examined the three-way interaction among self-esteem level, IPSE, and role stressors (RA and RC) in Sample 2. Table 4 presents the results for the three-way interaction involving RA. As can be seen, the three-way interaction term was not significant, failing to support Hypothesis 2. The results with respect to the three-way interaction involving RC are presented in Table 5. The three-way interaction term significantly predicted job performance ($\beta = -.13$, $\Delta R^2 = .01$, $f^2 = .02$, p < .05). The interaction, depicted in Figure 3, indicates that the relation between RC and job performance is strongest when both self-esteem level and IPSE are low. Tests of the simple slopes supported this interpretation: The relation between RC and job performance was significant only when both self-esteem level and IPSE were low, (t[172] = -2.62, p < .01; all

Step	1	2	3	4
Role conflict (RC)				
Age	.16	.03	.04	.02
	(.01)	(.00)	(.00)	(.00)
Gender	.08	.03	.01	00
	(.09)	(.07)	(.07)	(.07)
Tenure	.15	.22**	.23**	.23**
	(.00)	(.00)	(.00)	(.00)
SE		.40**	.46**	.44**
		(.04)	(.04)	(.04)
IPSE		.35**	.30*	.30**
		(.04)	(.04)	(.04)
RC		06	12	10
		(.04)	(.04)	(.04)
$SE \times IPSE$			25**	28**
			(.04)	(.04)
$SE \times RC$.02	.01
			(.04)	(.04)
$IPSE \times RC$.05	.10
			(.04)	(.04)
$IPSE \times SE \times RC$				14*
				(.03)
$\overline{\Delta R^2}$.09**	.33**	.07**	.01*

TABLE 5 Three-Way Interaction Among Role Conflict, Self-Esteem, and IPSE Predicting Job Performance

Note. N = 190. SE = Self-esteem. IPSE = Importance of performance to self-esteem. Values are standardized regression coefficients (standard error estimates listed in parentheses). All lower-order terms used in interactions were standardized prior to analysis.

p < .05, p < .01.

other simple slope tests were nonsignificant, p > .05). These results fully support Hypothesis 3.

Discussion

The question of whether or not self-esteem level relates to behavioral outcomes such as job performance has been a controversial one. Some authors (e.g., Baumeister et al., 2003, Krueger, Vohs, & Baumeister, 2008) suggest that self-esteem level has little relation to one's behavior; other authors have countered that one must adopt a broad view of the self and examine how self-esteem level interacts with other aspects of the self (Crocker & Park, 2004; Swann et al., 2007, 2008). Consistent with the latter perspective, this paper examined whether or not IPSE moderated self-consistency and behavioral plasticity theory predictions regarding



Figure 3: Three-Way Interaction Predicting Job Performance.

the relation between job performance and self-esteem level. Across two samples using both self- and other ratings of key constructs, this study advances our understanding of *when* self-esteem level should relate to job performance.

Our results suggest that self-esteem level *can* have a main and a moderating effect on job performance but that self-esteem contingencies play an important role with respect to when these main and moderating effects will be observed. That is, individuals who base their self-esteem on their performance in the workplace (i.e., high IPSE) show no positive relation between job performance and self-esteem level, nor is their performance negatively impacted by RC, presumably due to the negative self-implications poor performance has for such individuals. Thus, self-esteem level has a main or moderating effect only for those with low IPSE.

Our results suggest modifications to both self-consistency and behavioral plasticity theories. In particular, IPSE seems to be a critical required component for their theoretical predictions to be supported. We therefore propose that self-consistency theory predictions be modified. In particular, rather than positing that people engage in behaviors consistent with their self-perceptions, self-consistency theory should instead state that people engage in behaviors consistent with their self-perceptions so long as such behaviors do not threaten domains upon which their self-esteem levels are based. Similarly, for behavioral plasticity theory, rather than stating that the behavior of individuals with low self-esteem is more influenced by contextual variables than individuals with high self-esteem, we suggest this proposition be modified to state that the behavior of individuals with low self-esteem is more influenced by contextual variables than individuals with high self-esteem so long as such behaviors do not threaten domains upon which their self-esteem levels are based. Given self-consistency theory and behavioral plasticity theory represent two of the main theories organizational self-esteem researchers use to formulate hypotheses (Pierce & Gardner, 2004), our suggested modifications to these theories hold considerable implications for self-esteem researchers. Self-esteem researchers would therefore be well advised to include measures of both self-esteem level and self-esteem contingencies (such as IPSE), as self-esteem contingencies provide a boundary condition for self-consistency and behavioral plasticity theory predictions.

Our results similarly contribute to both the self-esteem and job performance literatures by bringing empirical substance to the ongoing theoretical debates on the effects of self-esteem level on job performance (see e.g., Krueger et al., 2008; Swann et al., 2007, 2008). In particular, our results help explain why reviews of past studies have found mixed, weak, or no results with respect to the effects of self-esteem level on job performance: By not taking into account self-esteem contingencies of participants, such studies would naturally tend to produce strong, weak, or no results, overall. However, by examining self-esteem level in conjunction with self-esteem contingencies, a clearer picture emerges.

Finally, our results also contribute to the job performance literature by demonstrating the importance of self-enhancement motivation with respect to job performance. As noted earlier, it has been suggested that motivation, as well as declarative and procedural knowledge, have been identified as important antecedent categories of job performance. Within the motivational arena, it has been suggested that self-enhancement principles are of paramount importance to individuals in organizational settings (Pfeffer & Fong, 2005), and our results provide support for this view. In particular, when self-esteem level is contingent upon workplace performance, individuals are less likely to act in self-consistent ways or be negatively affected by RC. Based on these results, researchers may want to consider how self-enhancement motivation (as represented by self-esteem contingencies) interacts with other antecedents of job performance in order to improve our understanding of the determinants of job performance (an idea we return to in our discussion of future directions). In doing so, our results can potentially provide increased theoretical precision to future hypotheses regarding predictors of job performance, an area that, as mentioned earlier, remains of utmost concern to organizations.

Practical Implications

One practical implication of our work lies in personnel selection. Our results indicate that when individuals have either high self-esteem levels or high IPSE, the impact of RC on job performance is neutralized. Thus, organizations hiring for positions with a high degree of RC may wish to avoid selecting individuals with both low self-esteem levels and low IPSE, as they would be most likely affected by RC and more likely to engage in self-consistent behaviors (i.e., poor performance). Of course, as a reviewer pointed out, such recommendations are limited to those job applicants who possess work experience (e.g., laid-off workers or unsatisfied employees seeking new positions, internal transfers, relocated spouses, etc.). With respect to applicants with no work experience (e.g., school graduates), recruiters may wish to assess performance-contingent self-esteem in other domains (e.g., academic competence; Crocker et al., 2003). Such an approach may be appropriate in that it has been suggested that domain-specific contingencies of self-esteem (e.g., academic or workplace competence) may simply reflect superordinate contingencies (e.g., to be competent), which readily switch to new domains such as from school to the workplace (Crocker & Wolfe, 2001). To our knowledge, however, this particular proposition has yet to be tested, so empirical research should be undertaken prior to endorsing this practice wholeheartedly.

A related practical implication is that aside from selecting new employees with high self-esteem levels or high IPSE, organizations may wish to influence employee self-esteem levels and contingencies directly. With respect to increasing self-esteem levels, numerous theoretical perspectives converge on the notion that to increase employee self-esteem levels one should provide employees with an environment that affirms their sense of competence, autonomy, and belonging (Brockner, 1988; Deci & Ryan, 1995; Leary et al., 1995, Pierce & Gardner, 2004). Such theoretical perspectives are backed up by empirical organizational research, which indicates that support from one's leader and organization, job autonomy, and performance-enhancing role conditions all positively influence self-esteem levels (Ferris, Brown, & Heller, 2009; Pierce & Gardner, 2004). Thus, organizations seeking to boost employee self-esteem levels may wish to focus on factors that influence employee's feelings of competence, autonomy, and belonging. For instance, it has been suggested that increasing feedback to employees, as well as increasing the contact/interdependence of the workforce with customers and fellow employees, can foster feelings of relatedness (i.e., social worth and support) and competence (Grant, 2007; Humphrey, Nahrgang, & Morgeson, 2007). Similarly, providing employees with the autonomy to schedule their own

hours, make decisions, or choose how to complete their work may also influence their sense of autonomy (Morgeson & Humphrey, 2006).

Improving self-esteem levels would likely have additional beneficial outcomes aside from self-esteem's relation with performance: Evidence that higher self-esteem leads to more positive attitudes is well-established (Baumeister et al., 2003), suggesting that high self-esteem will simultaneously promote employee satisfaction and well-being. However, it should be noted that *unrealistically* high self-esteem (or self-esteem that is not grounded in actual accomplishments) may render individuals overly sensitive to, or unwilling to pay heed to, negative feedback; such individuals may also display egotistical and narcissistic behavioral patterns (Baumeister et al., 1996). To avoid such a situation, it has been recommended that individuals should not provide unconditional positive regard (e.g., Rogers, 1961) to boost self-esteem levels but rather that actual accomplishments should form the foundation of one's self-esteem level (Baumeister et al., 2003).

With respect to increasing IPSE, there has been less work done on the antecedents of self-esteem contingencies. However, it is thought that self-esteem contingencies develop when an individual's acceptance by important others is achieved only when the individual performs certain actions or behaviors (Crocker & Wolfe, 2001). Thus, employers may wish to concretely communicate (e.g., through training materials or seminars) to employees that their value to the company is dependent upon achieving high performance. However, just as a high self-esteem level may have drawbacks, we would be remiss to not mention that high IPSE may similarly produce negative side-effects, including leaving individuals more vulnerable to depression should their performance come into question (Crocker, Karpinski, et al., 2003). Thus, whether or not high IPSE is desirable may depend in part on one's perspective (e.g., employee or employer; Crocker & Wolfe, 2001). Given the relatively recent introduction of self-esteem contingencies to the literature, much work remains to be done on their effects. Indeed, it has been suggested that highly contingent self-esteem may not be a problem in and of itself, but rather, it only becomes a problem when one's self-esteem becomes contingent upon areas over which one has little or no control (e.g., beauty), leaving oneself vulnerable to the vicissitudes of fate (Crocker & Knight, 2005). Thus, we encourage researchers to further examine the consequences associated with IPSE in the workplace.

Future Directions, Strengths, and Limitations

We believe there are numerous ways in which our results can be meaningfully extended. For example, we believe IPSE may similarly moderate the relation between other self-perceptions and job performance. In this respect, self-esteem level, along with generalized self-efficacy, Neuroticism, and locus of control have all been conceptualized as indicators of a latent core self-evaluation factor, which reflects one's "basic, fundamental appraisal of one's worthiness, effectiveness, and capability as a person" (Judge, Bono, Erez, & Thoresen, 2003, p. 304). In our study we chose to focus on the relation between self-esteem level and job performance, as this was a relation that past literature (e.g., Baumeister et al., 2003; Judge & Bono, 2001) had highlighted as being problematic.³ Yet the central premise of our study is that individuals with high IPSE will be less likely to perform poorly, as such poor performance would violate selfenhancement tendencies. Taking this premise at face value, it stands to reason that IPSE may moderate not just the effects of self-esteem level on job performance but also the effects of other core self-evaluation indicators or, indeed, the core self-evaluation factor itself (all of which have been linked to performance in past research, though none demonstrate the high variability that characterizes the relation between self-esteem level and job performance; Judge & Bono, 2001; Judge et al, 2003).

Indeed, one interpretation of our results could be that IPSE is analogous to a "strong situation" (Mischel, 1973) where individual differences are less likely to be related to outcomes, given an individual's overriding concern with maintaining and enhancing self-esteem.⁴ A natural extension of this analogy is that the effects of all dispositional traits (including but not limited to core self-evaluation traits) on job performance should be moderated by IPSE as well. For example, Conscientiousness has been shown to be related to job performance, with low Conscientiousness being associated with poorer job performance. Extending our results, one might not expect a relation between Conscientiousness and job performance for those who score highly on IPSE measures, as the "strong situation" that high IPSE represents may mitigate the effect of dispositional traits on job performance. Such research would also be useful to consider in light of recent debates regarding the utility of personality as a predictor

³Aside from self-esteem being the more theoretically appropriate variable, the existence of the core self-evaluation construct does not imply that we should stop research on the traits that comprise core self-evaluations, a point with which core self-evaluations researchers would agree. As Judge, Erez, Bono, and Thoresen (2002, p. 706) state, "it is not our contention that researchers should abandon study of self-esteem, neuroticism, locus of control, or generalized self-efficacy as isolated traits." Chen, Gully, and Eden (2004, p. 377) similarly note that although "a single core self-evaluation construct may improve prediction of general outcomes such as overall job performance, it might also exact a price in terms of precision and validity, and may reduce our understanding of the determinants of behavior in organizations." Thus, we encourage future research on both the core self-evaluation construct as well as its components.

⁴We thank Joel Brockner for suggesting this interpretation.

of job performance (Morgeson et al., 2007; Ones, Dilchert, Viswesvaran, & Judge, 2007; Tett & Christiansen, 2007): that is, by considering IPSE as a "strong situation," the predictive utility of personality traits may be improved. Extending the analogy further, aside from personality predictors of performance, similar moderating effects should theoretically be expected for attitudinal (e.g., job satisfaction), perceptual (e.g., justice perceptions), and contextual (e.g., abusive supervision) predictors of job performance.

Our study possessed a number of strengths that should be noted. First, our study used two separate samples to test Hypothesis 1, demonstrating the robustness of the phenomenon under investigation. Second, both samples used multisource data in that job performance ratings were provided by work peers not the self. Given that self-ratings of work performance are subject to numerous enhancement biases, using peer ratings of performance circumvents such biases and also eliminates the plausibility that our results are due to common method variance concerns (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Finally, we also replicated our findings using both self- and peer-rated measures of IPSE. Although the self-esteem contingencies literature is recent, with measures emerging only within the last 6 years (Crocker, Luhtanen, et al., 2003), the use of self-reports of self-esteem contingencies has been criticized (Anthony et al., 2007). By replicating our results using different ratings sources, we contribute to the emerging self-esteem contingencies literature by demonstrating the empirical validity of the construct across different rating sources.

However, these strengths should be evaluated in light of limitations of our study. With respect to our interactions, it should be noted that the variance explained by our three-way interaction among RC, selfesteem level, and IPSE may be considered small. Moreover, Hypothesis 2, which similarly suggested a three-way interaction involving RA, was not supported. In light of these concerns, pending replication of the effect, readers should view the three-way interaction with a degree of caution. However, it should also be noted that finding both two- and three-way interaction effects in field data is difficult, and even interactions that explain 1% of the variance should be considered important (Evans, 1985; McClelland & Judd, 1993). In this light, the variance explained by our two-way interactions (10% and 6% in Samples 1 and 2, respectively) and their replication can be considered impressive, whereas the variance explained by the three-way interaction involving RC meets conventional standards of significance.

Another limitation involves the cross-sectional nature of our data. Although theoretical perspectives suggest that self-esteem level influences performance, our data were not longitudinal in nature and hence caution must be exercised in interpreting the results. Indeed, it is likely that the relation between self-esteem level and performance is reciprocal, with individuals' self-esteem levels influencing initial performance that subsequently influences self-esteem levels. Although more research employing lagged designs is needed to tease out such causal effects, we do note that self-esteem levels exist prior to the commencement of job performance, which temporally suggests an initial effect of self-esteem level on performance.

It should also be noted that work peers, not supervisors, provided ratings of the focal participant's job performance. Although we used a different rating source for job performance to minimize common method variance, supervisor reports of job performance would have been ideal in that supervisory reports are typically used for performance evaluations. However, work peer reports of performance are also collected for performance evaluations (e.g., with 360-degree feedback instruments). Moreover, studies have suggested that peer and supervisor reports of performance are comparable in that they largely demonstrate measurement invariance across sources (Facteau & Craig, 2001), and meta-analytic estimates of the correlation of peer and supervisor performance ratings have been reported to range from .46 (with an estimated true score correlation of .98; Viswesvaran, Schmidt, & Ones, 2002) to .62 (Harris & Schaubroeck, 1988). Taken together, this suggests that work peer reports of job performance provide a reasonably valid approximation of the underlying job performance construct.

Finally, although we have proposed IPSE as a moderator that explains why behavioral plasticity theory predictions are not always supported, other explanations also exist. As a reviewer noted, one alternate explanation may lie in the choice of the antecedent of job performance, as self-esteem level may buffer *or exacerbate* negative effects, depending on the antecedent (see Duffy, Shaw, & Stark, 2000; Duffy, Shaw, Scott, & Tepper, 2006). To provide an example that may address why our second hypothesis regarding RA was not supported, it has been suggested that individuals with high self-esteem are more likely to be confident in their beliefs and appraisals (Brockner, 1988; Duffy et al., 2000). As such, when confronted with an ambiguous role, individuals with high self-esteem may be more likely to forge ahead, confident in their own abilities and assessment of the requirements of the role, rather than seek feedback to clarify expectations surrounding the role (and may in fact reject feedback, instead insisting they know how to tackle the role).

Unfortunately, if the individual is incorrect in his/her judgment of the role requirements, this is likely to lead to poor performance (see Chan, 2006). Thus, although individuals with high self-esteem may be less likely to be affected by RA, this in and of itself does not mean their performance

will not suffer as a result. Interestingly, high self-esteem may be more likely to buffer against the effects of RC (where our hypotheses were supported), as high RC tends to be characterized by multiple competing and conflicting demands. High self-esteem may serve individuals well in this case, as they may be less likely to allow the competing demands with which others assail them to interrupt their work (as they typically do not seek social approval; Brockner, 1988) or they may be less likely to waste time (and productivity) dithering over which demand to address (as they would be confident in their choice of which demand to address). Of course, more research is needed to address such speculative suggestions.

Summary

Hollenbeck, Brief, Whitener, and Pauli (1988, pp. 558-559) have stated "self-consistency theory predictions are based upon the notion that individuals attempt to maintain consistency between their self-concept and performance. Yet tasks probably differ widely in terms of how central they are to one's self-concept." These comments, now 2 decades old, have had little impact on organizational self-esteem research. This study supports the veracity of Hollenbeck et al.'s position and those who advocate taking a broader view of the self than simply examining self-esteem level (Swann et al., 2007). The extent to which one's self-esteem is based on performance at work, or IPSE, was found to act as a boundary condition for both self-consistency theory and behavioral plasticity theory predictions. These results help explain why empirical results indicate the relation between self-esteem level and performance is highly variable (Baumeister et al., 2003; Judge & Bono, 2001). Thus, we suggest that the distinction between self-esteem level and self-esteem contingencies is a critically important one for organizational researchers to consider, and we hope researchers begin to consider how a more complete view of the self can enhance our understanding of organizational phenomena.

REFERENCES

- Anthony DB, Holmes JG, Wood JV. (2007). Social acceptance and self-esteem: Tuning the sociometer to interpersonal value. *Journal of Personality and Social Psychology*, 92, 1024–1039.
- Arvey RD, Murphy KR. (1998). Performance valuation in work settings. Annual Review of Psychology, 49, 141–168.
- Bauer TN, Bodner T, Erdogan B, Truxillo DM, Tucker JS. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 92, 707–721.
- Baumeister RF, Campbell JD, Krueger JI, Vohs KD. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4, 1–44.

- Baumeister RF, Smart L, Boden JM. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103, 5–33.
- Brockner J. (1988). *Self-esteem at work: Research, theory and practice*. Lexington, MA: D.C. Heath & Co.
- Brown JD. (1993). Self-esteem and self-evaluations: Feeling is believing. In Suls J (Ed.), *Psychological perspectives on the self* (Vol. 4, pp. 27–58). Hillsdale, NJ: Erlbaum.
- Campbell JP. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In Dunnette M, Hough LM (Eds.), *Handbook of industrial* and organizational psychology (2nd ed., Vol. 1, pp. 687–731). Palo Alto, CA: Consulting Psychologists Press.
- Campbell JP, McCloy RA, Oppler SH, Sager CE. (1993). A theory of performance. In Schmitt N, Borman WC (Eds.), *Personnel selection in organizations* (pp. 35–70). San Francisco: Jossey-Bass.
- Chan D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology*, 91, 475–481.
- Chen G, Gully SM, Eden D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, 25, 375–395.
- Cohen J, Cohen P, West SG, Aiken LS. (2003). *Applied multiple regression/correlation* analysis for the behavioral sciences (3rd ed.). Mahwah, NJ: Erlbaum.
- Crocker J, Karpinski A, Quinn DM, Chase SK. (2003). When grades determine selfworth: Consequences of contingent self-worth for male and female engineering and psychology majors. *Journal of Personality and Social Psychology*, 85, 507–516.
- Crocker J, Knight KM. (2005). Contingencies of self-worth. Current Directions in Psychological Science, 14, 200–203.
- Crocker J, Luhtanen RK, Cooper ML, Bouvrette A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908.
- Crocker J, Park LE. (2004). The costly pursuit of self-esteem. *Psychological Bulletin, 130*, 392–414.
- Crocker J, Wolfe CT. (2001). Contingencies of self-worth. *Psychological Review*, 108, 593-623.
- Deci EL, Ryan RM. (1995). Human agency: The basis for true self-esteem. In Kernis MH (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–50). New York: Plenum.
- Diefendorff JM, Richard EM. (2003). Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology*, 88, 284–294.
- Dillman DA. (2000). *Mail and internet surveys: The tailored design method* (2nd ed.). New York: Wiley.
- Duffy MK, Shaw JD, Stark EM. (2000). Performance and satisfaction in conflicted interdependent groups: When and how does self-esteem make a difference? Academy of Management Journal, 43, 772–782.
- Duffy MK, Shaw JD, Scott KL, Tepper BJ. (2006). The moderating roles of self-esteem and neuroticism in the relationship between group and individual undermining behaviour. *Journal of Applied Psychology*, 91, 1066–1077.
- Eddleston KA, Veiga JF, Powell GN. (2006). Explaining sex differences in managerial career satisfier preferences: The role of gender self-schema. *Journal of Applied Psychology*, *91*, 437–445.
- Evans MG. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. Organizational Behavior and Human Decision Processes, 36, 305–323.

- Facteau JD, Craig SB. (2001). Are performance appraisal ratings from different rating sources comparable? *Journal of Applied Psychology*, 86, 215–227.
- Ferris DL, Brown DJ, Lian H, Keeping LM. (2009). When does self-esteem relate to deviant behavior? The role of contingencies of self-worth. *Journal of Applied Psychology*, 94, 1345–1353.
- Ferris DL, Brown DJ, Heller D. (2009). Organizational supports and organizational deviance: The mediating role of organization-based self-esteem. Organizational Behavior and Human Decision Processes, 108, 279–286.
- Festinger L. (1954). A theory of cognitive dissonance. Stanford: Stanford University Press.
- Grandey AA, Cropanzano R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior*, 54, 350–370.
- Grant AM. (2007). Relational job design and the motivation to make a prosocial difference. Academy of Management Review, 32, 393–417.
- Harris MM, Schaubroeck J. (1988). A meta-analysis of self-supervisor, self-peer, and peersupervisor ratings. PERSONNEL PSYCHOLOGY, 41, 43–62.
- Heider F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Hollenbeck JR, Brief AP, Whitener EM, Pauli KE. (1988). An empirical note on the interaction of personality and aptitude in personnel selection. *Journal of Management*, 14, 441–451.
- House RJ, Schuler RS, Levanoni E. (1983). Role conflict and ambiguity scales: Reality or artifacts? *Journal of Applied Psychology*, 68, 334–337.
- Humphrey SE, Nahrgang JD, Morgeson FP. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92, 1332–1356.
- Jackson SE, Schuler RS. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes*, 36, 16–78.
- James W. (1890). The principles of psychology (Vol. 1). Cambridge, MA: Harvard University Press.
- Jex SM, Beehr TA. (1991). Emerging theoretical and methodological issues in the study of work-related stress. *Research in Personnel and Human Resources Management*, 9, 311–365.
- Jex SM, Elacqua TC. (1999). Self-esteem as a moderator: A comparison of global and organization-based measures. *Journal of Occupational and Organizational Psychology*, 72, 71–81.
- Johnson JW. (2003). Toward a better understanding of the relationship between personality and individual job performance. In Barrick M, Ryan AM (Eds.), *Personality and work* (pp. 83–120). San Francisco: Jossey-Bass.
- Judge TA, Bono JE. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86, 80–92.
- Judge TA, Erez A, Bono JE, Thoresen CJ. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology*, 83, 693–710.
- Judge TA, Erez A, Bono JE, Thoresen CJ. (2003). The core self-evaluations scale: Development of a measure. PERSONNEL PSYCHOLOGY, 56, 303–331.
- Kanfer R. (1991). Motivation theory and industrial and organizational psychology. In Dunnette MD, Hough LM (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, pp. 76–170). Palo Alto, CA: Consulting Psychologists Press.

- Kanungo RN. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67, 341–349.
- Kernis MH. (2003). Toward a conceptualization of optimal self-esteem. Psychological Inquiry, 14, 1–26.
- Korman AK. (1970). Toward an hypothesis of work behavior. Journal of Applied Psychology, 54, 31–41.
- Krueger JI, Vohs KD, Baumeister RF. (2008). Is the allure of self-esteem a mirage after all? American Psychologist, 63, 64–65.
- Leary MR, Tambor ES, Terdal SK, Downs DL. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530.
- Liao H. (2007). Do it right this time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures. *Journal of Applied Psychology*, 92, 475–489.
- Mabe PA, West SG. (1982). Validity of self-evaluation of ability: A review and metaanalysis. Journal of Applied Psychology, 67, 280–296.
- Mischel W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80, 252–283.
- McClelland GH, Judd CM. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114, 376–390.
- Morgeson FP, Campion MA, Dipboye RL, Hollenbeck JR, Murphy K, Schmitt N. (2007). Reconsidering the use of personality tests in personnel selection contexts. PERSONNEL PSYCHOLOGY, 60, 683–729.
- Morgeson FP, Humphrey SE. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339.
- Mossholder KW, Bedeian AG, Armenakis AA. (1981). Role perceptions, satisfaction, and performance: Moderating effects of self-esteem and organizational level. Organizational Behavior and Human Performance, 28, 224–234.
- Mossholder KW, Bedeian AG, Armenakis AA. (1982). Group process-work outcome relationships: A note on the moderating impact of self-esteem. Academy of Management Journal, 25, 575–585.
- Motowidlo SJ, Borman WC, Schmit MJ. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10, 71–83.
- Murphy KR. (1989). Dimensions of job performance. In Dillon RF, Pellegrino JW (Eds.), *Testing: Theoretical and applied perspectives* (pp. 218–247). New York: Praeger.
- National Association for Self-Esteem (2009). Retrieved from http://www.self-esteemnase.org/ June 15, 2009.
- Nunnally JC. (1978). Psychometric theory. New York: McGraw-Hill.
- Ones DS, Dilchert S, Viswesvaran C, Judge TA. (2007). In support of personality assessment in organizational settings. PERSONNEL PSYCHOLOGY, *60*, 995–1027.
- Paullay IM, Alliger GM, Stone-Romero EF. (1994). Construct validation of two instruments designed to measure job involvement and work centrality. *Journal of Applied Psychology*, 29, 224–228.
- Payne SC, Webber SS. (2006). Effects of service provider attitudes and employment status on citizenship behaviors and customers' attitudes and loyalty behavior. *Journal of Applied Psychology*, 91, 365–378.
- Pierce JL, Gardner DG. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30, 591–622.

- Pierce JL, Gardner DG, Cummings LL, Dunham RB. (1989). Organization-based selfesteem: Construct definition, measurement, and validation. Academy of Management Journal, 32, 622–645.
- Pierce JL, Gardner DG, Dunham RB, Cummings LL. (1993). Moderation by organizationbased self-esteem of role condition employee response relationships. Academy of Management Journal, 36, 271–288.
- Pfeffer J, Fong CT. (2005). Building organization theory from first principles: The selfenhancement motive and understanding power and influence. *Organization Science*, 16, 372–388.
- Podsakoff PM, MacKenzie SB, Lee J, Podsakoff NP. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Rogers CR. (1961). On becoming a person. New York: Houghton Mifflin.
- Rosenberg M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Smith CS, Tisak J, Hahn SE, Schmieder RA. (1997). The measurement of job control. Journal of Organizational Behavior, 18, 225–237.
- Swann WB, Jr. (1992). Seeking "truth," finding despair: Some unhappy consequences of a negative self-concept. Current Directions in Psychological Science, 1, 15–18.
- Swann WB, Jr, Chang-Schneider C, McClarty KL. (2007). Do people's self-views matter? American Psychologist, 62, 84–94.
- Swann WB, Jr, Chang-Schneider C, McClarty KL. (2008). Yes, cavalier attitudes can have pernicious consequences. *American Psychologist*, 63, 65–66.
- Tett RP, Burnett DD. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500–517.
- Tett RP, Christiansen ND. (2007). Personality tests at the crossroads: A response to Morgeson, Campion, Dipboye, Hollenbeck, Murphy, and Schmitt (2007). PERSONNEL PSYCHOLOGY, 60, 967–993.
- Viswesvaran C. (2001). Assessment of individual job performance: A review of the past century and a look ahead. In Anderson N, Ones DS, Sinangil HK, Viswesvaran C, (Eds.), *Handbook of industrial, work, & organizational psychology, Vol. 2. Organizational psychology* (pp. 110–126). Thousand Oaks, CA: Sage.
- Viswesvaran C, Schmidt FL, Ones DS. (2002). The moderating influence of job performance dimensions on convergence of supervisory and peer ratings of job performance: Unconfounding construct-level convergence and rating difficulty. *Journal of Applied Psychology*, 87, 345–354.
- Williams LJ, Anderson SE. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601–617.