The Relationship between Core Self-Evaluations and Affective Commitment

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ABSTRACT

Core self-evaluations (CSE), a broad personality construct, has recently generated a great deal of research attention. However, while CSE has been found to be related to numerous relevant work outcomes (e.g., job satisfaction and job performance) and appears to be growing in its theoretical importance to the understanding of behavior at work, its relationship to Affective Commitment (AC) has not been investigated. Our results demonstrated that while CSE and AC are indeed related that, in order to fully understand this relationship, both job satisfaction and perceived job characteristics must also be considered since both fully mediate the CSE – AC relationship.

Introduction

Over the past several years a broad personality trait entitled Core Self-Evaluations (CSE) has been the focus of much research attention. The concept was introduced by Judge, Locke and Durham (1997) who suggested that CSE represents the fundamental bottom-line assessment that people make about their worthiness, competence, and capabilities. In short, CSE are viewed as representing a cluster of four conceptually related traits: self-esteem, generalized self-efficacy, locus of control, and neuroticism or emotional stability. Judge, Erez, Bono, and Thoresen (2003) conclude that these four traits share a great deal of conceptual similarity because each represents a component of a common core. With this in mind, an individual who scores high on CSE encompasses a fusion of these traits and is well adjusted, positive, self-confident, efficacious, and believes in his or her own agency (Judge et al., 2003). Essentially, high scores on the CSE measure indicate a broad, positive self-regard.

The CSE construct has been shown to be related to a variety of relevant workplace constructs. For example, several studies have found a relationship between positive CSE and job satisfaction (Judge, Bono, Erez, & Locke, 2005; Judge, Van Vianen, and De Pater 2004; Bono & Judge, 2003; Judge & Heller, 2002; Erez & Judge, 2001; Judge, Bono, & Locke, 2000; Judge, Erez, & Bono, 1998a; and Judge, Locke, Durham, & Kluger, 1998b). Additionally, studies have also found CSE to be related to motivation (Erez & Judge, 2001), job performance (Judge & Bono, 2001), stress (Best, 2003), happiness and life satisfaction, (Judge, Erez, Bono, & Thoresen, 2002), leadership (Eisenberg, 2000), goal commitment (Erez & Judge, 2001), and self-concordant goals (Judge et al., 2005). Bono and Judge (2003) point out that there likely exist many other criteria which CSE may meaningfully predict. One such variable is organizational

commitment. Surprisingly, researchers have almost totally neglected the relationship between CSE and organizational commitment. In fact, a search of the literature found only one study (Judge, Thoresen, Pucik, and Welbourne, 1999) which examined the relationship between CSE and organizational commitment. Yet, in this study only three of the four traits comprising CSE, in combination with positive affectivity, were assessed. The study, despite not utilizing the complete CSE construct, found a relationship between a proxy of similar core traits and organizational commitment.

The purpose of the present study was to outline theoretical support for the relationship between CSE and organizational commitment as well as to provide empirical evidence of this relationship. Additionally, job satisfaction, which has been largely associated with organizational commitment, specifically affective commitment (Hackett, Bycio, & Hausdorf, 1994; Meyer, Allen, & Smith, 1993), was investigated to ascertain its connection with both CSE and organizational commitment. Finally, Job Characteristics theory (Hackman & Oldham, 1976) was applied to the relationship between CSE, organizational commitment, and job satisfaction. Based on previous theory and empirical evidence it appears that job characteristics and job satisfaction may be positioned between CSE and organizational commitment in a causally distinct manner. In the present study, a series of hypotheses were utilized to develop a model (refer to Figure 1) depicting the CSE-organizational commitment link. As seen in Figure 1, the mediational role of job characteristics and satisfaction in the CSE – Organizational Commitment relationship was evaluated. The focus was placed on determining whether CSE were directly related to affective commitment or whether this relationship was partially or fully mediated by job satisfaction and/or job characteristics.

Figure 1
Hypothesized Model

Utility for Organizations

The CSE construct and subsequent scale, has been evaluated in regards to its relationship with many key work-related constructs. For example, strong relationships with both job satisfaction and job performance (perhaps two of the most crucial and relevant organizational criteria) have been found. Judge et al. (1998b) first hinted at the relationship between CSE and job satisfaction using three diverse samples. Initially, they found a correlation between CSE and job satisfaction under self-reported conditions ($r = .48$) and later when a respondent's significant other assessed these core traits ($r = .36$). Later, Judge and Bono (2001b) conducted a meta-analysis using the four individual core traits and found that correlations with job satisfaction ranged from .24 for emotional stability to .45 for generalized self-efficacy. In the same study, Judge and Bono (2001b) tested the four traits as indicators of a single latent CSE construct and found a correlation between the latent construct and job satisfaction to be .41.

With the development of the direct CSE scale (specifically, the CSES - a 12-item measure comprised of the latent variable representing the fusion of the four component traits), Judge et al. (2003) found that two different samples had an uncorrected correlation with job satisfaction of .41 and .49, respectively. Similarly, in 2004, Judge et al. provided evidence of the relationship between the CSES and job satisfaction finding a correlation of .56. Results from Judge et al. (2000) indicated that CSE were related to job satisfaction over time and that the relationship was stronger when CSE were measured in adulthood. Furthermore, independent childhood assessments, similar to and representing the CSE construct, correlated with job satisfaction 30 years later. On a side note, Judge et al. (2000) showed that intrinsic job characteristics (i.e., autonomy, feedback, skill variety, task identity, and task significance) mediated the relationship between CSE and job satisfaction. Individuals with positive self-evaluations not only perceived their jobs as providing more intrinsic characteristics, they actually attained more challenging jobs (i.e. jobs with much higher complexity). Finally, Judge and Heller (2002) found that CSE were more strongly related to job satisfaction than was positive and negative affectivity or a composite measure of the Big Five.

Although initial research focused on the relationship between CSE and job satisfaction, the literature has grown beyond that criterion (Bono & Judge, 2003). Beginning with a meta-analysis of 105 correlations, Judge and Bono (2001b), linked the four individual component traits of CSE to job performance. The strongest correlation was with CSE (.26) and the weakest was emotional stability or neuroticism (.19). The average correlation was .23, which coincidentally is the same coefficient as found for conscientiousness in predicting job performance (Barrick & Mount, 1991). In a later study, Judge et al. (2003) found an uncorrected correlation of .23 and .27 in two separate samples adding to the credibility of the relationship between CSE and job performance. Interestingly, Erez and Judge (2001) discovered that motivation mediated about half of the relationship between CSE and job performance. The relationship between CSE and job performance is important, because job performance is the organizational factor that most, if not all, organizations are striving to increase.

CSE has also exhibited positive relations with motivation and goal setting behavior. Erez and Judge (2001) found CSE to be a valid predictor of motivation in several ways. First, all four individual component traits were found to be related to motivation. More interestingly, the higher-order, latent variable of CSE displayed significantly higher correlations than the individual traits alone in predicting motivation. The authors also discovered that motivation mediated, on average, half of the relationship between CSE and job performance. Erez and Judge (2001) in addition to their findings on motivation and job performance also found that the CSE factor was positively related to both sales goal level ($r = .42, p = <.01$) and goal commitment ($r = .59, p = <.01$).

In regards to goal setting behavior, Judge et al. (2005) provided evidence that people who are more self-positive (high CSE) tend to choose goals that have the best chance to make them happy (with their jobs and lives). In the same study, the authors found that people with positive self-regard (high CSE) are more likely to have self-concordant goals – goals that reflect feelings of intrinsic interest and identity congruence rather than feelings of guilt and external compulsion (Sheldon & Houser-Marko, 2001). The fulfillment of self-concordant goals make people happier and more satisfied with their goals, themselves, and ultimately their lives, all factors that are positively associated with positive CSE.

CSE and Affective Commitment

Despite the positive relationships that have been found between CSE and numerous organizationally-related constructs (i.e., job satisfaction, job performance, motivation, and goal setting behavior), one construct where the relationship has not been examined is that of organizational commitment. Organizational commitment was most recently operationalized by Allen and Meyer (1990) into three distinct domains: affective commitment, continuance commitment, and normative commitment. Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in, the organization. Continuance commitment is based on the costs that the employee associates with leaving the organization. Finally, normative commitment refers to the employee's feelings of moral obligation to remain with the organization (p. 1). Affective and continuance commitment have received most of the research attention (Dunhab, Grube and Casteñeda, 1994) and are considered the most prominent and most commonly used forms of organizational commitment (Gautam, Van Dick, and Wagner, 2004).

Out of the aforementioned domains of organizational commitment, affective commitment is arguably the most desirable one that organizations are most likely to want to instill (Meyer & Allen, 1997). This type of commitment also appears to be the most studied dimension of organizational commitment as a keyword search in PsycINFO revealed 308 articles on affective, 188 articles for continuous, and 112 articles for normative commitment. Affective commitment is the organizational commitment dimension central to the present investigation. Research in the area of affective commitment has shown it to be positively correlated with age (Mathieu & Zajac, 1990; Allen & Meyer, 1993), organizational tenure (Mathieu & Zajac, 1990; Meyer

& Allen, 1997), perceived organizational support (Meyer & Allen, 1997), procedural justice (fairness) (Moorman, Niehoff, and Organ, 1993), perceived autonomy (Mathieu & Zajac, 1990; Dunhab et al. (1994), job satisfaction (Mathieu & Zajac, 1990; Meyer, et al., 1993), and locus of control (Irving, Coleman and Cooper, 1997; Luthans, Baack, & Taylor, 1987), among many other personal and organizational factors. Job satisfaction, for its part, has been linked more strongly with affective commitment than with other forms of commitment (Hackett et al., 1994; Meyer et al., 1993).

Affective commitment has also been found to be negatively related to turnover and positively related to productivity (Gautam, et al., 2004). Findings also reveal strong attitudinal commitment (essentially affective commitment) to be associated with another desirable outcome, lower absenteeism (Mathieu & Zajac, 1990). Lower turnover and absenteeism, and higher productivity are crucial factors as the former two can negatively affect organization's bottom-line, especially when good performers are leaving an organization, while the latter positively affects the bottom-line. With all these factors interrelated with affective commitment, it is apparent that this form of commitment is a very dynamic construct that is associated with a variety of personal and job-related facets.

With the prominence and importance of organizational commitment to organizational research and the work place, it is surprising that the relationship between CSE and organizational commitment has not been investigated. Bono and Judge (2003) point out that there are many other criteria to which CSE could be applied, in the same way that the individual core traits have been applied to different criteria. From an empirical standpoint, some research tenuously alludes to the possible connection of these two constructs. For example, research has demonstrated that people who appraise the defining aspects of their jobs as positively challenging experienced increased commitment (Allen & Meyer, 1990). As previously mentioned, Judge et al. (2000) showed that positive CSE is related to the attainment of more challenging and complex jobs. They go on to suggest that positive individuals actually obtain more challenging jobs, because they perceive jobs of equal or higher complexity as more intrinsically fulfilling. Reasoning that individuals with positive CSE seek out more challenging jobs and that people who appraise their jobs as positively challenging tend to experience increased commitment, it follows that CSE should be positively related to affective commitment.

From a theoretical perspective, Diener, Larsen, and Emmons' (1984) pointed out in their interactional theory that individuals will seek out situations based on personological predispositions. Positively disposed individuals experience more objectively positive events in their lives whereas negatively disposed individuals tend to experience more negative events (Magnus, Diener, Fujita, & Pavot, 1993). This appears consistent with Thoresen, Kaplan, Barsky, Warren, and de Chermont's (2003) suggestion that recurring positive experiences should foster affinity and identification with the organization, whereas recurring negative experiences should engender less affinity or identification. Since individuals with positive CSE sway toward the positive, they should also tend to experience more positive events in their daily lives at and away from the organization.

Meanwhile those positive events taking place in the organization should foster affinity toward and commitment to the organization.

Other evidence abounds as to the relationship between CSE and affective commitment. In Mathieu and Zajac's (1990) meta-analysis of the antecedents, correlates, and consequences of organizational commitment they discovered that perceived competence exhibited a large positive correlation of ($r = .63$), when corrected for attenuation, with commitment across five samples, all of which assessed attitudinal commitment. Attitudinal commitment is essentially equivalent to affective commitment as a recent meta-analysis by Meyer et al. (2002) substantiated when it revealed an average correlation of .88 between these two constructs. This evidence suggests that employees with strong self-confidence in their abilities and achievements (generalized self-efficacy and self-esteem) had higher affective commitment than less confident employees.

One study has been conducted which examined the relationship between organizational commitment and CSE. Judge et al. (1999) devised a study to evaluate how dispositional factors affect managers' ability to cope with organizational change. For this study three of the four core self-evaluation factors (self-esteem, generalized self-efficacy, and locus of control) as well as a related factor (positive affectivity) were chosen as predictors of ability to cope with organizational change. Through the use of a principal components analysis these four factors all loaded on a single factor that explained 60% of the shared variance in the dispositional constructs. This higher order factor, which they labeled "Positive Self-Concept," was similar to the core self-evaluation concept which Judge et al. (1997) originated. Incidentally, the Positive Self-Concept factor corrected for sampling and measurement error correlated with the Organizational Commitment Questionnaire (OCQ), the most widely used measure of organizational commitment (Mathieu & Zajac, 1990) at $r = .48$, while the corrected correlation was $r = .52$. Individually, the three factors that compose CSE were all moderately to highly correlated with organizational commitment: self-esteem ($r = .42$, corrected; $r = .32$ uncorrected) generalized self-efficacy ($r = .53$ corrected; $r = .37$ uncorrected), and locus of control ($r = .64$ corrected; $r = .41$ uncorrected). This indicates that each trait may share an apparent relationship with organizational commitment.

Of the four component traits comprising CSE, locus of control has been the most extensively examined in its relationship to organizational commitment. For example Irving et al. (1997) noted that locus of control plays a significant role in the development of affective commitment. Specifically they propose that individuals with an internal locus of control tend to be more affectively committed to both their organization and also their careers. The authors point out that previous research has explained the relationship between locus of control and (affective) commitment by positing that internals perceive themselves to have greater control over their environments which may also extend to the worksite. Additionally, Luthans et al. (1987) offered that internals are more likely to be committed to organizations that allow them this control. Conversely, Irving et al. (1997) argued that internals take more control over their choice of organizations than do

externals, and thereby internals make better initial choices of organizations than do externals.

In summary, there exist both empirical and theoretical implications as to why CSE and organizational commitment should be related. First, research to date has demonstrated that individuals with positive CSE or perceived personal competence tend to be more affectively committed to their organizations. Second, individuals with positive CSE have been shown to have positive organizational experiences, thereby fostering commitment to, and affinity for, the organization. Third, since internal locus of control has demonstrated a positive relation to organizational commitment, positive CSE should also produce a more committed individual. Finally, based on Judge et al.'s (1999) study, which indicated a relationship between organizational commitment and three of the four traits of the core-self evaluation concept, as well as a similar higher order factor, "Positive Self-Concept," CSE are hypothesized to be positively correlated with affective organizational commitment (refer to H₁ in Figure 2).

Figure 2
Annotated Hypothesized Model

Job Satisfaction and Affective Commitment

By recognizing the relationship between positive CSE and affective organizational commitment, another important relationship surfaces; the mediational role between these two constructs played by job satisfaction. Job satisfaction has been considered an antecedent of commitment since satisfaction represents only a subset of the factors that

determine one's overall commitment to the organization (Mowday, Porter, & Steers, 1982). For example, Mathieu and Hamel (1989) developed and tested a causal model of organizational commitment using samples of nonprofessionals and professionals and found support for direct influences of job satisfaction and mental health on levels of commitment. However, the most pressing evidence to date comes from Williams and Hazer (1986) who applied confirmatory modeling techniques to two sets of data and concluded that there is greater evidence that job satisfaction is a precursor of organizational commitment rather than the opposite. Thus, based on the seminal work of Mowday et al, (1982) and the preponderance of empirical evidence offered by Mathieu and Zajac (1990) and William and Hazer, (1986) it is hypothesized that job satisfaction will be positively related to affective organizational commitment (refer to H₂ in Figure 2).

CSE and Job Satisfaction

In support of the mediational role of job satisfaction, Judge et al. (1997, 1998) illustrated a direct link between CSE and job satisfaction. In fact, the direct effect model presented by Judge et al. (1997) states CSE influence job satisfaction through a process of emotional generalization – individuals' positive feelings about themselves spill over onto their jobs. Emotional generalization may also explicate positive experiences that employees have on the job, thereby fostering more affinity and commitment to the organization, as discussed earlier. However, a relationship between CSE and job satisfaction was also found to be mediated by perceived job characteristics (Judge et al, 1998, 2000). Either way, the relationship between CSE and job satisfaction is well supported by previous empirical research. Thus, CSE is expected to be directly and positively related to job satisfaction (refer to H₃ in Figure 2). However, based on Judge et al.'s (1998, 2000) findings it can also be expected that CSE will be indirectly related to job satisfaction with perceived job characteristics acting as mediators.

Perceived Job Characteristics and Affective Commitment

Hackman and Oldham's (1976) Job Characteristics Model provides a theoretical basis for why perceived job characteristics should mediate the core self-evaluation-organizational commitment relationship. Their model consists of five core job characteristics; skill variety, task identity, task significance, autonomy, and feedback from the job. The theory behind the model contends that increased skill variety, task identity and task significance leads to a critical psychological state wherein individuals experience meaningfulness of the work; increased autonomy leads to another critical psychological state wherein individuals experience responsibility for outcomes of the work; and feedback produces a psychological state wherein knowledge of the actual results of the work activities are achieved. Each of the critical psychological states is then translated into pertinent work outcomes such as high internal motivation, high growth satisfaction, high general satisfaction, and high work effectiveness.

In support of this theory, research has demonstrated that skill variety, task identity and task significance may facilitate both job satisfaction (e.g. Fried & Ferris, 1987; Loher,

Noe, Moeller & Fitzgerald, 1985) and affective commitment (e.g. Buchanan, 1974; Flynn & Tannenbaum, 1993; Mathieu & Zajac, 1990; Steers, 1977) vis-à-vis perceived meaningfulness. Knowing that the work is meaningful produces an increase in commitment and allegiance to that organization. In terms of the second psychological state, perceived responsibility should increase with increased autonomy on the job. Van Dyne, Graham & Dienesch (1994) suggest that the belief that one makes a difference in the organization fosters a sense of obligation to the organization; in other words, affective commitment should increase. Finally, as Hackman and Oldham (1976) suggest, the third psychological state, knowledge of results, should result from direct and unambiguous job-related feedback. Under conditions of high feedback, it is possible that affective commitment is enhanced, as individuals who are provided with praise and positive feedback, develop stronger feelings of loyalty to the organization (Eisenberger, Fasolo & Davis-LaMastro, 1990; Katz, 1964; Van Dyne et al., 1994). Research by Eby, Freeman, Rush and Lance (1999) revealed a direct relationship between feedback and affective commitment ($r = .17$, $p < .01$).

From another theoretical standpoint, researchers argue that these favorable organizational characteristics will encourage employees to become committed to the organization through reciprocity. For example, when an organization attempts to enrich jobs by providing autonomy, variety, task-identity and feedback, employees reciprocate by identifying more closely with the organization (Strauss 1977; Tyagi and Wotruba 1993). A number of other empirical studies have supported the positive effect of job characteristics on organizational commitment. For instance, Hunt, Chonko and Wood (1985) found that autonomy, variety, task-identity and feedback influence the level of an employee's organizational commitment. Likewise, Ramaswami, Agarwal and Bhargava (1993) provided support for the direct influence of autonomy, variety and feedback on organizational commitment. Based on these empirical findings and theoretical perspectives it is hypothesized that perceived job characteristics and affective organizational commitment will be positively related (refer to H₄ in Figure 2).

CSE and Perceived Job Characteristics

The mediational relationship of perceived job characteristics between core self-evaluation and job satisfaction has previously been mentioned. There is considerable evidence that perception of work characteristics are related to dispositions. Empirical research has found that positively disposed individuals rate characteristics of the task or job as more enriched than do less positively disposed individuals (Brief, Butcher, & Robertson, 1995; James & Jones, 1980; Judge et al., 1998; Kraiger, Billings, & Isen, 1989; Necowitz & Roznowski, 1984). Other research has shown support for this link, by illustrating that individuals prone to the experience of positive emotions respond favorably to situations designed to induce positive affect, whereas individuals predisposed to experience negative emotions and negative self-appraisals tend to respond less favorably to such situations (Larsen & Ketelaar, 1991).

From a theoretical stance, Judge et al. (1997) point to self-verification theory to explain the relationship between CSE and perceived job characteristics. Self-verification theory

(Swann, Stein-Seroussi, & Giesler, 1992) suggests that individuals will seek to verify their self-concepts by selecting situations that will afford them the feedback needed to reinforce that self-concept. Judge et al. (1997) concluded that individuals with positive CSE might seek out and categorize information in their work environment that would lead to positive conclusions about their work, while other individuals inclined to negative CSE might focus on the negative aspects of their jobs. Based on both theoretical and empirical viewpoints a positive relation between CSE and perceived job characteristics is hypothesized (refer to H₅ in Figure 2).

Perceived Job Characteristics and Job Satisfaction

As noted earlier, according to the Job Characteristics model (Hackman & Oldham 1976) general job satisfaction is one of the critical outcomes believed to come from intrinsically enriched jobs. The model states that intrinsic work characteristics such as skill variety, task identity, and task significance lead to increased meaningfulness and increased autonomy leads to increased responsibility. Perceived meaningfulness and responsibility are considered the critical psychological states that positively affect job satisfaction. Two meta-analyses supported the link uncovering a moderate positive correlation between perceptual measures of intrinsic job characteristics and job satisfaction (Fried & Ferris, 1987; Loher et al., 1985). With this and research by Judge et al. (1997, 1998, 2000) in mind, it is hypothesized that perceived job characteristics will be positively related to job satisfaction (refer to H₆ in Figure 2).

Method

Participants

Participants in the current study were selected from among MBA students enrolled in either a face-to-face or distance education MBA program at a large southeastern university. MBA students rather than typical undergraduate students were chosen due to expected maturity, as well as their potential experience with organizations and organizational settings. Although the majority of the sample consisted of MBA students representing a variety of professions, a smaller subset of the sample came from working professionals who were not enrolled in the university.

Following data collection the sample was filtered to meet the minimum criteria for age (≥ 21 years), organizational tenure (≥ 6 months), and length of overall job experience (≥ 6 months). The end result yielded a total sample of 119 cases. Out of this sample the average respondent was 32 years old, had worked for their current organization/employer for 4.6 years and possessed 6.4 years of overall work experience in their current job title. In terms of other personal demographics 63.9% were female, 84% were white, and 95% were college graduates or higher. As for organizational characteristics, 58% worked in the private sector (e.g. mostly businesses) and 30.3% worked in the public sector (e.g. government); 27.7% of respondents identified themselves as trained professionals, 14.3% identified themselves as middle management, and 11.8% identified themselves as support staff. Finally, 33.6% of

respondents reported earning between \$50,000 and \$74,999 in gross annual income, 22.7% reported earning \$35,000 and \$49,000, and 13.4% reported earning between \$25,000 and \$34,999. Participation was voluntary and all participants were encouraged to take part by the Assistant Dean for Graduate Programs in the College of Business.

Measures

Each participant in the study was required to complete four measures: the Core Self-Evaluation Scale (CSES), a Job Satisfaction Scale, a Job Characteristics scale, and an Affective Commitment scale, as well as a demographic survey consisting of age, gender, race, educational level, and time in current position.

Core Self Evaluation Scale (CSES)

The CSES was developed by Judge et al. (2003) as a continuance of their work on the core self-evaluation concept. The measure is a direct assessment of CSE which is derived from four conceptually related variables: self-esteem, generalized self-efficacy, neuroticism, and locus of control. The instrument contains 12 items, including, "I am confident I get the success I deserve in life," "Sometimes when I fail I feel worthless," "I

Table 1

Descriptive Statistics, Scale Reliabilities, and Intercorrelations Among CSE, Job Satisfaction, Perceived Job Characteristics, and Affective Commitment

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. CSE	44.55	6.05	.82	.42**	.29**	.31**
2. Job Satisfaction	17.73	4.75		.91	.62**	.68**
3. Perceived Job Characteristics	71.90	12.44			.82	.56**
4. Affective Organizational Commitment	25.33	9.25				.90

Note: Coefficient alpha reliability estimates are on the diagonal. *N* = 119. ***p* < .001

am filled with doubts about my competence," and "I determine what will happen in my life." Each item was scored on a 5-point Likert-type scale ranging from "1" or "strongly disagree" to "5" or "strongly agree." This measure was chosen as it is an emerging dispositional assessment that has demonstrated relationships with several

organizationally-based constructs such as job satisfaction and job performance (see Judge et al., 2005; Judge et al., 2004; Bono & Judge, 2003; Judge & Heller, 2002; Erez & Judge, 2001; Judge & Bono, 2001; Judge et al., 2000; Judge et al., 1998a; and Judge et al., 1998b for more complete information on the development of this instrument along with evidence of validity and reliability). To score this measure the 12 items were summed, after adjusting for reverse-scored items, to form a single composite score for each respondent. In the present study, this scale demonstrated a reliability of $\alpha = .82$ (refer to Table 1.)

Job Satisfaction

Job Satisfaction was measured using five items from the Brayfield-Rothe (1951) Job Satisfaction Scale. The short form of the Brayfield-Rothe scale has been used in nearly all previous studies involving CSE (Judge et al., 2005; Judge et al., 2004; Judge et al., 2003; Judge et al., 2000). For the present study the need to stay consistent with past research was a deciding factor in selecting this scale. The five items include, "Most days I am enthusiastic about my work," "I feel fairly satisfied with my present job," "I find real enjoyment in my work," "Each day at work seems like it will never end," and "I consider my job rather unpleasant." The last two items were reverse scored. The scale was rated on a 5-point Likert-type scale with "1" equal to "strongly disagree" and "5" equal to "strongly agree." A single composite score for each respondent was again achieved by summing the individual items across the measure. The reliability for this scale in the present study was $\alpha = .91$ (refer to Table 1.)

Affective Commitment

Affective Commitment (AC) was evaluated using Allen and Meyer's (1990, 1997) 6-item Affective Commitment portion of their three-dimensional measure of organizational commitment. Example items include, "I would be very happy to spend the rest of my career at this organization," "I do not feel like 'part of the family' at my organization," and "This organization has a great deal of personal meaning for me." This scale was rated with a 7-point Likert scale with "1" equaling "strongly disagree" and "7" equaling "strongly agree." This measure is similar to the Organizational Commitment Questionnaire (OCQ) which has been found to correlate moderately with a higher order factor comprised of three of the four core self-evaluation components (Judge et al., 1999). A confirmatory factor analysis of the commitment items from the Allen and Meyer AC measure (1997) and the OCQ demonstrated that both loaded on a single factor. Furthermore, the single-dimensional OCQ score typically used by researchers converged with the Allen and Meyer AC measure (with correlations ranging from .77 to .87). Given these findings, it has been concluded that the OCQ and the AC measure exhibit substantial overlap. This suggests that previous research in which the OCQ was used might best be interpreted as an investigation of the affective dimension of commitment (Dunham et al., 1994). This measure was also scored by summing the six individual items, after reverse-scoring, to form a single composite score per respondent. This scale demonstrated good reliability ($\alpha = .90$; refer to Table 1.)

Job Characteristics

Perceptions of job characteristics (i.e. feedback, autonomy, task significance, variety, and identity) were measured using an abbreviated 14-item version of the Job Diagnostic Survey (JDS; Hackman & Oldham, 1980). This measure was selected as it is the same measure utilized by Judge et al. (1998). Respondents were asked to rate each item on a 7-point Likert scale ranging from “1” or “very inaccurate” to “7” or “very accurate.” Example item statements include “This job is quite simple and repetitive” (reverse scored) and “Just doing the work required by the job provides many chances for me to figure out how well I am doing.” This scale was originally multidimensional, but Dunham (1976, p. 408) found that the “most parsimonious factorial solution was a single solution representing job complexity.” Thus, following the work of Judge et al. (2000) and Dunham (1976) all 14-item responses were summed to form a single perceived job characteristics score for each respondent. This scale demonstrated acceptable reliability ($\alpha = .82$; refer to Table 1.)

Design and Procedure

Data was collected using a proprietary software tool designed to create and publish custom surveys or questionnaires on-line. To access the on-line questionnaires representing CSE, job satisfaction, perceived job characteristics, and affective commitment as well as the demographic assessment, students in the MBA program were emailed a link which connected them to the survey website and also provided all relevant instructions

After preliminary analyses, the data was evaluated using AMOS 5.0 statistical software (Arbuckle, 2003). The hypothesized model was then evaluated against other relevant models based on four indices indicating goodness of fit. The mediating relationships of the designated constructs were also evaluated using AMOS 5.0.

Descriptive Statistics, Scale Reliabilities, and Intercorrelations

Based on theoretical and empirical estimations all variables were hypothesized to be positively related. This was indeed the result as the correlations were all found to be positive (all p 's < .001.) Of particular interest were the hypothesized correlations between CSE and job satisfaction ($r = .42$; refer to H_3 in Figure 2), job satisfaction and perceived job characteristics ($r = .62$; refer to H_6 in Figure 2), job satisfaction and affective commitment ($r = .68$; refer to H_2 in Figure 2), and perceived job characteristics and affective commitment ($r = .56$; refer to H_4 in Figure 2) which displayed high positive correlations, with the remaining pairs of study variables representing H_1 and H_5 (refer to Figure 2) registering moderate positive correlations. Descriptive statistics, scale reliabilities, and intercorrelations among study variables are presented in Table 1.

The importance of finding all study variables to be positively associated is most apparent as it fulfills preliminarily steps 1 through 3 of Baron and Kenny's (1986) four step process used to equate mediation. To begin with, Step 1 emphasizes that the

predictor variable (CSE) be correlated with the outcome variable (affective commitment). As for Step 2, it must be shown that the predictor variable (CSE) is correlated with the mediator (job satisfaction, and/or perceived job characteristics). Finally, in Step 3 there needs to be evidence (correlational) that the mediator (job satisfaction or perceived job characteristics) affects the outcome variable (affective commitment). However, Baron and Kenny (1986) point out that it is *not* sufficient just to correlate the mediator with the outcome; the mediator and the outcome may be correlated because they are both caused by the initial predictor variable (CSE). Thus, the initial variable must be controlled in establishing the effect of the mediator on the outcome. The extent to which mediation occurs with both job satisfaction and perceived job characteristics will be fully explored in the following sections.

Structural Model Tests

Structural Equation Models in the present study were designed and tested using AMOS 5.0 software (Arbuckle, 2003). The structural model was specified by allowing the individual items of each measure to load on a latent factor (to indicate this factor AMOS fixed one of the loadings to 1.0). AMOS regression weight estimates (standardized and unstandardized) relating the latent constructs of CSE to job satisfaction, perceived job characteristics, and to AC affective commitment are provided in Figure 3. Results indicate that CSE had a significant relationship with both perceived job characteristics and job satisfaction. As for the direct relationship between CSE and affective commitment, this link was not supported in the model as demonstrated by the non-significant regression weight estimate. Further, results indicate a strong direct relationship between job characteristics and job satisfaction and between job satisfaction and affective commitment. There was also a significant relationship between job characteristics and affective commitment. Fit statistics for the full model were: χ^2 (623, $N = 119$) = 1174.05 ($p < .001$), RMSEA = .087, CMIN/DF = 1.885, CFI = .731, NFI = .567, IFI = .736, and RFI = .538.

As a rule of thumb Browne and Cudeck (1993) posited that a RMSEA $\leq .05$ indicates close approximate fit, and values between .05 and .08 suggest a reasonable error. Wherein the present full model presents an RMSEA of .087, this implies a model fit above reasonable error, but still below .10 which Browne and Cudeck (1993) suggest indicates poor fit. In addition to the RMSEA statistic, several writers have recently suggested the use of the CMIN/DF ratio as a measure of fit (Arbuckle, 2003). With this in mind, Carmines and McIver (1981, p. 80) suggest as a rule of thumb that χ^2 to degrees of freedom ratios of 2:1 or 3:1 are indicative of an acceptable fit between the hypothetical model and the sample data. The present full model clearly presents an adequate fit with a CMIN/DF of 1.885. Finally, in regards to the other goodness-of-fit indexes, values closer to 1.0 indicate very good fit, with values above .90 a cut-off for acceptable fit. Of note in the present full model, none of the fit indexes reach the .90 cut-off. However, these indexes may be affected by small sample size. Most importantly, the NFI, IFI, and RFI are sample-based indexes. These indexes are formed by two kinds of error: error of approximation and error of estimation. Of these two types

Figure 3
AMOS SEM Results

Note: Unstandardized path coefficients in parenthesis. * $p < .05$; ** $p < .01$

of error, error of estimation can be affected by sample size, in that there is greater error with smaller sample sizes (Kline, 2005).

Alternative Model

As an alternative to the full model it is also conceivable that there is no direct relationship between CSE and affective commitment, which would be the case if this relationship were fully mediated by perceived job characteristics and job satisfaction. By dropping the link between CSE and affective commitment, results indicate very little change in model fit: χ^2 (624, $N = 119$) = 1174.25 ($p < .01$), RMSEA = .086, CMIN/DF = 1.882, CFI = .731, NFI = .567, IFI = .737, and RFI = .538. The standardized fit indexes changed by only .001. These results demonstrate that removing the direct link between CSE and affective commitment does little to affect the overall fit of the model. It also suggests that nearly the entire relationship between CSE and affective commitment is mediated by both perceived job characteristics and job satisfaction.

Job Characteristics as a Mediator

As can be inferred from the results above, much, if not all, of the relationship between CSE and affective commitment is mediated by perceived job characteristics and job satisfaction. To determine the extent to which perceived job characteristics mediates

this relationship, withholding job satisfaction from the model, the Sobel test (Baron & Kenny, 1986; Preacher & Leonardelli, 2003; Sobel, 1982) which provides a test statistic that can be used to test mediation from path models was employed. The Sobel test of mediation is given by dividing the product of the raw, unstandardized regression weights of the paths a and b by the square root of $b^2 S_a^2 + a^2 S_b^2$ with S_a and S_b representing the relevant standard errors for paths a and b . The final output of the Sobel test results in a z-score where values larger than 1.96 are considered significant at the .05 level.

With perceived job characteristics acting as a mediator, in a reduced three variable model without job satisfaction present, the Sobel test was found to be significant ($Z = 2.39, p < .017$). This is important, but the degree to which mediation is taking place, either full or partial, is also important. Jose (2003) agreed and pointed out that most researchers wish to note whether the independent variable (IV) $\Rightarrow$ dependent variable (DV) beta weight significantly drops after the mediator has been included. Sobel's z reflects the size of this drop, and if it yields a significant value, then mediation of some sort has occurred. If the resulting IV $\Rightarrow$ DV beta weight drops to non-significance, in conjunction with a significant z-score, then this is taken as evidence for full mediation. If the IV $\Rightarrow$ DV beta weight is still significant, in conjunction with a significant z-score, then this is taken as evidence of partial mediation. If the Sobel's z is not significant, then this result is interpreted as "no mediation."

For the present mediation, the z-score was indeed significant. Additionally, the direct relationship between CSE and affective commitment was also reduced to non-significance ($p = .094$). This clearly indicates that full mediation has taken place. To make the calculation of full or partial mediation simpler, Jose (2003) has developed an internet-based program to graphically depict mediation among three variables, called Medgraph-I. The results also indicated full mediation was taking place, substantiating the results previously stated.

Job Satisfaction as a Mediator

After determining that perceived job characteristics were fully mediating the relationship between CSE and affective commitment while withholding job satisfaction from the proposed model, the focus shifts to job satisfaction acting as a mediator with perceived job characteristics withheld from the model. The Sobel test of mediation was again employed, and the result was significant ($Z = 3.45, p < .001$). The type of mediation must also be determined. Again, the direct relationship was reduced to non-significance ($p = .543$). With both the Sobel test significant and the direct link between CSE and affective commitment reduced to non-significance, full mediation is indicated.

Full Model Mediation

To determine the extent to which the full model is mediated Kline (2005) acknowledges the lack of any test for statistical significance of indirect effects through two or more mediators. However, he does point to a rule of thumb established by Cohen and Cohen (1983) which advises that if all the component unstandardized path coefficients are

statistically significant at the same level of α , then the entire indirect effect can be regarded as statistically significant at the same level of α , as well. In the full model, each of the component unstandardized path coefficients between CSE $\rightarrow$ perceived job characteristics $\rightarrow$ job satisfaction $\rightarrow$ affective commitment are significant at the same level of $\alpha = .05$. Refer to Figure 3, for a visual display of the unstandardized path coefficients.

Not only can the statistical significance of the indirect effects of both mediators on the relationship between CSE and affective commitment be determined, the exact percentage of mediation taking place can also be calculated. This can be accomplished by dividing the total indirect effects by the total effects in the full model. AMOS provides a summary of both the standardized and unstandardized total, direct, and indirect effects. Results are displayed in Table 2. Clearly, in the full model nearly the entire relationship between CSE and affective commitment is mediated (90%). The table also includes the percentage of mediation taking place in the reduced three variable-one mediator models including perceived job characteristics (58%) and job satisfaction (86%).

Table 2

Direct, Indirect and Total Relationship Between CSE and Affective Commitment

Relationship	Full Model	Job Characteristics (as Mediator)	Job Satisfaction (as Mediator)
Direct	.040	.162	.055
Indirect	.342	.223	.325
Total	.381	.385	.379
Proportion of Mediated Relationship	.898	.579	.858

Note: Proportion of relationship mediated was calculated by dividing the indirect relationship by the total relationship.

Discussion

With CSE generating growing empirical support it is somewhat surprising that research examining the relationship between CSE and affective commitment has not been undertaken. This study directly examined this relationship and offers a significant contribution to the extant literature in two major ways. First, the results offer compelling support for a meaningful relationship between CSE and organizational commitment. Second, a better understanding of this relationship is provided, given the compelling evidence that the relationship between CSE and Organizational Commitment is not direct, but is instead mediated by both Job Satisfaction and Job Characteristics.

In order to verify the existence of both direct and indirect relationships between CSE and Organizational Commitment a series of hypothesis were presented. The first hypothesis (H_1) which predicted a direct positive relationship between CSE and affective commitment was substantiated by an initial correlation analysis that indicated a zero-order correlation of ($r = .31$; See Table 1). This finding is not surprising considering Judge et al. (1999) found a similar proxy of traits entitled Positive Self-Concept to be related to organizational commitment. Additional empirical indicators of such a relationship also came from Mathieu and Zajac's (1990) meta-analysis of the antecedents, correlates, and consequences of organizational commitment where they discovered that perceived competence (a construct with content analogous to generalized self-efficacy and self-esteem) exhibited a high positive correlation with attitudinal commitment.

However, other hypotheses were offered which favored the existence of an indirect relationship between CSE and organizational commitment. In order to fully explore the potential mediating roles that job satisfaction and job characteristics may play, zero-order correlations between job satisfaction and organizational commitment and CSE and job satisfaction must first be established. First, it was expected that affective commitment would be related to job satisfaction (H_2). Results confirmed these expectations and are consistent with previous empirical research by Mowday et al. (1982), William and Hazer (1986), and Mathieu and Zajac (1990). Second, higher CSE was expected to be associated with correspondingly higher levels of job satisfaction (H_3). Again, results were as expected with a high positive relationship between the two constructs. This is not really surprising as Judge et al. (1997, 1998) illustrated a direct link between CSE and job satisfaction.

Another indirect relationship focusing on perceived job characteristics was also indicated from the results from a similar pair of hypotheses. The first of which predicted that perceived job characteristics would be positively related to affective commitment (H_4). Results supported this expectation revealing a high positive correlation between the two constructs. This substantiates previous research which demonstrated that skill variety, task identity and task significance may facilitate affective commitment (e.g. Buchanan, 1974; Flynn & Tannenbaum, 1993; Mathieu & Zajac, 1990; Steers, 1977).

A second hypothesis (H_5), CSE being positively related to perceived job characteristics, was also supported with regards to the indirect relationship between CSE and affective commitment. This finding was also anticipated, as empirical research has found that positively disposed individuals rate characteristics of the task or job as more enriched than do less positively disposed individuals (Brief et al., 1995; James & Jones, 1980; Judge et al., 1998; Kraiger et al., 1989; Necowitz & Roznowski, 1984). This finding is also consistent with Judge et al.'s (1997) theoretical stance, where self-verification theory was utilized to explain the relationship between CSE and perceived job characteristics.

With positive correlations found between predictor (i.e., CSE), outcome (i.e., affective commitment) and mediator variables, (i.e., job satisfaction and perceived job

characteristics), the groundwork for establishing mediation was established. Results demonstrated that job satisfaction, when acting as the sole mediator in a three variable model, significantly and fully mediated the relationship between CSE and affective commitment. Results were the same in regards to perceived job characteristics acting as the sole mediator in a three variable model with mediation again found to be significant and full. In addition to the three variable models, results also demonstrated that by applying the two mediators in a four variable structural equation model that the indirect effects (mediated effects) between CSE and affective commitment were again significant.

This four variable model, or the full model presented above (see Figure 3) also incorporated a path from perceived job characteristics to job satisfaction, which represents a positive relationship between these two variables. This relationship, based on Hackman and Oldham's (1976) Job Characteristics theory, was hypothesized (H_6) and substantiated by a high positive correlation. The full model, which was treated as a structural equation model, was tested for goodness of fit in regards to the relationship of the variables and the paths between them. This full model was found to be a good fit under certain indicators, but inconclusively a good fit with other indexes. However, all relationships were as expected, thus offering some credence to the goodness of fit of the model and generally lending support to all hypothesized relationships.

Limitations

In terms of generalizing these findings there are some caveats which must be considered. First, although the participants were taken from a diverse sample of both MBA students and other working professionals from a variety of fields and disciplines it may be beneficial to also examine individuals from a single organization. Perhaps variance in organizational characteristics (e.g., size, sector, relative labor market) played a role in attenuating the relationships examined here. Second, in considering the full structural equation model, a larger sample would have perhaps led to more stable and robust results. That being said, an a priori power analysis was conducted in order to determine the number of participants necessary to detect a medium effect, defined as $\rho = .3$ with 80% power (Cohen, 1988). This power analysis indicated a need for approximately 85 cases assuming the usual .05 criterion of success. Nonetheless, some of the goodness of fit indexes were found to be low, most likely a reflection of the small sample sizes. Finally, a higher cut-off for organizational tenure may be appropriate (rather than the 6 months used here) given the meta-analysis by Mathieu and Zajac's (1990) revealed that organizational tenure was related to organizational commitment ($r_t = .170$).

Practical Implications and Future Research

These findings offer an important contribution to the already extant literature on CSE by applying this construct to a new and relevant domain, namely, affective commitment. So how does the positive relationship between CSE and Organizational Commitment operate and furthermore how do these mediator constructs contribute to the

relationship? Judge, et al. (1998) suggest that people with positive CSE stand on a higher platform to begin with as compared with those with negative self-estimate. That is, individuals with positive self-concepts see their jobs and lives more positively because they possess the dispositional makeup that allows them to do so. Thus, the positive relationship between CSE and Organizational Commitment may be an incarnate of the overlapping positivism that employees bring into their daily work lives which then transfers to recurring positive experiences that Thoresen, et al. (2003) suggest should foster affinity and identification with the organization.

As cited earlier, Judge et al. (1997) believe CSE influence job satisfaction through a process of emotional generalization – individuals' positive feelings about themselves spill over onto their jobs. Emotional generalization may also explain why individuals become more committed to the organization. This positive emotional platform from which individuals of high self-worth and self-confidence see themselves may also be the mechanism that affects the actual perceptions of work attributes, such as autonomy and task significance, affecting how one appraises the job (Judge et al., 1998). This mechanism in turn likely activates the three psychological states noted in Job Characteristics theory (i.e., skill variety, task significance, and task identity) which then affects job satisfaction through perceived meaningfulness. Likewise, autonomy likely enhances perceived responsibility for one's work which in turn enhances affective commitment. This positivity of persona which individuals with positive CSE possess may essentially smooth out the rough edges in the organizational setting and bond these individuals to the organization as individual's job satisfaction and perception of job characteristics are enhanced.

Of importance to human resource managers, among others, is that by selecting individuals in the hiring process who score highly positive on the core self-evaluation scale, chances are these individuals will view their jobs as more satisfying. They may also view the aspects of their work with higher regard, develop more affinity and loyalty to their organization as a function of being more satisfied, and perceive the characteristics of their particular job as more positive. As Eby et al. (1999) found, affective commitment and general job satisfaction are (negatively) related to turnover behavior, whereas only affective commitment is related to absenteeism. Thus, personnel managers could potentially benefit from lower turnover and recruitment costs, as well as higher day to day productivity resulting from significant decreases in absences by hiring individuals who score positively on the core self-evaluation scale.

Selection based, in part, on CSE may also help organizations improve job performance. Judge and Bono (2001) found the true correlation between CSE and job performance to be .22 utilizing over 4,000 participants in 35 separate studies. Similarly, based on their review of the literature, Salgado and Fruyt (2005) suggest that CSE represents a personality measure with great promise for predicting job performance.

In regards to recruiting and selection Allen and Meyer (1997) also ask whether organizations can do anything during recruitment and selection that will influence or set the stage for subsequent commitment. Specifically, they ask whether it is possible to

select from among applicants those who are most likely to become committed employees. In theory, they believed it might be possible, but at that time of their publications there was not sufficient evidence to draw firm conclusions. The results of the present study, however, do offer some preliminary evidence that individuals could be selected on the basis of becoming committed employees. However, future research should focus on evaluating individual's CSE prior to employment and later assessing their affective commitment to determine longitudinally whether core self-evaluation is a valid predictor of affective commitment. Perceived job characteristics and job satisfaction should also be evaluated longitudinally to determine the impact on the predictability of CSE in regards to affective commitment.

Future research may also focus on assessing the potential role of CSE in predicting job performance – especially when combined with tests of general mental ability (GMA) or other g-loaded measures of intelligence. Specifically, CSE may be found to be unrelated to GMA and thereby explain unique variance in job performance, thus adding incremental validity in predicting job performance over and above that of GMA alone. Furthermore, CSE may also be found to add incremental validity when combined with other valid predictors such as integrity tests, structured interviews or work samples. To the extent that CSE is related to job performance and unrelated to integrity tests, GMA, structured interviews, or work samples, CSE could represent a potentially valuable component of a selection battery.

Conclusion

In summary, the results of the present study indicate that CSE are not directly related to affective commitment as some evidence would suggest, but are rather indirectly related with job satisfaction and perceived job characteristics acting as the conduit to a more affectively committed individual. This is important as previous research had not concretely evaluated this relationship. Furthermore, this study has taken the core self-evaluation concept one step farther by applying it to yet another work-related domain. However, future research is needed to assess the full impact of CSE and its ability to predict affective commitment longitudinally as well as its utility in selection and hiring procedures.

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