

Measuring Personality in Context:
Improving Predictive Accuracy in Selection Decision Making

by

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(ABSTRACT)

This study examines the accuracy of a context-sensitive (i.e., goal dimensions) measure of personality compared to a traditional measure of personality (NEO-PI-R) and generalized self-efficacy (GSE) to predict variance in task performance. The goal dimensions measure takes a unique perspective in the conceptualization of personality. While traditional measures differentiate within person and collapse across context (e.g., Big Five), the goal dimensions measure employs a hierarchical structure where the item level (i.e., first-order) is based on behaviors in a given context, and at the dimension level (i.e., second-order) each behavior is organized by organizational goals. As such, at the item level, the person is differentiated within context, but at the dimension-level, person is undifferentiated and the situation is differentiated by goals. To develop this measure, the behavior-in-situation items were identified, a goal taxonomy that captures the work context was developed, and the items were linked to the goal dimensions.

The predictive accuracy of the goal dimensions measure was compared to that of the NEO-PI-R and GSE for performance on four tasks (creative, mundane, conflict management, and persuasive) and an overall performance composite. The results were modest in that the goal dimensions models did not perform substantially better than the traditional measure of personality. Specifically, the bivariate correlations between the goal dimensions and each criterion ranged from 0.00 to 0.30 and 19 out of 80 correlations (23.75%) were significant; compared to the absolute values of the correlations between the NEO-PI-R facets and each

criterion that ranged from 0.00 to 0.24 with 26/240 significant correlations (10.83%). However, the results indicate that the goal dimensions model accounted for significant variance in task performance beyond that accounted for by the best traditional model for one or more of the criteria in the conflict management task and the persuasive task. These results suggest that future research on the goal dimensions measure is warranted.

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Measuring Personality in Context:

Improving Predictive Accuracy in Selection Decision Making

For years, Industrial/Organizational Psychologists have encouraged organizations to use applicant personality test scores as a criterion for personnel selection (Berry, 2003). The most widely used tests evolved from the lexical approach to measuring dispositional traits, such as the Big Five (Goldberg, 1990; Norman, 1963). In the domain of personnel selection, a continuing problem is that the validity coefficients based on scores from these trait measures are modest (Barrick & Mount, 1991; Hertz & Donovan, 2000; Tett, Jackson, & Rothstein, 1991). To improve predictive accuracy, researchers have begun to consider compound traits such as integrity (Ones, Viswesvaran, & Dilchert, 2005) and core self-evaluation (Judge, Erez, and Bono, 1998).

Typically, these compound traits are an amalgamation of Big Five traits and any improvements in predictive accuracy is a function of combining traits that are accounting for unique variance in the criterion. However, core self-evaluation includes generalized self-efficacy (GSE) as a dimension. GSE is the expectation of an individual to perform well across a broad range of tasks. Dispositional traits are biologically-based explanations of behavior (McCrae & Costa, 1985), whereas, self-efficacy cognitions are thought to be learned (Bandura, 1977). To date, GSE has not been systematically studied as a predictor of job performance (see Chen, Gully, and Eden (2001) for an exception).

Although dispositional traits and GSE come from distinct theoretical backgrounds, they share communality in that both de-emphasize context as affecting behaviors. I will use the label “context-insensitive” to describe the manner in which traits and GSE approach the measurement of their respective constructs. In contrast to the context-insensitive approaches to personality,

“context-sensitive” approaches view the situation as an important source of variation in human behavior. As such, context-sensitive measures of personality allow situations in which behaviors manifest themselves to more directly affect personality scores.

Three strategies have been used to contextualize the assessment of traits. First, researchers have added a contextual reference (e.g., “at work”) to the items of trait-based measures of personality (e.g., Bing, Whanger, Davison, & VanHook, 2004). Second, researchers have used instructional sets to contextualize the assessment. For example, Schmit, Ryan, Steirwalt, and Powell (1995) administered the NEO-FFI with instructions to respond as if they were applying for a job as a customer service representative. These two strategies have shown small improvements to the predictive accuracy of scores from trait measures. The third strategy is based on experience-sampling methods where each participant is prompted to describe the work behavior he/she is performing at that moment, and also self-report current standing on traits (e.g., Huang & Ryan, 2009). At this point it is too early to know how such a technique might be applied in the selection context, but it represents another method for studying the effect of the situation on the predictive accuracy of Big Five traits. However, trait theorists measure consistencies in behavior over time and context and are not bothered by variations in behavior due to differences in situations because “there are relatively few dimensions of personality and relatively few basic sorts of situations” (Friedman & Schustack, 2006, p. 376). So any attempt to contextualize the Big Five is contrary to the fundamental premise of trait theory.

As mentioned above, consideration of GSE in core self-evaluations raises the possibility of using personality to predict job performance from a different theoretical background than trait theory, i.e., a social learning perspective. GSE presumes that the effects of context can be aggregated over with little loss of understanding of the individual. That is, GSE represents an

individual's best estimation of efficacy in any context based on his/her sampling and aggregation of past successful/unsuccessful performances in specific contexts. Self-efficacy, however, was originally postulated as a context-sensitive construct (Bandura, 1977). Bandura proposed that the characteristics of the situation affect efficacy expectations, thereby requiring the inclusion of the context in each item designed to measure self-efficacy (Bandura, 1977).

Whereas the problem with GSE is that assumption that context can be aggregated over without loss of meaning, the problem with using Bandura's notion of self-efficacy for selection is that each context must be highly specified. In the selection context, the Bandura approach requires each personality assessment be tailored to each job. More specifically, tailored to outcomes for tasks subsumed under jobs. Assuming an organization was willing to use such tailored assessment instruments, unique measures must be developed for each job, as it is well established that positions classified as the same job often vary in terms of tasks (Schmidt, Hunter, & Pearlman, 1981). For example, a clerical worker may primarily perform duties related to being a receptionist whereas another clerical worker may have duties primarily related to keyboarding. Such within job title task variability is problematic if personality assessment is based on specific tasks. Furthermore, researchers are typically most interested in predicting overall job performance. Bandura's causal agency theory does not readily suggest a manner in which to conceptualize the prediction of overall job performance based on specific self-efficacy beliefs.

Implicit in the measurement of specific self-efficacy (SSE) is the argument that different person characteristics can be associated with success in any given context. This argument is more fully addressed by social cognitive theorists concerned with demonstrating that context impacts behavior at the idiographic level. Social cognitive approaches consider the interaction

between the situation and an individual's cognitions and affects in understanding behavior.

Social cognitive theorists believe that aspects of a situation activate knowledge structures, and it is the assessment of the situation using activated knowledge structures that leads to behavioral intentions (e.g., Cervone, 2004; Mischel & Shoda, 1995). In contrast to SSE research, idiographic social cognitive researchers such as Cervone eschew nomothetic prediction of behaviors in favor of greater understanding of more nuanced causes of individual behavior.

For the current study, I developed a measure of personality in the work context consistent with both the social cognitive assumption that different person characteristics can lead to similar behaviors in a given context and the self-efficacy assumption that different patterns of person characteristics/behaviors can produce successful performance. To meet these assumptions required that the assessment of personality in the work context be structured in terms of something other than person characteristics. Furthermore, the structure imposed in the assessment instrument had to be relevant to the organizational context. Two choices were obvious, organizational goals and organizational roles. It is consistent with the social cognitive and social learning perspectives to assume that goals mediate human behavior (Dweck & Leggett, 1988). In the work context, desired outcomes are typically conveyed as organizational goals. Furthermore, employees of organizations are assigned formal roles (e.g., Salesperson) designed to facilitate the achievement of organizational goals. However, the current study used students as participants, so only the goal dimensions structure was used because the tasks conducted in the experiment were not based formal roles.

The items on the goal dimensions measure were written as behaviors occurring in a given context. Each item was written in a manner that allowed each individual to rate his/her self-efficacy to perform the behavior in the specified context. An example item is: "you have been

assigned multiple tasks that all have important deadlines. How confident are you that you can complete these tasks by their deadline dates?” Each self-efficacy item on the goal dimensions measure was an indicator of achieving an organizational goal. The above example item represented the “effective task management” goal dimension. To score the measure, for each goal, the average of all items representing that goal was used as the individual’s goal dimension score.

In summary, unlike typical personality theories that use person characteristics as the structure of personality, the measure developed for the current study was structured by aspects of the work context. Specifically, the current study used organizational goals as the structure of the personality assessment. The overarching purpose of the current study was to compare the predictive accuracy of the context-sensitive, goal dimensions measure to the predictive accuracy of the context-insensitive assessments of Big Five traits and GSE.

Literature Review

*Personality Measurement Independent of Context**The Trait Approach*

The goal of trait theory is “to infer the underlying personality structure of individuals and to compare persons and groups on trait dimensions” (Mischel, 1968, p. 5-6). This is accomplished by identifying an individual’s position on a dimension and comparing that position with previously established norms (Mischel, 1968). That is, trait theory is based on individual differences that appear consistently in a large sample. In studying personality using trait theory, the focus is on measurement and comparison to others. The development of trait theory arose primarily from the use of the lexical approach when in 1936, Allport and Odbert conducted a search for all of the “trait names” in the English dictionary (Norman, 1963) and factor analytic techniques were used to identify common traits (Cattell, 1945). Trait theory, thus was induced from data, rather than deduced from theory.

Trait theorists (e.g., Chen et al., 2001; McCrae & Costa, 1985) do not account for the situation, stating instead that behavior is a result of an individual’s standing on a given characteristic. Currently, the Big Five is the most widely used conceptualization in the measurement of personality. The Big Five consists of Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (McCrae & Costa, 1985). The trait approach to personality has been used to predict behavior in a wide range of contexts. Big Five assessments have been used to predict personality disorders (Duijsens & Diekstra, 1996), risky behaviors such as drinking and unrestricted sexual behavior (Theakston, Stewart, & Dawson, 2004; Simpson & Gangestad, 1991), and health-related behaviors such as eating disorders (Bollen & Wojciechowski, 2004) and smoking (Shadel, Cervone, & Niaura, 2004).

In the work context, Big Five assessments have been used to predict job satisfaction (Skibba & Tan, 2004; Furnham, Petrides, & Jackson, 2002; Judge, Heller, & Mount, 2002) and leadership (Bono & Judge, 2004; Hui & Yongxin, 2004). The most common use of trait assessments is in the selection domain. The beliefs supporting the use of personality tests were that personality could help explain and predict behavior (Tett et al., 1991) and that personality measures demonstrate “meaningful relationships with important organizational outcomes and provide incremental validity beyond cognitive ability tests” (Dwight, Wolf, & Golden, 2002, p. 2208).

However, in the personnel selection domain, research has shown that traits are weak predictors of job performance. Barrick and Mount (1991) conducted a meta-analysis of studies that examined the criterion-related validity of personality for selection purposes. They found that Conscientiousness is a consistently valid predictor of job performance (corrected correlations ranging from .20-.23) for almost all types of jobs and appears to tap into traits that are important to accomplishing work tasks. They also found that for jobs in which significant interaction with others is necessary, managers and sales occupations for example, Extraversion is a valid predictor of job performance (corrected correlations of .15-.18). Further, Barrick and Mount hypothesized that Emotional Stability would be a valid predictor of job performance; however, their reported correlations were relatively low. Their results also suggest that Agreeableness is not an important factor in predicting job performance. It is important to note that in their meta-analysis, they included studies that did not explicitly measure the Big Five and instead categorized each of the scales used into the Big Five dimensions (or a sixth Miscellaneous dimension). Barrick and Mount (1991) concluded that personality test scores account for relatively small amounts of variance in job performance relative to general aptitude. This

conclusion was supported by other meta-analyses of the personality-job performance relationship (e.g., Salgado, 1997; Tett et al., 1991; Zhao & Seibert, 2006).

Responding to concerns expressed regarding the categorization techniques used by Barrick and Mount (1991) in their meta-analysis, Hurtz and Donovan (2000) looked specifically at studies that included a measure of the Big Five personality traits. This is an important distinction, as personality measurement for personnel selection most commonly relies on measures of the Big Five. Hurtz and Donovan (2000) estimate that the true validity of Conscientiousness, the best predictor of job performance among the Big Five traits, ranges from .15 to .26 across occupations, which implies that Conscientiousness can at best explain approximately 5% of the variance in job performance. Reported validities for the remaining Big Five traits are even lower: Emotional Stability ($\rho_v = .13$), Agreeableness ($\rho_v = .11$), Extraversion ($\rho_v = .09$), and Openness to Experience ($\rho_v = .06$).

Barrick, Mount, and Judge (2001) conducted a meta-analysis to quantitatively summarize all previous meta-analyses of the relationship between personality traits and job performance. They included 15 previous meta-analyses, including again those that did not explicitly measure, but could be categorized into the Big Five. They found that Emotional Stability ($\rho = .13$) and Conscientiousness ($\rho = .27$) were significantly related to overall job performance. The relationship between the other traits and job performance was not distinguishable from zero. The results of their comprehensive meta-analysis are consistent with those previously discussed. They conclude that the modest magnitude of the validities of each dimension for predicting overall job performance is disappointing.

Whereas the above meta-analyses focused on the relationship between the broad Big Five personality traits and overall job performance, Dudley, Orvis, Lebiecki, and Cortina (2006)

conducted a meta-analysis examining the relationship between narrow “conscientiousness” traits (i.e., achievement, dependability, order, and cautiousness) and specific job performance criteria (i.e., task performance, job dedication, interpersonal facilitation, and contextual performance). They argue that in order to maximize the predictive accuracy of the narrow traits, they must be based on a priori connections to the criterion. They found that the correlations across the four performance criteria and narrow traits varied to the extent that they concluded that performance criterion operated as a moderator variable. For task performance, the estimated true score validities ranged from 0.11 to 0.25, for job dedication from 0.08 to 0.46, for interpersonal facilitation from -0.02 to 0.23, and for counterproductive work behaviors from -0.34 to 0.00. However, the percentage of variance in overall job performance explained by the narrow traits beyond that explained by trait level conscientiousness was only 3.7%. Their results suggest that by linking narrow traits to specific performance criteria can, in some cases, account for more variance than trait level conscientiousness. But, when predicting overall job performance, narrow traits are not very useful (Dudley et al., 2006).

The goal in personnel selection is to maximize the prediction of the variance in job performance. The best predictor of job performance is general aptitude, and research has shown that personality traits are not correlated with measures of general aptitude. So, the variance in job performance captured by personality dimensions adds to that captured by general aptitude (Schmidt & Hunter, 1998). Thus, despite the meta-analytic evidence of the modest accuracy of traits to predict job performance, personality tests continue to be used in organizations.

Generalized Self-Efficacy (GSE)

GSE proponents also do not account for the situation in order to understand and predict behavior. GSE is defined as an individual’s belief that he/she is capable of performing

successfully in a variety of situations (Chen et al., 2001). By definition, GSE theory discounts the importance of the situation. However, unlike trait theorists, GSE theorists assert that GSE “emerges over one’s life span as one accumulates successes and failures across different task domains” (Chen et al., 2001, p. 63), rather than being a stable, heritable trait.

Bandura (1977) defined an efficacy expectation as “the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 193). These expectations are said to vary in magnitude (level of task difficulty), generality (degree of generalized belief of success beyond a specific task), and strength (degree of perseverance after disconfirming experiences). Although Bandura (1977) intended self-efficacy to be studied within a specific context (i.e., specific self-efficacy; SSE, discussed in detail below), recent research has adopted a trait-like approach to the study of self-efficacy based on generalized efficacy expectations (i.e., GSE; Chen et al., 2001). Proponents of GSE argue that as job complexity increases, the degree to which an individual believes he/she will be successful regardless of task will become an important predictor of job performance (Chen et al., 2001).

Tipton and Worthington (1984) measured participants’ GSE and the length of time that each participant could hold their arm outstretched while holding a book. They found higher GSE was related to longer time holding the book. GSE has also been examined as a moderator variable in the relationship between performance and person-role fit (DeRue & Morgeson, 2007). They found that people with high GSE and high person-role fit had higher performance compared to all other combinations of GSE and person-role fit. However, the correlation between performance and GSE was not significant ($r = 0.13$).

Foti and Hauenstein (2007) examined the relationship between several variables, including GSE, and leadership effectiveness and emergence using both the variable approach and

the pattern approach. The results using the variable approach suggested that GSE was not significantly related to leadership emergence, but was a significant predictor of promotions (i.e., leader effectiveness). In their analysis using the pattern approach, they categorized participants based on intelligence, dominance, GSE, and self-monitoring scores into three groups (above the median on all variables, at the median or a combination of above and below the median across the variables, and below the median on all variables). The results of the pattern approach analysis suggested that the participants in the high pattern (i.e., scoring above the median on all variables) were more emergent, promoted more frequently, and received higher ratings of effectiveness (Foti & Hauenstein, 2007).

Core self-evaluations. Judge et al. (1998) proposed a broad personality trait, labeled core self-evaluations, consisting of self-esteem, GSE, locus of control, and emotional stability. They suggest that these four traits are highly correlated, thus can be treated as one factor. They assert that core self-evaluations are related to job performance. To justify the inclusion of GSE when making this assertion, they report the results of a meta-analysis suggesting that GSE is moderately correlated with job performance ($\rho = .26$; Hysong & Quiñones, 1997 as cited in Judge et al., 1998). Several studies have been conducted examining the relationship between core self-evaluations and job performance; however, correlations between job performance and each trait are reported individually.

Presented below is a summary of this research, focusing on the relationship between GSE and job performance. In the current study, I chose to use GSE as an additional context-insensitive measure, rather than using core self-evaluations. This decision was made for several reasons. First, the sample used in the current study is college students. Variance in self-esteem in college students is low, so self-esteem is unlikely to predict task performance (N.M.A.

Hauenstein, personal communication, April 9, 2009). Second, the emotional stability component of core self-evaluations is a Big Five trait. Third, locus of control deals with the degree to which individuals believe they have control over their environment (Ng, Sorensen, & Eby, 2006). This distinction has little to do with the current study as self-efficacy “pertains to confidence with respect to behaviors, whereas locus of control is more concerned with confidence in being able to control outcomes” (Judge et al., 1998, p. 171). Finally, the basis of the assessment being developed in the current study is SSE. GSE is the most conceptually relevant construct to SSE, thus is the most appropriate context-insensitive assessment for comparison.

Judge and Bono (2001) conducted a meta-analysis examining the relationship of the core self-evaluation traits with job satisfaction and job performance. Their findings for job performance are consistent with those of Hysong & Quiñones ($\rho = .23$). Additionally, Erez and Judge (2001) considered the relationship between core self-evaluations and goal setting, motivation, and performance. In their second study, they measured each of the core self-evaluation traits and performance on an anagram task using undergraduate students as participants. Their results suggest a non-significant relationship between GSE and performance ($\rho = .03$). However, in their third study, they used insurance agents as participants and their performance ratings as the outcome measure. They report a significant correlation between GSE and performance ratings ($\rho = .22$; Erez & Judge, 2001).

More recently, research has been conducted to examine the relationship between core self-evaluations and several work success variables such as income, job satisfaction, and occupational status (Judge & Hurst, 2008). Based on their results they concluded that core self-evaluations significantly predicted all three success criteria. However, in their study, Judge and Hurst (2008) measured core self-evaluations as a single variable and did not analyze each

component independently, thus no conclusion regarding the specific relationship between GSE and the outcome variables can be discussed.

GSE has been examined as a predictor of several performance variables; nevertheless the conclusions that can be made are mixed. As a component in core self-evaluations, GSE has shown significant relationships with job performance but, as this is a relatively new concept, much more research is needed. Additionally, although there is some evidence of a significant relationship between GSE and job performance, GSE has not yet been systematically examined as a potential personnel selection tool.

Personality Measurement within Context

Trait measures continue to dominate the realm of personnel selection even though researchers have struggled with their low predictive accuracy. Recently, GSE and core self-evaluations have gained popularity and may provide improvement to the predictive validity of job performance. However, the results regarding GSE suggest that it will also have limited predictive accuracy. Many researchers believe that a fundamental problem underlying these measures is the lack of context (Bing et al., 2004; Mischel, 1968; Cervone, 2004). Several options have been explored in order to address this issue. Some researchers have examined methods of improving the trait measures of personality, while others have turned to alternative personality theories that incorporate the effects of the context.

Proponents of contextual personality believe that behavior is based on a system of interactions between personality and situations (Cervone, 2004). Specifically, a given situation activates a pattern of an individual's cognitions and affects (i.e., personality), which in turn drive the individual's behavior in that situation. They assert that context-insensitive personality constructs can be useful for describing observable characteristics of an individual, but they

cannot be used to explain the “inner mechanisms that generate those features” (Cervone, Shadel, Smith, & Fiori, 2006, p. 471). Thus, in order to fully understand and predict behavior, one must fully understand personality within context.

Measuring Traits in Context

The initial response to the weak predictive accuracy of scores on trait measures has been to contextualize the item stems of the trait questionnaires. Bing et al. (2004) assert that noncontextual personality items are subject to interpretation depending on the situation in which they imagine themselves when determining their response to the item. They state that the item “I am a leader,” for example, may invoke a work context or a social situation. The variance in respondents’ frames-of-reference on the personality test can be a source of unwanted variance that influences the low predictive validities of the Big Five constructs. Specifically, they examined the differences in predictive validity of undergraduates’ GPA using the traditional NEO-PI-R Conscientiousness Scale and a contextualized version in which they controlled the frame-of-reference by specifying a school context to each item. Even though they were able to demonstrate that the frame-of-reference provides incremental validity beyond cognitive ability and noncontextual personality, the amount of difference in correlations reported was small (contextual $r = .51$ vs. noncontextual $r = .42$).

Schmit et al. (1995) examined the effect of both the frame-of-reference and the instruction set used in the administration of the trait measure. They used an unaltered personality inventory (NEO-FFI) with the original test instructions, an unaltered NEO-FFI with instructions to respond as if they were applying for a job as a customer service representative, an altered form of the NEO-FFI, in which each item was appended to include a reference to a work context with the original instructions, and the altered form with the altered instructions. They found

differences between groups that were affected by the frames-of-reference in both the personality measure and in the instructions. However, the effect of these differences on the overall validity of the measure was not certain. They conducted a second study in order to examine whether the frame-of-reference was creating socially desirable responding, which would be detrimental to validity, or self-presentation effects, which would increase the validity of the measure. For this study, they administered the NEO-PI-R Conscientiousness scale to one group of participants (half of this group receiving the original instructions and the other half receiving the job application instructions) and an altered form of this scale, appended to reference a school context, to a second group (half of this group receiving the original instructions and the other half receiving the job application instructions). They also obtained college cumulative GPAs for each participant. In study 2, they found support for the self-presentation hypothesis, suggesting that participants in the application/work context conditions presented themselves more accurately based on comparisons of conscientiousness ratings and college GPA. Overall, this study provides evidence to support that the context (i.e., situation) is an important factor when considering personality measurement.

Lievens, De Corte, and Schollaert (2008) more recently examined the effects of frame-of-reference. Rather than contextualize each item, they manipulated the frame-of-reference by providing contextualized instructions. One group received the traditional instructions with no specified frame-of-reference. The second and third groups received instructions asking them to think of themselves in the context of school or work, respectively. GPA was used as their performance criterion. Consistent with previous research, they found the highest criterion-related validity for Conscientiousness in the school contextualized instruction condition ($r = 0.37$) and lowest in the traditional instruction condition ($r = 0.09$).

Specific Self-Efficacy

Bandura's (1977) explanation of self-efficacy was developed using the social cognitive approach as a foundation. He proposed that the characteristics of the situation (i.e., the behavior that must be performed) would affect the individual's efficacy expectations, thereby stipulating the inclusion of the context in the definition of self-efficacy (Bandura, 1977). To clarify, an individual will have varying levels of self-efficacy depending on the behavior that he/she is required to perform. Research on self-efficacy based on Bandura's definition examines an individual's belief that he/she can successfully complete a specific task (i.e., SSE).

Stajkovic and Luthans (1998) conducted a meta-analysis examining the relationship between SSE and work-related performance. They report an average correlation of 0.38 between SSE and performance.

Judge, Jackson, Shaw, Scott, and Rich (2007) conducted a meta-analysis of the same relationship, but were more specifically interested in the role of individual difference variables (e.g., personality traits, general mental ability, experience) in the relationship between self-efficacy and work-related performance. In their meta-analysis, they examined the effects of the individual difference variables on this relationship. They found that after accounting for personality traits, general mental ability, and experience, self-efficacy was not a significant predictor of work-related performance. They conclude that while SSE is moderately correlated with job performance, after accounting for the individual difference variables, its predictive validity decreases dramatically. However, they report that self-efficacy was significantly related to performance when the task complexity was low and the performance criterion was operationalized as task performance rather than job performance. This suggests that when

predicting performance on a task-specific level, SSE accounts for variance beyond individual difference variables.

The Social Cognitive Approach

Social cognitive researchers (e.g., Cervone, 2004; Cervone & Shoda, 1999; Mischel, 1968; Mischel & Shoda, 1995) believe that the situation is an important factor that interacts with an individual's personality characteristics to determine behavior. Funder (2001) asserts that in order to study personality, the individual, situation, and behavior must all be considered. The social cognitive approach to personality is based on the assumption that both cognitive and affective processes have social foundations. Personality is viewed as an emergent property of the interactions of person factors (cognitions and affects) and situational variables that are reciprocal (Cervone & Shoda, 1999). It is social in nature and aims to integrate the effect of social interactions, which are an integral part of the situation (i.e., context), to form a comprehensive theory of personality (Cervone & Shoda, 1999). Further, the social cognitive approach attempts to explain both the stability and variability of behavior across situations.

Cognitive-affective personality system (CAPS). Since the early 1970s, Mischel has promoted the social cognitive approach to personality, discussing extensively the stable *if...then...* behavioral signatures of individuals (Mischel, 1973, 1979). Mischel and Shoda (1995) integrated Mischel's early ideas into the CAPS model to incorporate the role of the situation into the conception of personality. They assert that the situation is not merely a simple stimulus that invokes a given response, but rather that specific aspects of each situation activate cognitive and affective internal reactions that are based on an individual's prior experiences (Mischel & Shoda, 1995). Further, their theory captures the process of development of stable patterns of behavior in situations called *if...then...* behavioral signatures (Mischel & Shoda, 1995). Using these

behavioral signatures, this theory is able to account for both the stability of personality and the variance that is dependent on the situation, unlike the context-insensitive theories that treat this variability as error.

They assume that individuals differ in “the accessibility of cognitive-affective mediating units” and “the organization of relationships through which these units interact with each other and with psychological features of situations” (Mischel & Shoda, 1995, p. 246). They assert that specific aspects of each situation activate cognitive and affective internal reactions that are based on an individual’s prior experiences (Mischel & Shoda, 1995). From cognitive psychology, their theory draws the concept of schemas that individuals develop over the course of a lifetime, suggesting that individual differences in schemas will necessarily result in individual differences in behaviors, even in the same situation. Using *if...then...* behavioral signatures, this theory is able to account for both the stability of personality and the variance that is dependent on the situation.

However, empirical research on the CAPS model is not predicated on the use of a self-report measure of personality. The traditional research strategy is to create *if...then* profiles by idiographically tracking covariation between a specific behavioral response across different situations (e.g. Shoda, Mischel, & Wright, 1993a, 1993b, 1994). More recently, CAPS researchers have attempted address all three points on the personality triad or what Vansteelandt and Van Mechelen (1998, 2004) label the *triple typology* approach. The triple typology goal is to classify situations and behavioral responses, and to identify the different person types based on behavioral tendencies in the different situations.

Knowledge-and-Appraisal Personality Architecture (KAPA). Using CAPS as a foundation, Cervone (2004) developed the KAPA model to more concisely conceptualize

personality. Cervone (2004) proposed that behavior is a function of self-knowledge (i.e., schemas, goals, self-perceptions, etc.) and situational appraisals. That is, situational variables are appraised by the individual, which in turn activates aspects of the individual's self-knowledge. Behavior is then determined by the activated self-knowledge. The KAPA method examines personality by measuring an individual's underlying system of structure (i.e., self-knowledge) and process (i.e., situational appraisals) that leads to a behavior, rather than measuring an individual's standing on dimensions of a predetermined structure (e.g., Big Five). In order to demonstrate this method, Cervone (2004) examined the relationship between an individual's self-knowledge and self-efficacy appraisals for performance in a specific context (i.e., SSE). Self-knowledge included self-schemas (i.e., personal strengths and weaknesses) and situational beliefs (i.e., the degree to which a situation was relevant to those characteristics). He proposed that "positively valenced self-knowledge would foster consistently high appraisals in situations that individuals judged as relevant to the personal attributes represented by that knowledge" (Cervone, 2004, p. 190).

Cervone (2004) showed that individuals vary in terms of chronically available self-knowledge, and that individuals differentiate situations in relation to expressing the behavioral tendencies associated with their self-schemas. Cervone (2004) also found interindividual variability regarding perceptions of situational affordances for expressing behaviors. That is, two individuals with seemingly the same self-schema can appraise a situation quite differently. One employee who is anxious about speaking in public may appraise team meetings with familiar colleagues as the primary anxiety-provoking situation, whereas another employee who is anxious about speaking in public may appraise meetings with unfamiliar customers as the primary anxiety-provoking situation. By researching personality idiographically, the reason that

individuals with the same self-schema sometimes behave differently in the same situation becomes clearer. Both employees see themselves as anxious about speaking in public, yet they behave differently based on their unique appraisals of situations. Furthermore, it provides understanding for the inconsistency of an individual's behavior across situations that may appear similar.

Hoffner (2006) applied Cervone's (2004) method specifically to the context of work and found results consistent with previous research. Like Cervone (2004), they first asked participants to identify three self-relevant schemas specific to the context of work (at least one strength and one weakness). Then, participants were presented with 80 work-specific situational phrases and asked to rate the relevance of each of the previously identified schemas to the situations (i.e., the degree to which the situation affords the opportunity to express the characteristic). Finally, participants completed an 80-item measure of SSE developed from the 80 situational phrases (e.g., the situational phrase "leading group meetings" became the self-efficacy item "If I were assigned to lead a meeting of a group of people that had never met before, I would be able to lead the group in introductions and discussion of a plan of action for a newly assigned project"). They demonstrated that individuals have insights into their strengths and weaknesses at work, and individuals appraise work situations in relation to expressing these characteristics. Further, individuals behave as a function of the interplay between self-knowledge and situational appraisals (see also Hoffner & Hauenstein, 2008).

The KAPA model has also been applied to more specific contexts. For example, Cervone, Orom, Artistico, Shadel, and Kassel (2007) examined individuals' perceptions of characteristic strengths and weaknesses in regards to smoking behavior. Then they asked participants to rate the relevance of those characteristics to smoking behavior in a set of

situations. Finally, they assessed their self-efficacy regarding whether to engage or refrain from smoking in smoking-related situations. They found that participants' self-efficacy scores were indeed related to their perceptions of the relevance of their strengths and weaknesses to the situations (Cervone et al., 2007). Additionally, Wise (2007) applied the KAPA method to individuals' beliefs regarding their self-efficacy towards challenging outdoor recreation activities. They found that when characteristics were believed to benefit performance, self-efficacy toward recreation activities was higher than when characteristics were thought to hinder performance (Wise, 2007).

In terms of measuring personality, KAPA is more similar to SSE than measuring *if...then* profiles in CAPS research. KAPA examines the relationship between self-perceptions and SSE to perform in a specific context. The point of such research is to demonstrate that individuals interpret the situation in terms of affordances to demonstrate personal strengths and avoidance of revealing personal weaknesses. From the KAPA perspective, personality measurement involves idiographic measurement of self-efficacy expectations as a function of self-knowledge related to a specific context.

Summary of Personality Measurement Models

The differences among the strategies used to measure personality reflect in the emphasis that each theory/conceptualization of personality places on differentiating between or within the person and differentiating the situation. Traditional measures of traits provide a differentiated structure of a person collapsed over context. Personality is conceptualized as an existing taxonomy of dimensions that describe the structure of a person (e.g., Big Five). These measures afford the opportunity to distinguish people based on their standing on multiple dimensions. In selection, scores on these dimensions are used to predict job performance (see Figure 1a). This

method is straightforward in that a direct linkage between traits and job performance need not be specified.

GSE is a conceptual extension of SSE in which the context, not the person, is differentiated. Proponents of GSE assume that self-efficacy perceptions represent the structure of personality, but choose to measure self-efficacy as an aggregation of these differentiated self-efficacy expectations (see Figure 1b). As such, GSE measurement is a solution to the problem that SSE is often too bound to context to be useful in applied situations. Instead of developing a different measure of personality from context to context, GSE allows for the use of one measure of efficacy perceptions to be used to predict across different contexts. The obvious limitation is that the more an individual's efficacy expectations vary as a function of context, the less likely GSE is to accurately represent efficacy in any given context. Naturally, the greater the variability in individual efficacy perceptions, the less likely that GSE will predict performance, especially task performance.

Bing et al. (2004) attempted to contextualize trait personality items by adding the "at school" tags. Schmit et al. (1995) attempted to alter both the frame-of-reference and the instruction set used in the administration of the trait measure to provide a contextual reference and improve predictive accuracy. Lievens et al., 2008 also manipulated the frame-of-reference in the instruction sets given for trait measures. The results from each of these studies demonstrated that by contextualizing trait measures of personality, the predictive accuracy can be improved slightly. Both strategies measure personality using a differentiated structure of a person within a specified context (e.g., at work). They rely on the traditional trait conceptualization of the structure of personality, but provide a reference to a specific context (see Figure 2a). In doing so,

these methods reduce the error variance incurred by collapsing across context, thus allowing stronger relationships to emerge between traits and job performance.

The SSE model presumes that efficacy perceptions are a reflection of cognitive-affective processes within an individual. That is, two individuals with the same level of SSE could be using different cognitive-affective processes to determine their perceptions. Similarly, two individuals using the same cognitive-affective processes could come to different SSE perceptions. SSE measures the structure of a person within context differentiating by task. That is, SSE conceptualizes personality as context-specific efficacy expectations, thus organizing behavior around the context (see Figure 2b). According to Judge et al. (2007), after controlling for individual difference variables, SSE was not significantly related to overall job performance. However, when the performance criterion was operationalized at the task-specific level, SSE was a significant predictor.

For use in selection decision making, there are two disadvantages with the SSE model. First, the context is represented by specific tasks. As such, the relationship between SSE and the criterion can only be studied nomothetically if people are doing the same task. This can be accomplished in a lab setting, but is unlikely to occur in the work context. For example, two clerical workers may perform different types of clerical tasks (e.g., answering phones, filing, photocopying). A unique measure of SSE would need to be developed for each task; thus making SSE too cumbersome to use in personnel selection. In addition, SSE is designed to predict specific task performance, not overall performance, which was demonstrated by Judge et al. (2007). The SSE model does not provide a useful framework for predicting overall performance.

All of the above measurement models of personality are undifferentiated in some manner. The trait model and the tagged trait/frame-of-reference models do not differentiate situations.

The SSE model does not differentiate the person. And GSE measures efficacy collapsed over both the person and the situation. In contrast, the social cognitive models measure personality by differentiating both the person and the situation (see Figure 3). As such, CAPS and KAPA allow for greater understanding by measuring each individual across multiple contexts. However, the idiographic focus limits the usefulness of this measurement strategy for developing nomothetic prediction models used to make selection decisions.

As an alternative, I propose a context-sensitive, nomothetic measure of personality similar to SSE. At the item level, the person is differentiated within context, but at the dimension-level, person is undifferentiated and the situation is differentiated by organizational goals (see Figure 4). The development of such a measure requires a process to identify the behavior-in-situation items, to develop a goal taxonomy that adequately captures the work context, and to link the items to the goal dimensions. To achieve this, I will use methods from the social cognitive approach.

From Idiographic to Nomothetic Measurement

There is a strong case to be made for measuring personality differentiated on both the person and situation dimensions (i.e., idiographic). Molenaar (2004) asserts that results based on interindividual variation are currently used in understanding and explaining intraindividual variation, but only in strict circumstances are they the same. Nesselroade (2004) agrees with Molenaar's (2004) position stating "the blind aggregation of information across individuals... is not necessarily appropriate when the objective involves the study of individual level processes" (p. 229).

Borsboom, Mellenbergh, & van Heerden (2003) argue that "locally irrelevant constructs," those that vary between-subjects and are stable within-subjects, should "not be

conceptualized as explaining behavior at the level of the individual” (p. 215). By definition, traits are locally irrelevant constructs, thus should not be used to explain behavior. These constructs give no answer to the ontological question: “Why do people behave the way they do?” To address the process question properly, and to provide the most relevant and useful personality information, Borsboom et al. (2003) advise a focus on locally homogeneous constructs in which individuals change over time, but at rates that are similar between people. By finding the patterns of change across people over time (differing situations), a more accurate measure of personality can be developed.

Unfortunately, as pointed out by Tuerlinckx (2004), idiographic research is more difficult to conduct, the data analyses are more complex, and the results are less clear when making causal inferences. A possible solution is based on the premise that individuals share common perceptions of situations, and common perceptions of the behaviors that lead to effective performance in different situations. Nesselroade, Gerstorf, Hardy, and Ram (2007) state that a fundamental question in studying behavior is to determine “what to do about *idiosyncrasy* while attempting to establish *general* lawfulness” (p. 218). They suggest that in order to bridge the gap between the idiographic and nomothetic levels of analysis, they must identify and filter out “irrelevant” variance due to idiosyncrasy. They propose using p-technique factor analysis to identify this variance, then removing it in order to improve the ability to detect nomothetic relationships. To conduct this analysis, multivariate time-series data for each individual is factor analyzed to identify intraindividual patterns of covariation over time (Nesselroade et al., 2007). Then, using the individual factor structures, they specify the same value for the correlations between factors for each individual. This process allows idiosyncrasies in loading patterns across

individuals, but provides invariant factor intercorrelations that can be used in nomothetic data analysis.

Other researchers have identified critical issues to this process. Borsboom and Dolan (2007) question how variables can be viewed as equivalent using this method. They state that the proposed method does not “integrate intraindividual processes and interindividual differences” (p. 236). Further, this method does not address the issue of practicality. While it does provide a way in which idiosyncrasies can be identified and controlled, it still requires longitudinal data collection and complex analysis. As an alternative, this study relies on measurement of communalities in perceptions by designing a measure that focuses specifically on those behaviors-in-situations relevant to organizational functioning and the linkage to goal dimensions where there are high levels of perceptual agreement. By excluding items where perceptual agreement is low, idiosyncratic variance will be minimized. The key issue is the extent to which individuals share such common perceptions.

Communalities in Social Perceptions

Many psychological theories assert that there are communalities in perception (e.g., prototypes, mental models, and implicit personality theory). As such, communalities have been discussed using several terms and studied using a variety of methods. Each method examines similarities in schemas, which broadly defined, are knowledge structures used to organize beliefs and expectations. Individuals’ schemas develop over time to include such things as self-knowledge, task specific knowledge, and expectations regarding the behavior of others.

One way in which communalities in cognitive structures were identified was employed by Rosch (1975), who examined the similarities in cognitive representations of semantic categories. She proposed that when individuals hear a “category word” (e.g., vehicle, sport, etc),

a cognitive representation of that category is generated. Further, she asserted that members of the category (e.g., car, football) would vary on the degree to which individuals perceive that member to fit in the category. She provided participants with a list of categories and members and asked them to rate the fit of each member to the category. She found high levels of agreement on the members believed to be the best examples of each category. This finding provides evidence for the presence of communalities in cognitive structures regarding general categories (Rosch, 1975). These communalities are often called prototypes.

Hampton (1995) further explains prototype theory stating that the perceptions of category membership are determined by comparing the similarity of the features of the member to those of the prototype. Members with a high degree of similarity are matched to the category, while those with low similarity are excluded. Thus, an individual's prototype clearly impacts perceptions of category membership.

Building on Rosch's (1975) research, Cantor and Mischel (1977) examined personality traits as prototypes. They believed that, when given information about a person consistent with a trait concept, an individual's schema for that concept would be activated. Further, that schema would be used as the individual's prototype to process additional information about that person. Participants were presented a series of statements describing personality characteristics of 4 fictional people (one extravert, one introvert, and two controls). In one condition (prototype explicit), two sentences were inserted to describe the person as either extraverted or introverted and in the other condition (prototype implicit), these sentences were excluded. They were instructed to remember these characteristics and then completed a test of recognition memory and a trait rating test. The trait rating test asked participants to rate the people on 6 scales including extraversion and introversion. The results of the scale ratings for extraversion and

introversion indicate that participants in both the implicit and explicit conditions were able to identify the extravert correctly as highly extraverted and not introverted, and the introvert as highly introverted and not extraverted. The control people were rated moderately on both extraversion and introversion. The test of recognition memory asked participants to rate their degree of certainty that a series of characteristics were presented in the original statements. They found that participants tended to be certain on those characteristics that were presented, regardless of their relevance to the extraverted and introverted dimensions. However, they were less certain that characteristics not on the original list relevant to those dimensions were not presented. These results suggest that the organization of trait-related information functions as prototypes. As such, these results provide compelling evidence regarding communalities in perceptions of traits (Cantor & Mischel, 1977).

Mental model is another term used for schema. In Industrial/Organizational literature, mental models have been examined to study the effects of individual differences on the effectiveness of training and practice. The method of evaluating communalities in mental models uses complex statistical algorithms that allow for the mapping of cognitive connections within an individual's schemas. For example, Edwards, Day, Arthur, and Bell (2006) used Pathfinder, an assessment technique that generates concept similarity maps of cognitive structures, to assess the similarity in mental models developed through training and practice on a cognitive task. Pathfinder is used to compute the closeness (i.e., the ratio of common links between two individuals and the total number of links in both individuals' structures) between an individual and a referent (e.g., another team member or an expert). In their study, Edwards et al. (2006) trained participants in dyads to perform a task comprised of two interdependent functions. Each participant learned both functions. After the training, they measured each participant's mental

model for the task and compared them within dyad and to an expert mental model. Pathfinder determines a measure of closeness between individuals' mental models, calculated by dividing the common links by the total number of links. Edwards et al. (2006) report average closeness ratings of about 35%, suggesting that not only can communalities be measured, but that they can be developed through experience over time (i.e., training).

Implicit personality theory also examines communalities in schemas. This theory asserts that when making predictions regarding the behaviors of others, for whom they have a limited amount of information (e.g., the response that individual would give to one personality item), they rely on their schema that includes the given behavior to make inferences for the other's behavior in a similar situation (e.g., the response that individual would give to a similar personality item). The accuracy of these inferences to predict the other's actual behavior suggests that these implicit personality theories are useful tools (Jackson, Chan, & Stricker, 1979). And, the degree to which individuals are congruent in their predictions provides an estimate of the communalities in implicit personality theories.

To examine implicit personality theories, Jackson et al. (1979) administered parallel forms of the Personality Research Form (PRF), which provides participants with an other's response to one personality item (e.g., "My work is carefully planned and organized before it is begun") and asks them to estimate the likelihood that the same other would respond in the same manner to a similar item (e.g., "My papers are always neat"). Then, they analyzed the congruence of participants' estimates as a measure of communalities in implicit personality theories. Their results were significant, which suggests that individuals' schemas for personality characteristics contain similar information. Thus, this study provides evidence for communalities in schemas related to personality.

Hauenstein and Alexander (1991) discuss two individual difference variables related to implicit theories, sensitivity to the appropriate implicit theory and threshold (i.e., the willingness of the individual to use the implicit theory to make judgments regarding characteristics or behaviors of another). They distinguished between raters high on sensitivity with moderate thresholds (called normative raters) and raters low on sensitivity with high thresholds (called idiosyncratic raters). The first step of their study involved identifying participants possessing these combinations. They measured the accuracy (i.e., sensitivity) of participants' implicit theories regarding college professors by asking them to indicate on a series of items the degree to which they believed a college professor would answer true. Then they asked participants to rate a series of lecturing behaviors with regard to lecturing performance (i.e., measure of threshold). Using participants' responses, they generated sensitivity and threshold correlations. This process allowed them to identify the normative and idiosyncratic raters. After the groups were formed, participants observed one of two lectures. In one lecture, the performance was generally positive, while in the second lecture, the performance was generally negative. Then, participants completed performance ratings on the professor giving the lecture. The first step in their analysis was to examine the effectiveness of their rater group formation procedure. They asserted that to demonstrate that normative raters shared an implicit theory of college professors, they should have higher interrater reliability in their performance ratings compared to the idiosyncratic raters. They found interrater reliability correlations (i.e., degree of shared perceptions) ranging from 0.48 to 0.60 for normative raters and from 0.23 to 0.53 for idiosyncratic raters (Hauenstein & Alexander, 1991). This study demonstrates another method with which to measure implicit theories and provides evidence for communalities in these perceptions.

Communalities in perception have been studied in reference to several theories: prototypes, mental models, and implicit personality theories. Although each theory utilizes different methods of measurement and analysis, they all provide evidence for idiosyncratic variance in perception, as well as shared variance (i.e., communalities). Discussed previously, Hoffner and Hauenstein (2008) applied the KAPA method (Cervone, 2004) to the context of work. To provide additional evidence of communalities in perception, the variance in self-efficacy appraisals was examined. A generalizability analysis of the results demonstrated that approximately 17% of the variance in the ratings of situational relevance was due to idiosyncratic variability (i.e., situations by raters interaction), whereas 33% of the situational relevance ratings were due to shared perceptions of the context (i.e., situation main effects). The above research across many domains indicates that social perceptions share communalities. As such, there is ample evidence to support the development of a goal dimension measure using normative perceptions that link behaviors-in-situations to goal dimensions.

Overview of the Current Study

The current study was designed to compare the predictive accuracy of a theoretically developed, context-sensitive, nomothetic measure of personality to that of both trait measures and GSE (i.e., context-insensitive personality assessments). Based on the argument that context-sensitive measures provide a more accurate foundation for understanding, explaining, and predicting behavior, this study extends previous research measuring self-efficacy in work situations as organized by a goal-structure of work. Specifically, using the communalities in perceptions of the relationship between common behaviors in work situations and their linkage to goals that organizations strive to achieve, the current study attempts to demonstrate that self-efficacy to achieve goals in a given work context will increment predictive accuracy of performance beyond that of traits or GSE.

Participants completed four tasks (mundane, persuasive, creative, and conflict management) representing different competencies related to work performance. A prediction model was estimated for both context-insensitive assessments. The empirical goal of the current study was to determine if the goal dimensions measure of personality accounts for variance in task performance beyond the context-insensitive assessments. Within each task, performance was modeled using the facet-level indicators of the Big Five. Also, within each task, an a priori identified relevant subset of work goals from the context-sensitive measure was used to predict performance.

Finally, an overall performance composite was calculated across the four tasks. Once again, the empirical goal was to demonstrate that the context-sensitive measure of personality accounts for variance in overall performance beyond the context-insensitive measures. For the

analysis of overall performance, performance was modeled using the Big Five trait-level indicators and the all the goals of the context-sensitive measure.

Specifically, the following hypotheses were tested:

H1: For each task, scores for goal dimensions identified as relevant for predicting task performance will increment predictive accuracy of task performance scores beyond that of the best facet-level trait prediction model and the GSE prediction model.

H2: For overall performance, using all goal dimensions from the context-sensitive measure will increment predictive accuracy beyond the trait-level prediction model and the GSE prediction model.

For exploratory purposes, I will also examine whether the context-insensitive models increment predictive accuracy of task performance scores and overall performance scores beyond that of the context-sensitive model.

Method

Development of the Context-Sensitive Measure (Pilot Study)

The purpose of the pilot study was to determine the common perceptions of the relationship between work behaviors and organizational goals (organizational roles were also examined in the pilot study, but were excluded from the measure used in the focal study).

Participants

Participants in each phase of this study were undergraduate psychology students from a large southeastern university with at least six months of work experience. Focus groups were made up of 10 subjects each. The sorting task was completed by 123 participants, with each situation sorted by a minimum of 13 and a maximum of 70 participants.

Procedure

Focus groups. Two focus groups were held in order to generate a list of common organizational roles and goals. One group was asked to brainstorm commonly held roles within organizations (e.g., leader, customer service representative, human resource manager), while the second group was asked to brainstorm a list of goals that organizations commonly strive to achieve (e.g., promoting attendance, self-leadership, creative problem solving). This resulted in 15 roles (including a multi-role category) and 22 goals.

Then, four additional focus groups were held. Two of the groups were asked to generate behaviors that a person in each role would typically perform. The other two groups were asked to generate behaviors that an employee would engage in to achieve each identified organizational goal. The behaviors were reviewed by the researcher and a research assistant to remove redundancies. This process resulted in 264 behaviors.

Sorting task. One hundred twenty-three independent participants were recruited to complete a sorting task in which they were given a portion of the behaviors developed in phase 1. Seventy of the participants were asked to sort the behaviors into the appropriate work role. The remaining 53 participants sorted the behaviors by the goal that would be achieved. Each behavior was sorted by a minimum of 13 and a maximum of 70 participants.

For the purpose of the focal study, only the data from the goal-sort were used. More precisely, the focal study uses the data from the 10 goals that are task-relevant. The role distinction was not used in the focal study because in the lab, the tasks were prescribed and it is difficult to assign roles to participants and expect them to act as they would in an organization.

Development of the goal dimensions measure. Items were retained for the goal-dimensions measure if there was 60% agreement that a given behavior was related to a goal. Additionally, goals related to fewer than 3 behaviors were removed from the final list. This resulted in 79 behaviors separated into 12 goal categories. Two of the goal categories, safe work environment and managing diversity, were not used in the current research because these dimension had no meaning in the laboratory context. Removal of the behaviors related to these goals resulted in a final list of 67 behaviors.

The 10 goal dimensions used in the current study were: 1) effective work teams, maintaining groups of employees working towards a common goal; 2) promoting attendance, enforcement of attendance policies; 3) environment of helping others, promoting helping among coworkers; 4) effective customer service, maximize customer satisfaction; 5) effective task management, assigned tasks are completed by their deadlines; 6) resolution of conflict, preventing employee disagreements from having a negative impact on organizational productivity; 7) self-leadership, working without close supervision; 8) effective communication,

sharing information to increase productivity; 9) encouraging flexibility and adaptability in others, maintaining productivity when facing unexpected changes; and 10) creative problem solving, novel ideas or solutions that increase productivity.

Appendix A lists the general behaviors associated with each of the 10 goal dimensions. Following the identification of the goals and related behaviors, the final form of the goal dimension questionnaire was developed by placing each behavior in a specific work context. For example, the behavior “leading group meetings” became the self-efficacy item “If I were assigned to lead a meeting of a group of people that had never met before, I would be able to lead the group in introductions and discussion of a plan of action for a newly assigned project.” Participants rated each of the 67 self-efficacy items using a confidence scale (Bandura, 2006) ranging from “cannot do at all” (0) to “moderately can do” (50) to “highly certain can do” (100). Individuals’ goal dimension scores, which were used to predict specific task performance, were the average of the scores on the self-efficacy items related to each goal. Appendix B presents the final form of the goal dimensions questionnaire.

Focal Study

Participants

One hundred and thirty-six undergraduates from a large southeastern university with at least six months of work experience participated in this study. Sixty-seven percent were female and the average age was 19.7 years. In some cases, participants did not complete all of the four tasks. One hundred and thirty-two completed the creative task, 133 completed the persuasive task, 135 completed the mundane task, and 133 completed the conflict management task.

Procedure

Phase 1. Participants completed phase 1 on-line at survey.vt.edu. First, participants read the informed consent form and completed a demographic measure. Then, they completed the goal dimensions measure. Lastly, they completed a measure of GSE.

Phase 2. Approximately 1-6 weeks later, participants completed a trait personality measure and four tasks in the laboratory. When participants arrived in the lab, they were given the NEO-PI-R measure of personality traits. After they completed the measure, they were given instructions on their first task. After they completed each task, they were escorted to another area and given instructions on the next task. Each task took 30 minutes to complete. The order of the tasks was counterbalanced based on the day of the week. On Monday, the order was mundane, persuasive, creative, and conflict management. The order on Tuesday was conflict management, mundane, persuasive, and creative. Wednesday, the order was persuasive, creative, conflict management, and mundane. And on Thursday, the order was conflict management, creative, mundane, and persuasive.

Measures

Demographics. Participants were asked their age, sex, and months of work experience.

Goal dimensions measure. The previously described measure of personality in the work context (see Appendix B) was completed in Phase 1.

Trait measure. Participants completed the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) at the beginning of Phase 2. The NEO-PI-R is a 240 item self-report measure of the five major personality dimensions (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) and six facets of each dimension (see Table 1). Internal consistency reliabilities for the dimension scores range from 0.86 to 0.95 and from 0.56 to 0.90 for the facet scores.

GSE measure. GSE was measured using the 8-item new general self-efficacy (NGSE) scale developed by Chen et al. (2001). Participants responded to the following items using a 5-point Likert scale ranging from strongly disagree to strongly agree: 1) I will be able to achieve most of the goals that I have set for myself, 2) When facing difficult tasks, I am certain that I will accomplish them, 3) In general, I think that I can obtain outcomes that are important to me, 4) I believe I can succeed at most any endeavor to which I set my mind, 5) I will be able to successfully overcome many challenges, 6) I am confident that I can perform effectively on many different tasks, 7) Compared to other people, I can do most tasks very well, and 8) Even when things are tough, I can perform quite well. Chen et al. (2001) state that the factor analysis of the 8 items consistently yields a single-factor solution and report test-retest reliability ranging from $r = 0.62$ to $r = 0.66$. The average of the eight items was used to represent each individual's GSE score.

Tasks

Creative task. The goal of this task was to elicit creative problem solving, similar to research and development or marketing activities. Participants were given 30 minutes to develop a marketing strategy to present to a client for a 3-D Holographic Television (see Appendix C). Redmond, Mumford, and Teach (1993) have used this task in order to determine the level of subordinate creativity, while manipulating leader behavior on several dimensions. However, for the purpose of this study, participants completed the task individually. Participants were given a modified version of Redmond et al.'s (1993) instructions and description of the product (see p. 127). Modifications were made to Redmond et al.'s (1993) original instructions in order to incorporate information relevant to current technology and prices. For example, in the "other features" section of the description of the television,

Redmond et al. (1993) use the phrase “reasonable image quality.” This phrase was modified to read “high definition image quality.” Further, “high fidelity sound (four speakers)” was changed to “high fidelity sound (surround sound).” Additionally, the original description contained a direct reference to the company that was producing the television. For this study, no reference to a company was made. Prices were also adjusted to be realistic by today’s standards. This task was completed in a computer lab where participants were given access to Microsoft Word and PowerPoint in order to complete this task.

Redmond et al. (1993) operationalized creativity as two dimensions, originality and quality. They further delineated originality into unexpected (“did they approach the problem in a novel, imaginative, unpredictable, or innovative manner?”) and description (“did they expand upon an idea, tell a story, or use fine detail to help the reader visualize the plan?” p. 130). Quality was defined as completeness (“did they understand the instructions, use the information, and follow the instructions fully and completely?”) and effectiveness (“is the plan usable, practical, and/or appropriate (reach and frequency)?” p. 130). The creative task performance score was calculated by summing the scores on these four components.

A pilot study was conducted to develop the benchmarks for coding the four components and for use in rater training. Twenty-three undergraduate students completed the creative task protocol. The three research assistants and the researcher met to discuss five of the commercials. The benchmarks were developed from these discussions (see Appendix D). Then, the research assistants and researcher coded the remaining 18 commercials independently and inter-rater reliability was computed ($r = 0.76$). Using the benchmarks developed, the research assistants coded the responses given by participants in the focal study and inter-rater reliability was analyzed biweekly to insure consistency. The final inter-rater reliability was 0.97.

Mundane task. The goal of this task was to measure performance on a tedious, repetitive task, similar to those found in clerical positions. Sixty surveys used to measure graduating seniors' perceptions of the university were completed randomly by the researcher and research assistants. Participants were given these surveys and instructed to enter the responses into an Excel document following the rules provided in the instructions (Appendix E). Each participant was given the same 60 surveys and was scored on the number of correct entries (to measure actual performance on a clerical task) and the percentage of the total responses that were entered correctly (which measures the individual's accuracy controlling for differences in speed of entry that could be due to differences in exposure to Excel spreadsheets and 10 key) in 30 minutes.

Conflict management task. The goal of this task was to measure interpersonal effectiveness in a conflicted situation, similar to situations faced by managers. This task was designed to simulate a team environment where members have differing opinions as to the optimal solution to a given problem. To complete this task, participants individually were given a scenario stating that he/she was on a plane that crashed in Northern Canada during the middle of winter (Appendix F). Twelve items were recovered from the plane (a ball of steel wool, a small ax, a loaded .45-caliber pistol, can of Crisco shortening, newspapers (one per person), cigarette lighter (without fluid), extra shirt and pants for each survivor, 20 x 20 ft. piece of heavy-duty canvas, a sectional air map made of plastic, one quart of 100-proof whiskey, a compass, and family-size chocolate bars (one per person)). The participant was instructed to rank order the list of items based on their importance to the individual's survival.

After the individual rank ordering was completed, the researcher collected the form and escorted the participant to a second lab with video and audio recording equipment, where they

joined two confederates (one male and one female). The researcher then took the participant's responses to another room in order to generate the confederate's responses. There are three items on the list for which strong, logical arguments can be made for giving relatively high or relatively low rankings (a small ax, a loaded .45-caliber pistol, and a compass). The confederate responses were specifically manipulated around these three items. For confederate A, the rankings for each of these three items was 6 points away from the participant's (i.e., if the participant responded with a 2, the confederate ranking would be 8). For participant rankings of 1-6, 6 points was added to confederate A's ranking and for rankings of 7-12, 6 points was subtracted. For confederate B, the difference in rankings of these three items was 3 (i.e., their score will be exactly between the first confederate and the participant). In the event that these manipulations resulted in two items with the same ranking (i.e., one item ranked 1 (4) and another ranked 7 (4)), the confederate's ranking for the item rated more important of the two by the participant was only two points away (i.e., the confederate's ranking for the item rated 1 by the participant above was 3, while the other item was assigned a ranking of 4). Rankings for both confederates were similar to the participant's for the remaining nine items (see Table 2 for an example).

After the confederates' rank orders were developed, the researcher returned to the lab and gave the participant and the confederates their response sheets. The confederates were randomly assigned to either A or B, based on the ID numbers used to identify each group member (Confederate A was always assigned ID 286 and Confederate B was always assigned ID 612). The researcher announced each member's ID number while distributing the individual response sheets. Then, the researcher gave them a group rank order form (Appendix G) and instructed the group to come to consensus on the rank orders of the items. They were given

twenty minutes to reach consensus. The group form instructed them to focus their discussion on those items for which there was the most disagreement. The discussion was recorded onto a VHS tape.

The confederates were trained to use their given rank orders when constructing verbal responses to participants. First, the confederates engaged the participant in a brief discussion of their overall rank orders to determine where there was the most disagreement (small ax, compass, and pistol). Then, confederate B asked the participant to explain his/her rationale for giving the rankings. Based on the participant's rationale, confederate A (i.e., six point difference from the participant) provided the counterpoint argument. For example, if the participant ranked the compass as the third most important item because it can be used to get out of the forest and find the nearest town, confederate A argued that basic survival guidelines say that people should stay where they are and let rescuers come to find them. The reverse argument was made if the participant ranked the compass as one of the least important items. If the small ax was ranked high in importance by the participant because it is necessary to chop tree branches for firewood, confederate A argued that it was not important because they would be able to find plenty of usable branches on the ground. The argument against a high participant rating for the pistol was that the pistol could be dangerous in a stressful situation when individuals may start to panic. Alternatively, confederate A argued that the pistol would be very important for protection against wild animals in the forest if the participant ranking was low in importance. Confederate A was trained to remain firm on his/her ranking for the first ten minutes of the discussion.

Confederate B, with the middle-of-the-road rankings, was trained to be equivocal in regards to arguments presented. Confederate B helped facilitate discussion by showing support for both arguments provided. Further, if the participant acquiesced to confederate A,

confederate B prompted the participant by using phrases like “well, I’m not sure about this...I can see reasons for both arguments...” and extended the discussion of the item ranking. They were trained to use these tactics specifically when the participant gave in to the argument presented by confederate A immediately without attempting to reinforce his/her original rationale. Confederate B attempted to continue the discussion of each item for at least one minute, and then allowed the discussion to move to the next item.

After the first ten minutes, confederate A was trained to state “we only have ten minutes left,” and then act in a more cooperative manner. He/she was more willing to compromise with the participant and took on a much more agreeable attitude. This step was included in order to alleviate any negative affect that the participant may have felt from engaging in a strong conflict situation so that carryover to the next task was minimized.

Conflict management styles are typically discussed as a combination of two dimensions of conflict behavior; assertiveness and cooperation (Ruble & Thomas, 1976). Assertiveness is defined as “a party’s attempt to satisfy his own concerns” and cooperation is defined as “attempts to satisfy the concerns of the other person” (Ruble & Thomas, 1976, p. 144). They discuss five conflict management styles; competing (high assertiveness, low cooperation), avoiding (low assertiveness, low cooperation), accommodating (low assertiveness, high cooperation), collaborating (high assertiveness, high cooperation), and compromising (medium assertiveness, medium cooperation).

To score this task, coders assigned ratings to each participant on two 7-point Likert bipolar scales; uncooperative – cooperative and unassertive – assertive (see Appendix H). To train the coding scheme, the researcher and two research assistants met to discuss the definitions of cooperative and assertive behaviors and establish decision rules for assigning values on each

dimension. Then, each rater independently coded one video at a time, and then met to discuss any discrepancies. Inter-rater reliability was computed for the scales and had to be consistently greater than $r = 0.80$. When the researcher and research assistants were able to meet these standards, the research assistants were assigned half of the remaining tapes to code. The researcher continued to code all tapes and the inter-rater reliability was calculated periodically to ensure consistency. Excluding the training tapes, inter-rater reliability for the bipolar scale ratings between the researcher and assistant 1 was 0.88 and 0.88 between the researcher and assistant 2.

Persuasive task. The goal of this task was to measure social influence similar to expectations in a sales position. For this task, each participant was given a packet of information regarding blood donation at the local American Red Cross (Appendix I). They were given 5 minutes to review the information before being escorted to the student center where they were given 20 minutes to approach people with whom they did not have a personal relationship and persuade them to volunteer to donate blood. A trained research assistant was with them to aid in answering any questions that the targets had, as well as record the participant's persuasive behaviors (described in detail below). The research assistants were responsible for reporting to the American Red Cross when targets were successfully recruited to donate blood. The research assistant collected the volunteer's name, email address, phone number, and the date and time for their appointment, and then forwarded this information to a representative at the local American Red Cross. The volunteers were informed that they were making a commitment and they received a copy of the information packet with a reminder regarding their scheduled donation time.

Yukl and Falbe (1990) describe eight types of influence tactics that can be used in persuasion (pressure, upward, exchange, coalition, ingratiating, rational, inspirational, and consultation). Using the definitions provided in their article (p. 133), the research assistants recorded the frequency with which the participant used each tactic when engaging each target. Each individual statement made by the participant in the attempt to persuade the target was recorded under the most appropriate influence tactic. Each statement was only counted once. For example, the statement, “what if you or a family member was in an accident and needed blood?” counted as one ‘pressure’ tactic. However, the statement “what if a family member needed blood?” followed by the statement “what if it was you?” resulted in two ‘pressure’ tactic counts. Appendix I provides examples of persuasive arguments that could be used for each tactic. After each encounter, the research assistant recorded the duration of the conversation, the sex of the target, and the result of the interaction (Appendix J). The research assistant also recorded the total number of targets approached and the number of targets that the participant was unable to engage (i.e., “blow-offs”). The variety of persuasive styles used by each participant was also recorded. Three criteria were used in the scoring of this task: successful persuasive attempts (less any successes without any persuasive argument presented), total number of targets approached, and the variety of persuasive styles used.

In order to train the coding scheme, the researcher met with the two research assistants assigned to conduct this task to discuss the types of persuasive styles and provide examples statements for each type. Then, a research assistant (not assigned to this task) was recruited to perform the task while the researcher and the two research assistants observed his persuasive attempts and coded his statements following the guidelines established previously. Following each of his engagements, the researcher and research assistants compared observations and

discussed any discrepancies. This process continued until perfect agreement was reached for 5 consecutive engagements. Additionally, throughout the first two weeks of data collection, a second assistant periodically accompanied the assigned assistant to ensure that coding consistency was maintained.

Overall performance composite. The overall performance score was an aggregate of scores on all tasks computed in order to examine the ability of the NEO-PI-R traits, the goal dimensions measure, and GSE to predict a more general measure of performance (as is commonly done in personnel selection practices). An estimate of overall task performance was calculated for each participant. First, within each task, performance scores on each criterion were converted to standard scores. Second, for each task with multiple criteria, an average z-score was computed (i.e., each criterion was equally weighted within task). Third, the four z-scores representing performance on each task was averaged (i.e., each task was equally weighted in the overall performance composite).

Analyses

Following the logic of Raymark, Schmit, & Guion (1997), who discussed the effectiveness of carefully linking personality measures to job specifications, a survey was administered to eight experts in the field of Industrial/Organizational psychology (i.e., graduate students and professors) asking them to select the goal dimensions that should predict task performance. Based on expert agreement of 50% or higher, the goal dimensions identified as relevant to the creative task were effective work teams, resolution of conflict, self-leadership, effective communication, encouraging flexibility and adaptability, and creative problem solving. Goal dimensions related to the mundane task were promoting attendance, effective task management, and self-leadership. The goal dimensions identified for the conflict management

task included effective work teams, environment of helping others, resolution of conflict, effective communication, encouraging flexibility and adaptability, and creative problem solving. The goal dimensions identified for the persuasive task were effective customer service, self-leadership, effective communication, encouraging flexibility and adaptability, and creative problem solving.

Analyses were conducted in a multi-step process. For hypothesis 1, the predictions were for the performance of each task. First, for each criterion, the best NEO-PI-R facet model was identified. A backward regression analysis was conducted using the six facets from each of the Big Five traits. Using $p < 0.10$ as the criterion for significance (due to low power), all significant facets were retained. Then an additional backward regression analysis was conducted using those previously identified significant facets. From this model, all significant facets (again using $p < 0.10$ as the criterion), were retained as the best model. The regression weight for GSE was also calculated for each task criterion. Additionally, the best goal dimensions model was identified for each criterion using the backward regression analysis and $p < 0.10$ as described above.

Then, for each criterion, the residual variance when accounting for the NEO-PI-R facet model was predicted using the goal dimensions identified by the subject matter experts. The same process was planned to test the GSE measure.

For overall performance (i.e., Hypothesis 2), the analytic strategy was the same as that used to test the first hypothesis, except that the Big Five traits were used (instead of the facets) to develop the best trait-level prediction model, and all of the goals were used to develop the best goal dimensions prediction model. The GSE model was also examined in the same manner.

Results

Descriptive Statistics

NEO-PI-R. The trait level scores were the sum of the six facets related to each trait. Internal consistency reliability was calculated for each trait. The reliability for Neuroticism was 0.85, for Extraversion was 0.82, for Openness was 0.71, for Agreeableness was 0.80, and for Conscientiousness was 0.87. The correlations between each criterion and NEO-PI-R trait and facet can be found in Table 3.

GSE. Scores ranged from 2.63 to 5.00 (mean = 4.19, standard deviation = 0.46). The internal consistency reliability for the 8-item measure of GSE was 0.87. Table 4 presents the mean, standard deviation, and internal consistency reliability of the GSE scores. Additionally, Table 4 includes the correlations between GSE and each goal dimension. The correlations between each criterion and GSE can be found in first row of Table 5.

Goal dimensions. Table 4 presents the means and standard deviations for the scores on each dimension. The means for each goal dimension are similar, and there does not appear to be an issue with range restriction. Table 4 also includes the internal consistency reliabilities for each goal dimension. The reliabilities were for effective work teams 0.88, for promoting attendance 0.66, for environment of helping others 0.84, for effective customer service 0.91, for effective task management 0.84, for resolution of conflict 0.84, for self-leadership 0.87, for effective communication 0.87, for encouraging flexibility and adaptability 0.84, and for creative problem solving 0.87. The intercorrelations between the goal dimensions and GSE can also be found in Table 4. The goal dimensions intercorrelations are moderate to strong, which indicates that participants are not clearly differentiating between goal dimensions. This is a potential problem when examining the accuracy of predicting performance because any given goal dimension is

less likely to account for unique variance in the criterion beyond any other goal dimension. The goal dimensions are dissimilar to traits in this respect, as traits are generally independent. The correlations between each criterion and the specific self-efficacy goal dimensions can be found beginning with the second row of Table 5.

Creative task. The creative task score was calculated using the sum of the four dimensions (unexpected, description, completeness, and effectiveness). Scores on this task ranged from 4 to 17.33. The average was 7.66 and the standard deviation was 4.14 (N = 134).

Mundane task. For the mundane task, participants were assigned two scores, number of correct responses and the percentage of responses entered that were correct (number of correct responses / total responses). The number of correct responses entered ranged from 240 to 2139. The average was 1084.69 and the standard deviation was 326.88 (N = 136). The percentage of correct responses ranged from 26% to 100%. The average was 98.22% and the standard deviation was 0.07% (N = 136).

Conflict management task. For this task, participants were scored on a 7-point Likert scale on two dimensions (cooperation and assertiveness). Before proceeding with further analyses on this task's scores, a univariate analysis of variance was conducted to examine any possible effects of confederate pair (which remained consistent throughout the study) on the cooperative scale score and assertiveness scale score. It was discovered that the confederate pair accounted for significant variance in both the cooperative score ($p = 0.02$) and the assertiveness score ($p = 0.06$). Further review of the videos by the researcher revealed that one confederate pair remained consistent in the roles throughout the data collection, while the other confederate pair became inconsistent in their roles over time. In this problematic confederate team, the individual assigned to confederate A decreased the intensity with which he/she presented his/her

arguments over the course of the semester. Further, confederate B did not always work to prolong the discussion of those items on which there was the most disagreement. This pattern occurred regardless of the member of the pair assigned to each role. Therefore, data from the latter confederate pair was excluded from all other analyses. The remaining data was then reanalyzed to examine any possible effects of confederate role (i.e., male vs. female confederate assigned to confederate A). A univariate analysis of variance was conducted and it was found that confederate role was not significant in predicting the cooperativeness scale score ($p = 0.19$), but was significant for the assertiveness scale score ($p = 0.04$). Therefore, in the analyses including the assertiveness scores, confederate role was controlled for by calculating the residual variance after entering confederate role as a predictor. All further analyses on this criterion were conducted using the residual variable.

Using the data remaining after removing the problematic group, the scores on the cooperative scale ranged from 2 to 7. The average was 5.81 and the standard deviation was 0.96 ($N = 67$). The scores on the assertiveness scale ranged from 1 to 7. The average was 4.44 and the standard deviation was 1.56 ($N = 67$).

Persuasive task. For the persuasive task, each participant was assigned three scores. The ultimate goal of a persuasion attempt is to successfully convince the target to change their behavior, opinion, etc. Therefore, one of the persuasive task's criteria was the number of successful persuasive attempts (less any successes without a persuasive argument). Scores on the success criterion ranged from 0 to 7. The average was 1.79 and the standard deviation was 1.88 ($N = 133$).

However, the number of successes is dependent on both the participant and the target, therefore, two additional criteria were recorded; the number of targets approached and the variety

of persuasive styles used (i.e., how many different types of persuasive styles from the eight described above were used in the 20 minute time period). The number of targets approached ranged from 0 to 66. The average was 17.65 and the standard deviation was 13.78. The scores on the variety of persuasive styles used ranged from 0 to 6. The average was 1.61 and the standard deviation was 1.29 (N = 133).

Overall performance. The overall performance score was designed to aggregate the scores across all tasks. However, due to the exclusion of half of the participants' data, the conflict management task scores were excluded from the overall performance composite. Thus, the overall performance score was calculated using z-scores for the creative task, the mundane task, and the persuasive task. For the creative task, the z-score for total score was computed. For the mundane task, the z-scores for both criteria (number of correct entries and the percentage of total entries that were correct) were calculated. The average of these two scores was the contribution to the overall performance score for the mundane task. The persuasive task originally included three criteria; number of successful attempts, total approaches, and number of persuasive styles used. The number of successful attempts, while possibly the most important outcome measure, is based not only on the individual's ability to persuade, but also variance in the targets approached. Therefore, number of successful recruitments is not included in the overall performance score. Instead, the persuasive task component of the overall performance score was calculated by averaging the z-scores computed from the total approaches and variety of styles used variables. After these three task level z-scores were computed, they were summed for each participant as the measure of overall performance. The overall performance scores ranged from -6.39 to 5.06. The average was -0.01 and the standard deviation was 1.60 (N = 132).

Criterion intercorrelations. Table 6 presents the correlations between all criteria, including overall performance. These tasks were chosen in order to assess unique combinations of competencies. Low intercorrelations between criteria across tasks indicate that each task is indeed capturing unique differences in competencies. Examination of Table 6 shows only four significant correlations between criteria across tasks and the largest of these was 0.28.

Prediction Models within Tasks

NEO-PI-R models. To determine the best NEO-PI-R facet model predicting performance on each task, five backward regression analyses were conducted using six the facets of each trait. Using $p < 0.10$ as a cutoff (due to low power), significant facet level predictors were retained. Additionally, any facets that did not meet the $p < 0.10$ criterion, but the removal of which resulted in predictors significant at that level becoming non-significant at the next level were also retained. The predictors retained in the five separate regression models for each trait were then entered into a single regression model. The same backward regression protocol was used to identify the best prediction model.

Following this procedure, the best facet model predicting creative task score contained only impulsiveness ($R^2 = 0.02$). The best facet model for the clerical task correct responses entered contained only vulnerability ($R^2 = 0.03$). For the clerical task percentage of responses entered correctly, the best facet model included self-consciousness, excitement-seeking, aesthetics, values, and compliance ($R^2 = 0.12$). The best facet model for the conflict management task's cooperative scale included impulsiveness, gregariousness, activity, values, and compliance ($R^2 = 0.29$). The model for the conflict management assertiveness scale included straightforwardness and competence ($R^2 = 0.14$). For the persuasive task number of successful persuasive attempts, the best facet model contained only modesty ($R^2 = 0.02$). The model for

persuasive task total number of targets approached included angry hostility and impulsiveness ($R^2 = 0.06$). And finally, the facet model for the persuasive task variety of persuasive styles used included anxiety, angry hostility, activity, ideas, values, and straightforwardness ($R^2 = 0.18$). This information is summarized in Table 7 where the significant facets in the best model are listed below their respective trait-level distinctions and the R^2 and adjusted R^2 values for the best facet model are listed in the final two columns.

GSE prediction models. Regression analyses were conducted using GSE scores to predict each criterion. GSE was only significant in predicting successful persuasive attempts ($R^2 = 0.05$) and total targets approached in the persuasive task ($R^2 = 0.03$).

Goal Dimensions Models. Using the goal dimensions identified by the expert ratings to be related to performance on each task, backwards regression analyses were conducted and only those goals that were significant at $p < .10$ were included in the final goals model for the criterion. Also, any goals that did not meet the $p < 0.10$ criterion, but the removal of which resulted in predictors significant at that level becoming non-significant at the next level were also retained.

The goal dimensions model for the creative task began with effective work teams, resolution of conflict, self-leadership, effective communication, encouraging flexibility and adaptability, and creative problem solving. Of those goals, the significant predictors of the creative task score were resolution of conflict ($\beta = 0.12$) and encouraging flexibility and adaptability ($\beta = -0.14$; $R^2 = 0.06$). For the mundane task, the original expert model goals were promoting attendance, effective task management, and self-leadership. None of these goals were significant predictors of either the number of correct responses or the percentage of correct responses entered. The expert goals model for the conflict management task included effective

work teams, environment of helping others, resolution of conflict, effective communication, encouraging flexibility and adaptability, and creative problem solving. None of these goals were significant predictors of the cooperative scale scores. For the assertiveness scale scores, resolution of conflict ($\beta = 0.07$) and creative problem solving ($\beta = -0.03$) were significant ($R^2 = 0.13$). For the persuasive task, the expert goals model included effective customer service, self-leadership, effective communication, encouraging flexibility and adaptability, and creative problem solving. Effective communication was the only significant goals model predictor for all three of the task criteria: successful persuasive attempts ($\beta = 0.04$; $R^2 = 0.06$), total approaches ($\beta = 0.16$; $R^2 = 0.02$), and variety of persuasive styles used ($\beta = 0.02$; $R^2 = 0.03$).

In two cases (encouraging flexibility and adaptability in the creative task score model and creative problem solving in the conflict management assertiveness scale model), the associated regression weights were negative. The a priori expectations were that the goals would be positively related to performance on each criterion, so they were examined as possible suppressor variables in the models. According to Cascio and Aguinis (2005), a suppressor variable receives a negative regression weight because it has little association with the criterion and a high intercorrelation with one or more of the other predictors. In both cases described above, the criteria for suppressor variables were met (see Tables 4 and 5). Therefore, although the negative regression weights for these variables are inconsistent with the a priori expectations, they were still included in the best models. The best models are summarized in Table 8 where the significant goals are listed for each criterion along with the R^2 and adjusted R^2 values (in the last two columns).

Incremental Variance Due to Goal Dimensions Measure

Hypothesis 1 stated that for each task, the goals model would improve predictive accuracy beyond that of the NEO-PI-R facet model and the GSE prediction model. To test Hypothesis 1, the goals models defined above were used to predict the residual variance from the NEO-PI-R facet models and the GSE prediction models. These analyses were conducted only for those criteria for which there were significant models for comparison.

Creative task. First, the residual variance of the NEO-PI-R facet model, which consisted only of impulsiveness, was calculated. Then the goal dimension resolution of conflict was used to predict the facet model residual variance. Supporting Hypothesis 1, the goal dimensions model accounted for significant incremental variance ($R^2 = 0.06, p < 0.10$). The regression weight for resolution of conflict was 0.13 ($p = 0.01$) and for encouraging flexibility and adaptability was -0.11 ($p = 0.02$). The GSE prediction model was not significant in predicting creative task performance, so the analysis comparing GSE prediction and goals model prediction was not conducted.

Mundane task. There were no significant goals predictors for either criteria (correct responses or percentage of responses entered correctly), so Hypothesis 1 was not examined for this task.

Conflict management task. There were no significant goal dimension predictors of the cooperative scale scores, so Hypothesis 1 was not examined for this criterion. For the assertiveness scale, the goal dimensions (creative problem solving and resolution of conflict) significantly predicted variance beyond that accounted for by the NEO-PI-R facet model (straightforwardness and competence), providing support for Hypothesis 1 ($R^2 = 0.12, p < 0.10$). The regression weight for creative problem solving was -0.03 ($p = 0.06$) and for resolution of conflict was 0.06 ($p = 0.01$). The GSE prediction model was not significant in predicting

assertiveness scale scores, so the analysis comparing GSE prediction and goals model prediction was not conducted.

Persuasive task. For the criterion of successful persuasive attempts, the goal dimension of effective communication predicted incremental variance beyond the NEO-PI-R facet model (modesty), $R^2 = 0.06$, $p < 0.10$). The regression weight for effective communication was 0.03 ($p = 0.01$). Additionally, the goals model accounted for significant residual variance from the GSE prediction model ($R^2 = 0.02$, $p < 0.10$), also supporting Hypothesis 1. The regression weight for effective communication was 0.02 ($p = 0.09$).

For the total approached criterion, the goal dimension of effective communication did not significantly predict variance beyond that accounted for by the NEO-PI-R facet model (angry hostility and impulsiveness; $R^2 = 0.02$; $p = 0.16$) or the GSE prediction model ($R^2 = 0.00$; $p = 0.47$), which does not support Hypothesis 1.

For the criterion variety of persuasive styles used, Hypothesis 1 was not supported. The goal dimension of effective communication did not account for significant residual variance beyond the NEO-PI-R facet model (anxiety, angry hostility, activity, ideas, values, and straightforwardness; $R^2 = 0.01$; $p = 0.32$). The GSE prediction model did not account for significant variance in the variety of persuasive styles used, so was excluded from this analysis.

Summary. Hypothesis 1 was supported for the creative task score, the assertiveness scale score in the conflict management task, and the total successful attempts in the persuasive task when compared to the NEO-PI-R facet models. Additionally, Hypothesis 1 was supported when comparing the goals model to the GSE model for the total successful attempts criterion in the persuasive task. The results comparing the goals model to both the NEO-PI-R facet model and the GSE model for the persuasive task total number of targets approached did not support

Hypothesis 1. Also, the comparison of the goals model to the NEO-PI-R facet model for the creative task score and the variety of persuasive styles used did not support Hypothesis 1.

Incremental Variance Due to NEO-PI-R and GSE

For examination purposes, analyses were also conducted to determine if the NEO-PI-R models and the GSE models incremented the goal dimensions model. In these analyses, the NEO-PI-R facet models and the GSE prediction model were used to predict the residual variance from the goal dimension models. Again, these analyses were conducted only for those criteria for which there were significant models for comparison.

Creative task. For the creative task criterion, after controlling for the goal dimensions resolution of conflict and encouraging flexibility and adaptability, the NEO-PI-R facet impulsiveness predicted significant incremental variance, ($R^2 = 0.02$). The regression weight for impulsiveness was -0.14 ($p = 0.08$). The GSE prediction model was not significant in predicting creative task performance, so the analysis comparing GSE prediction and goals model prediction was not conducted.

Mundane task. There were no significant goals predictors for either criteria (correct responses or percentage of responses entered correctly), so this analysis wasn't conducted for this task.

Conflict management task. There were no significant goals predictors for the cooperative scale scores, so this analysis wasn't conducted for this criterion. For the assertiveness scale, the NEO-PI-R facet model (straightforwardness and competence) accounted for a significant portion of the residual variance from the goal dimensions model, creative problem solving and resolution of conflict ($R^2 = 0.13$, $p < 0.10$). The regression weight for straightforwardness was -

0.11 ($p = 0.01$) and for competence was 0.10 ($p = 0.03$). GSE did not significantly predict the assertiveness scale scores, thus was not examined for this criterion.

Persuasive task. For the successful persuasive attempts criterion, neither the NEO-PI-R facet model (modesty; $R^2 = 0.02$, $p = 0.17$) nor the GSE prediction model ($R^2 = 0.01$, $p = 0.30$) accounted for a significant portion of the residual variance from the goals model (effective communication).

For the total approached criterion, the NEO-PI-R facet model (angry hostility and impulsiveness) accounted for a significant portion of the residual variance beyond the goal dimension effective communication ($R^2 = 0.05$, $p < 0.10$). The regression weight for angry hostility was 0.40 ($p = 0.12$) was not significant but the regression weight for impulsiveness ($\beta = -0.69$, $p = 0.02$) was significant. The GSE prediction model was not significant in predicting the goals model residual variance.

The NEO-PI-R facet model (anxiety, angry hostility, activity, ideas, values, and straightforwardness) accounted for significant residual variance in the variety of persuasive styles from the goals model ($R^2 = 0.15$, $p < 0.10$). The significant regression weights were -0.04 for anxiety ($p = 0.05$), 0.05 for angry hostility ($p = 0.11$), 0.06 for ideas ($p = 0.01$), and -0.05 for values ($p = 0.06$). The GSE prediction model did not account for significant variance in the variety of persuasive styles used, so was excluded from this analysis.

Summary. The NEO-PI-R model incremented the goal dimensions model for the creative task total score, the conflict management assertiveness scale score, the number of targets approached in the persuasive task, and variety of persuasive styles used. It did not increment the goal dimensions model for the persuasive task successful persuasive attempts. The GSE prediction model was only significant in predicting the persuasive task successful persuasive

attempts and total number of targets approached, and did not increment the goal dimensions model for either criterion.

Prediction Models for Overall Performance Composite

To test hypotheses 2 regarding overall performance, the first step was to identify the best prediction models for the Big Five trait scores, GSE and the goal dimensions measure. Using backwards regression, Neuroticism was the only significant Big Five predictor of overall performance ($R^2 = 0.02$). The regression weight for Neuroticism was -0.01 ($p = 0.09$).

GSE was not related to overall performance ($R^2 = 0.01$). The regression weight for GSE was 0.32 ($p = 0.30$). Given that the GSE model did not significantly predict overall performance, GSE was not used in the test of Hypotheses 2.

Finally, a backwards regression analysis for all of the goal dimensions (effective work teams, promoting attendance, environment of helping others, effective customer service, effective task management, resolution of conflict, self-leadership, effective communication, encouraging flexibility and adaptability, and creative problem solving) was used to predict overall performance. Effective customer service, resolution of conflict, and effective communication were significant predictors of overall performance ($R^2 = 0.09$, $p < 0.10$). The regression weights were -0.06 for effective customer service ($p = 0.01$), 0.03 for resolution of conflict ($p = 0.06$), and 0.04 for effective communication ($p = 0.01$). The regression weight for effective customer service was negative, which was inconsistent with a priori expectations, so it was examined as a suppressor variable. It met the criteria outlined by Cascio and Aguinis (2005), so was included in the best goals model.

Incremental Variance in Overall Performance Due to Goal Dimensions Measure

Hypothesis 2 stated that the goal dimensions would improve predictive accuracy beyond the NEO-PI-R trait-level prediction model and the GSE prediction model. The goals model (effective customer service, resolution of conflict, and effective communication) accounted for a significant portion of the residual variance from the NEO-PI-R trait-level model (Neuroticism), supporting Hypothesis 2 ($R^2 = 0.07, p < 0.10$). The regression weights for effective customer service ($\beta = -0.05; p = 0.02$) and effective communication ($\beta = 0.04; p = 0.01$) were significant. The regression weight for resolution of conflict was not significant ($\beta = 0.03; p = 0.16$). The GSE model was not used to examine Hypothesis 2 because it did not significantly predict overall performance.

Finally, using a more conservative approach, the goal dimensions model (effective customer service, resolution of conflict, and effective communication) was used to predict the residual variance in overall performance after extracting variance accounted for by all of the Big Five traits. The goal dimensions accounted for a significant portion of the residual variance ($R^2 = 0.07, p < 0.10$). As with the prior analyses controlling only for Neuroticism, effective customer service ($\beta = -0.05, p = 0.04$) and effective communication ($\beta = 0.04, p = 0.02$) were significant, but the regression weight for resolution of conflict ($\beta = 0.04, p = 0.17$) was not significant.

Incremental Variance in Overall Performance Due to NEO-PI-R and GSE

Similar to the task performance analyses, the predictive accuracy of the NEO-PI-R trait-level prediction model and the GSE prediction model beyond that of the goal dimensions model was examined. The NEO-PI-R trait-level model did not significantly account for the residual variance from the goals model ($R^2 = 0.01, p = 0.25$). The GSE model was not examined because it did not significantly predict overall performance.

Discussion

The focus of personality research in Industrial psychology is accurate prediction of job performance. Context-insensitive personality measurement, specifically trait assessment, dominates in selection decision making research. Trait measures collapse across context and use dimension scores to predict job performance (see Figure 1a). Researchers have struggled with the modest accuracy of traits to predict job performance arguing that the context is a necessary component in understanding and predicting behavior (Bing et al., 2004). Several methods have been employed to introduce context into personality measurement.

Bing et al. (2004), Schmit et al. (1995), and Lievens et al. (2008) manipulated trait measures by adding context-specific tags to items and/or specifying the frame-of-reference in the instructions. The prediction model using the scores from these measures is identical to that of traits (see Figure 2a). Both strategies marginally increase predictive accuracy, suggesting context-sensitive measures may improve selection decision making. Other researchers (Bandura, 1977; Judge et al., 2007) have examined SSE as a context-sensitive predictor of behavior. However, SSE is measured at the task-specific level, organizing behavior around context (see Figure 2b). This model is useful in predicting task-specific performance, but not overall performance (Judge et al., 2007).

Social cognitive models (e.g., CAPS and KAPA) conceptualize personality as the interaction between the person and the situation, and provide explanations of both the structures and processes of personality. These models increase the understanding of behavior, but because they examine personality at the idiographic level, they are not practical in selection context. I have argued that a viable measurement strategy is to use a social cognitive framework of personality to develop a nomothetic measure that is organized by a hypothetical structure of

work context. Specifically, I used normative perceptions of the relationship between work behaviors and specific organizational goals. Once behaviors and goals were linked, I developed SSE items that placed the work behavior in a specific context. For example, the behavior “remaining calm while assisting irate customers” was linked to the goal dimension effective customer service. The corresponding SSE item was “a very angry customer approaches you for assistance after a problem arising from your organization. How confident are you that you can remain calm while assisting irate customers?”

Prediction Models

The prediction models for each of the three measures examined in this study are not consistent with prior expectations. First, Conscientiousness scores on the trait measure (at both the trait level and the facet level) did not predict performance as well as expected. The correlations between Conscientiousness and its facets and the task-specific criteria ranged from -0.19 to 0.19 and from -0.14 to 0.10 for overall performance. Although the magnitude of these correlations is consistent with meta-analytic estimates in applied settings (Barrick & Mount, 1991; Hertz & Donovan, 2000), I expected the controlled experimental setting to provide for psychometric quality in the criterion measures, thereby allowing for stronger relationships than typically seen in applied settings. In particular, the mundane task was included primarily because I expected Conscientiousness to be a strong predictor. I do not have an explanation for why Conscientiousness did not perform better in the current study.

Second, the lack of predictive accuracy of GSE was somewhat surprising, given that it has been shown to predict several other variables (Erez & Judge, 2001; Tipton and Worthington, 1984). GSE was only significantly related to persuasive task successes and total number of targets approached. As discussed previously, a limitation of GSE is that as variation in efficacy

expectations as a function of contexts increases, the accuracy of GSE in predicting task-specific performance should decrease. This may explain the lack of task-specific predictive accuracy. However, GSE was not significantly related to overall performance. This could be due to issues with the overall performance score composite itself (discussed in detail below).

It also could be argued that the goal dimensions measure turned out to be a measure of GSE in the work context. That is, instead of asking subjects to rate their general self-efficacy, the amalgamation of self-efficacy ratings across multiple organizational contexts resulted in a better representation of GSE, at least in the context of work. Such an argument is not without merit considering that the goal dimensions were more interrelated than expected.

Finally, the results of the goal dimensions measure were not as strong as expected. First, the bivariate correlations between the goal dimensions and each criterion were modest. The absolute values of the goal dimensions correlations ranged from 0.00 to 0.30 and 19 out of 80 correlations (23.75%) were significant. In comparison, the absolute values of the correlations between the NEO-PI-R facets and each criterion ranged from 0.00 to 0.24 and 26/240 correlations (10.83%) were significant.

Next, the goal dimensions were more strongly correlated than expected. I assumed that participants would be able to differentiate self-efficacy perceptions as a function of organizational goals. That is, participants were expected to view some organizational goals as fitting with their strengths whereas other organizational goals potentially exposing weaknesses. Given the interrelatedness of the goal dimensions models, it is not surprising that goal dimensions did not increment the prediction of task performance criteria beyond that accounted for by the NEO-PI-R facet models as strongly as expected. The goal dimensions models captured significant variance in task performance beyond that accounted for by the best traditional model

for only 3 of the 8 task performance criteria (the assertiveness score in the conflict management task, and the total number of successful persuasive attempts and total targets approached in the persuasive task).

Predicting Task Performance

I hypothesized that the goal dimensions would account for variance in task criterion beyond that accounted for by a traditional trait measure and GSE measure (i.e., context-insensitive measures), and also examined whether or not the traditional trait measure and GSE measure accounted for variance in task performance beyond that accounted for by the goal dimensions. Although the results were not as strong as anticipated, the findings warrant further research. Foremost is the fact that goal dimensions identified as conceptually linked to task performance increased the variance accounted for beyond that captured by the dominant Big Five measure. It is important to note that I used a conservative strategy to test for incremental variance due to goal dimensions, while the Big Five prediction models were based on raw empiricism. For example, in the persuasive task, the total number of successful persuasive attempts increased as modesty decreased. After controlling modesty, the goal dimension of effective communication predicted successful attempts suggesting that individuals who believe they can communicate effectively in organizational contexts were better at gaining compliance from others. This is a good example of how the two measures may be complimentary. None of the NEO-PI-R facet dimensions explicitly measure communication skills. Yet, it is clear that effective communication skills should lead to success at gaining compliance from strangers.

Another positive aspect of the goal dimensions measure is that it consistently predicted task performance better than GSE. GSE was only significantly related to 2 of the 8 criteria

(successful persuasive attempts and total targets approached) and did not account for significant variance in either criterion beyond that accounted for by the goal dimensions model.

Also, the low intercorrelations among task criteria indicate that there are important differences in individuals' abilities to perform each task. The variations in the best NEO-PI-R facet models and the goal dimensions models indicated that there were differences in the competencies required to perform each task. Further, that GSE was only significantly related to two of the eight task-specific criteria provides additional evidence supporting this assertion. By operationalizing the measurement of personality as behavior-in-context, the expectation is that task/job performance should be more accurately predicted. The expectation of better predictive accuracy is because the person-in-context strategy assumes that person characteristics that drive success in a specific work context can vary across individuals.

From a practical perspective, the results are also promising. The goal in personnel selection is to maximize the variance in job performance accounted for in order to make the best selection decisions. The model from the goal dimensions measure accounted for variance beyond that of the traditional personality measure for those criteria listed above. For the purpose of maximizing predictive accuracy, the goal dimensions measure is even more useful. The goals models were developed using expert ratings, however, it is possible that other goals were also related to performance. For prediction, they would certainly be used in the selection context.

Predicting Overall Performance

I also hypothesized that the goal dimensions would account for variance in overall performance beyond that accounted for by a traditional trait measure and GSE measure, and examined whether or not the traditional trait measure and GSE measure accounted for variance in overall performance beyond that accounted for by the goal dimensions. The hypothesis was

supported. The goals model accounted for a significant portion of the residual variance from the NEO-PI-R trait-level model. Additionally, the NEO-PI-R trait-level model did not significantly account for the residual variance from the goals model. The GSE model did not significantly predict overall performance.

In typical selection validation research, several predictor/criterion relationships are examined. Then, when the criteria are combined to create an overall performance composite, the predictors that were significantly related to the specific criteria tend to predict overall performance. This study was conducted in a similar manner. First, performance was operationalized at the task level. Then, they were statistically combined to form an overall performance composite. However, several of the significant predictors from both the facet models and the goal dimensions models for task specific performance were not significant predictors of overall performance.

The tasks were specifically chosen to represent a variety of behaviors commonly occurring at work that require unique combinations of competencies for successful performance, while in selection validation research, the subdimensions of overall performance (i.e., task-specific criteria) are typically moderately intercorrelated. It is possible that the tasks in this study were too independent, so the overall performance composite was a sterile combination of independent task performance. It is unlikely that a similar situation would occur in selection validation research, thus conclusions regarding the prediction of the overall performance composite need to be qualified by the fact that the prediction models for overall performance (especially for the NEO-PI-R measure) were so different from the prediction models of specific task performance.

Improving the Goal Dimensions Measure

The goal dimensions measure was not as accurate in predicting performance as expected. However, there is enough evidence regarding the potential usefulness of this model from both a theoretical and practical perspective that continued research is warranted. This section outlines some possible issues concerning the goal dimensions measure and how they can be addressed in future studies.

The purpose of this study was to develop a measure of personality based on a hierarchical structure of work context. The item level is based on behaviors in a given work context, and at the dimension level each behavior-in-context is linked to an organizational goal (see Figure 4). The results of this study show that there are areas where the goal dimensions measure can be improved.

The main issue is that the goal dimensions were intercorrelated at higher than expected levels. Although it is clear that goal dimensions are in some cases logically related (e.g., “effective customer service” is likely related to “resolving conflict”), there are clear cases where goal dimensions should be less dependent. For example, there is little reason to expect that the goal dimension of “promoting attendance” should be related to the goal dimension of resolving conflict, yet a 0.53 correlation was found.

It is possible that these inflated goal dimensions intercorrelations primarily are due to the self-efficacy response format. There is typically high leniency bias in self-report measures because individuals are unwilling to view themselves as below average (Farh & Dobbins, 1989). It may be worth exploring if wording the response format in a manner more typical of trait measures reduces the intercorrelations. That is, word the item stem as representing effective or ineffective behaviors in a work context, and then have respondents rate the degree to which

the item is self-descriptive. Also, a forced-choice strategy where individuals are asked to choose the behavior-in-context that they do best and/or worst should also be explored.

The development of the goal dimensions measure could also be improved. In the current structure, the goals and behaviors were limited in scope because they were developed by undergraduate students. This likely led to some goal dimensions not having enough behavior-in-context items. More research is needed in order to better represent contexts relevant to goals and more comprehensively sample from important goals and relevant behaviors using subjects from a wide variety of jobs. Also, the O*NET database could be used in order to increase the breadth of commonly occurring behaviors. Additionally, the roles dimensions were not used in the current study. In future studies, the role and goal dimensions could be combined to create a matrix of behavior-in-context items. It is likely that the role distinctions will increase the degree to which individuals are able to differentiate by context.

Conclusion

In summary, this study shows that the goal dimensions measure of personality based on a social cognitive foundation incorporating the interaction of the person and the situation can be used to predict task performance. The results are encouraging from both a theoretical and practical standpoint. Theoretically, the method used to develop the goal dimensions measure provides a better understanding of the structure of the work context. Practically, the measure accounts for variance in the performance of some tasks beyond the traditional measure of personality. The two measures can be used in combination, as in some cases, both account for unique variance in the other. Future research is needed to examine the goal dimensions measure from both perspectives.

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Appendix A

Goals with related behaviors

1) Effective Work Teams

Be reliable to a group

Enhance group cohesion through team composition

Encourage team work

Focusing a work group

Staying focused on a task while working in a group

Work as a member of a group

Working with a group to complete a complex task

Maintain involvement of all group members

2) Promoting Attendance

Enforce consequences for missing work

Award good attendance

Calling in "sick" only when it's legitimate

Reporting to work for every scheduled shift on time

3) Environment of Helping Others

Helping coworkers in your spare time

Providing training to a new employee

Provide support to other employees

Taking some of the work load off a coworker that is behind

Mentoring a new employee

4) Effective Customer Service

Helping customers when they approach you as you are going on a break or leaving for the day

Discuss/provide alternatives to better serve the customer

Guide and provide information for visitors

Provide customer assistance via phone/internet

Effective customer communication

Demonstrate active listening and patience while providing service to customers

Connecting on a personal level with customers

Providing courteous service to customers

Providing services to diverse clients

Understanding target consumer needs

Resolving complaints to customer satisfaction

Contacting potential customers to sell a product

Smiling while working with clients or customers even when you are upset or angry

Remaining calm while assisting irate customers

Handling customer dissatisfaction

Working on sales floor assisting customers

5) Effective Task Management

Completing assigned tasks by their deadlines

Making "to do" lists

Maintaining a schedule of deadlines and meetings

6) Resolution of Conflict

Resolving conflicts between subordinates

Providing fair and unbiased solutions to conflicts

Resolving conflicts between yourself and a peer

Resolving conflicts within a group

Understanding both sides of an argument

7) Self-Leadership

Working on problem solving tasks

Working without a boss

Conduct daily operations without assistance

Staying focused on a task while working alone

Getting started without direction from a supervisor

Performing tasks without being asked

Completing tasks without being asked

8) Effective Communication

Communicating organizational updates

Communicate constructive criticism

Presenting information clearly

Writing speeches or presentations for sharing information with a large group

Remaining calm and composed while presenting to a group

While presenting to a large group, speaking clearly and with enough volume so that

everyone can hear and understand you

Clearly presenting ideas to a large group of peers and superiors

9) Encouraging Flexibility and Adaptability

Dealing with work interruptions

Adjusting your behavior to a given situation

Learning how to cope with new management

Assessing problems "on the fly"

Adjusting to a changing work environment

Be open to alternative solutions

Adapt to performing new organizational operations

Adjusting to new regulations

10) Creative Problem Solving

Think outside the box

Finding creative solutions to difficult problems

Develop creative advertising strategies

Appendix B

Goal Dimensions Measure

Effective Work Teams

You're working on a group project and your coworkers have assigned you to a specific task with a given deadline. How confident are you that you can be reliable to the rest of your group?

You are given the opportunity to develop your own team using employees currently working in various departments within the organization. How confident are you that you could compose a team that would have high group cohesion?

You are the leader of a group of employees assigned to complete several projects that require collaboration. How confident are you that you will be able to encourage team work among the group members?

You are the leader of a group of employees working on an important project. It is your responsibility to keep them from getting distracted. How confident are you that you can focus a work group?

You are working on a project with a group of people. How confident are you that you can stay focused on your task while working in a group?

You're involved in a group project where you are a member of the group. You are being lead by another employee, and have to work with other group members as your coworkers. How confident are you that you can work as a member of a group?

You've been assigned to a group in order to complete a difficult task. To complete it effectively, you must divide the task and work together. How confident are you that you can work with a group to complete a complex task?

You are the leader of a team working on a project. Each team member has been assigned a specific task to complete in order to finish the project. How confident are you that you can maintain the involvement of all group members?

Promoting Attendance

An employee misses work without a valid excuse, how confident are you that you will be able to enforce the consequences for absence?

An employee has had impeccable attendance. He's never come to work late, or missed a day without a legitimate reason. How confident are you that you can award his good attendance?

You're tired from lack of sleep and don't feel like going to work, but are otherwise physically healthy enough go in. How confident are you that you can only call in "sick" when it's legitimate?

You work in an organization where your time at work is divided into shifts and you have multiple shifts throughout the week. How confident are you that you can report to work on time for every scheduled shift?

Environment of Helping Others

Your coworkers are overloaded with work and you have free time. How confident are you that you can help them in your spare time?

It is a new employee's first day of work and you are his trainer. It is your responsibility to show him around the organization and explain his duties. How confident are you that you can provide training to a new employee?

One of your fellow employees has been having a difficult time at work and at home and confides in you about her problems. How confident are you that you can provide support to other employees?

You notice that a coworker has a lot of work to be done, and has fallen behind. You have extra time and can perform several of his tasks. How confident are you that you can take some of the work load off a coworker that is behind?

You have a new employee with minimal experience in your field. You need to help him understand his responsibilities and be there for him if he has any questions or concerns. How confident are you that you can mentor a new employee?

Effective Customer Service

You are leaving work for the day or to go on break when a customer approaches you in need of assistance. No one else is immediately available. How confident are you that you can help customers when you are going on break or leaving for the day?

A customer approaches you with a problem and proposes a solution. You know that his solution would work, but that there are alternative ways to handle the problem more effectively. How confident are you that you can discuss and provide these alternatives to better serve the customer?

You're in charge of taking care of visitors who come to your organization. How confident are you that you can guide and provide information for visitors?

At your organization, customers often contact you through phone calls or via e-mail for assistance. How confident are you that you can provide customer assistance via phone/internet?

You spend a lot of your day at work relaying information between your clients and your organization. How confident are you that you can maintain effective customer communication?

Your role in your organization is to handle customer service. Often when customers approach you, some of their requests or problems are lengthy and don't always make sense. How

confident are you that you can demonstrate active listening and patience while providing service to customers?

You are assigned to monitor the accounts of several customers. It is important that you maintain a strong relationship with each customer. How confident are you that you can connect on a personal level with your customers?

You are working for an organization with many customers. Your responsibility is to provide the best service to each customer as possible. How confident are you that you can provide courteous service to customers?

Your organization has a list of clientele from all different backgrounds, countries, and ethnicities. How confident are you that you can provide service to such a diverse group of clients?

Your organization markets several different products, each with a unique target market. You must be able to develop specific strategies for each product. How confident are you that you can understand target consumer needs?

You receive a complaint from a customer. You need to solve the problem in the best way so as to make the customer happy. How confident are you that you can resolve complaints to customer satisfaction?

Your organization has a new product that you are trying to sell. Your job is to contact new and existing customers to promote the product. How confident are you that you can contact potential customers to sell a product?

Before work, you had a personal problem that left you upset. At work, you still provide service to clients and customers. How confident are you that you can smile while working with clients or customers even when you're upset or angry?

A very angry customer approaches you for assistance after a problem arising from your organization. How confident are you that you can remain calm while assisting irate customers?

A customer is unhappy with a service your organization provided and you must find a solution to the problem. How confident are you that you can handle customer dissatisfaction?

You are a sales representative for an organization. Your job involves working the sales floor approaching potential customers and providing services to them. How confident are you that you can work on the sales floor assisting customers?

Effective Task Management

You have been assigned multiple tasks that all have important deadlines. How confident are you that you can complete these tasks by their deadline dates?

At work, you have a lot of things that you know you need to accomplish in the next week. How confident are you that you can make “to do” lists?

You have been assigned a series of tasks, each with a different deadline. How confident are you that you can complete these by their deadline?

During any given week, you have several deadlines to meet and meetings to attend. How confident are you that you can maintain a schedule of deadlines and meetings?

Resolution of Conflict

You are the supervisor of a team and two of your subordinates are having a disagreement. How confident are you that you can resolve their conflict?

Two of your employees are having an argument that you need to mediate. How confident are you that you can provide a fair and unbiased solution to their conflict?

You and a peer are in disagreement over an aspect of your organization. How confident are you that you can resolve the conflict?

You are working with a group with members who are in disagreement. How confident are you that you can resolve the conflict within the group?

You're in disagreement with a fellow employee. Both of you have points that argue your own side. How confident are you that you can understand both sides of an argument?

Self-Leadership

You are presented with several issues within the organization that are decreasing productivity. Your boss has asked you to develop solutions to these issues. How confident are you that you could work on these problem solving tasks?

You're working in an organization in which you don't have a specific supervisor who follows up on your work. How confident are you that you can complete your work without a boss?

On a daily basis, you are often working alone without a supervisor or a coworker working on the same tasks as you. How confident are you that you can conduct daily operations without assistance?

You're working on a task by yourself that requires concentration. How confident are you that you can stay focused on your task while working alone?

You have a project that needs to be started, but you are not being monitored by your supervisor. How confident are you that you can get started with direction from a supervisor?

While at work, you notice things that need to be completed though no one has brought it to your attention. How confident are you that you can perform tasks without being asked?

You've been assigned a series of tasks with no specific deadlines. How confident are you that you can complete tasks without being asked?

Effective Communication

You have been updated on information within your organization and need to tell other employees. How confident are you that you can communicate organizational updates?

You notice a fellow employee doing something wrong on a project he's working on. How confident are you that you can express your criticism constructively?

You are often assigned the responsibility of communicating information to your coworkers and clients through presentations. How confident are you that you can present the information clearly?

You need to present information to a large group of people. How confident are you that you can write speeches or presentations for sharing information with large groups?

You have a presentation to give in front of a group of your coworkers and management. How confident are you that you can remain calm and composed while presenting in front of the group?

You have a presentation to give to a large group of your coworkers in a large room. How confident are you that you can speak clearly and loudly enough so that everyone can hear and understand you?

While in a meeting, you have ideas that you'd like to present to your peers and superiors. How confident are you that you can clearly present these ideas?

Encouraging Flexibility and Adaptability

You are working on a project and throughout the day your coworkers keep coming by your desk to ask you questions or make small talk. How confident are you that you can deal with work interruptions?

You are assigned to work with several different clients, each with very different needs. They must each be handled uniquely. How confident are you that you can adjust your behavior to a given situation?

A new manager has been hired to work for your organization. He is now your boss and has a very different perspective and leadership style than your past supervisor. How confident are you that you can learn how to cope with new management?

A problem arises that needs an immediate solution. You must acknowledge the problem, and find the correct solution fast. How confident are you that you can assess problems “on the fly”?

Your company was bought by another organization. The new management has redesigned the workplace and hired new people. How confident are you that you can adjust to a changing work environment?

You’ve been presented with a problem and have expressed your possible solution. Another coworker then expresses his solution to the problem. How confident are you that you can be open to alternative solutions?

The organization you have been working for has just updated many of the regular tasks because of increasing technology. Your job has changed significantly, but you are fully trained in the new operations. How confident are you that you can adapt to performing new organizational operations?

Your organization has updated regulations in order to benefit the organization and its employees. How confident are you that you can adjust to new regulations?

Creative Problem Solving

You are presented with a problem that has been addressed unsuccessfully several times using conventional solutions. You need to come up with a creative way to address the problem. How confident are you that you can think outside the box?

A coworker has just come to you for advice on how to handle a difficult problem. You want to come up with a solution to handle the problem effectively but creatively. How confident are you that you can find creative solutions to difficult problems?

You work in the advertising department of your organization. You're responsible for the development of marketing strategies that are new and fresh. How confident are you that you can develop creative advertising strategies?

Appendix C

Creative Task Instructions

You are an employee in the marketing department of a large firm. Your firm has been selected to develop a 30-second television commercial to advertise a new product (a 3-D Holographic Television). This client is very important to the firm and YOU have been assigned to the development of the commercial. In 30 minutes, you are expected to present your initial ideas regarding the commercial to the client. Your job is to develop the commercial and describe it in a way that will impress the client so that they will choose to use your ideas. You can use Microsoft word and/or power point to develop your presentation. You are also instructed to be as imaginative as possible. Some things to consider when developing your commercial: what is the target audience for the product; how can you use a 30-second commercial to affect the target market; and when would be the best time to air this commercial?

Product Description:

One of our clients has developed and patented a three-dimensional holographic television. Using the latest in computer and laser technology, this brand new home entertainment system takes a standard two-dimensional television, or DVD signal, and recreates it into a three-dimensional image, a hologram.

The computer technology was developed from research with high-density televisions.

Unlike high-density televisions, however, the computer in the 3-D holographic TV generates the normally untelevised third dimension using known objects in its extensive memory. All three dimensions are then combined and projected using lasers and mirrors.

The 3-D holographic image is projected into an area on top of the set. This 3-D projection allows the created image to be viewed from all angles (front, back, and sides). For

example, in a scene where a car is moving forward, from the front of the set, it would appear to be moving toward you. When viewed from the back of the set, you would see an image of the rear of the car moving away from you.

Other Features:

- Uses standard household current
- High-quality computer chips
- Extended memory of known objects
- State-of-the-art software
- Computer interface for custom hologram design
- High Definition image quality
- Large image size
- Easy to operate controls
- High-fidelity sound (surround sound)
- Wireless remote

Retail Price

The manufacturer's suggested retail price per unit is estimated to be \$6000-\$7000 for the first 10,000 units produced. As more units are produced, the average manufacturing cost per unit is projected to curve downward. Therefore, within one year, they estimate that the retail price will be between \$2500 and \$4000.

Appendix D

Coding Questionnaire for Creative Task

Originality Considerations:

Using the scale points presented below each question, rate each presentation:

1) Unexpected

Did the participant approach the problem in a novel, imaginative, unpredictable, or innovative manner?

Unexpected Scale Points:

- 1 – No commercial or vague description of family watching TV with no specific scenes
- 2 – Watching the TV with vague descriptions of predictable scenes.
- 3 – Goes beyond watching the TV, but not very much outside the box
- 4 – Outside the box, different and unique, but not “WOW”
- 5 – “WOW”

2) Description

Did the participant expand upon an idea, tell a story, or use fine detail to help the reader visualize the plan?

Description Scale Points:

- 1—No commercial, no details other than regurgitating product information
- 2—Commercial ideas, no story
- 3—Can start to picture scenes, limited detail
- 4—Good detail in scenes, can see commercial
- 5—Complete detail of commercial from start to finish, including dialogue

Quality Considerations:

3) Completeness

Did the participant understand the instructions, use the information, and follow the instructions fully and completely?

Completeness Scale Points:

- 1—No commercial, no target market or placement
- 2—No real commercial, but describes target market and/or placement
- 3—Not detailed commercial and no target market or placement
- 4—Not detailed commercial with target market and/or placement OR detailed commercial (at least 4 on description) without target market and/or placement
- 5—Detailed commercial (at least 4 on description) with target market and/or placement

4) Effectiveness

Is the plan usable, practical, and/or appropriate (reach and frequency)?

Effectiveness Scale Points:

- 1—No commercial, no target market, no placement
- 2—Commercial ideas, no real detail; gives ideas for target market and/or placement; can be built on
- 3—Not detailed commercial; limited target market and/or placement; would consider buying with changes
- 4—Detailed commercial; limited/no target market and/or placement; would buy but need to make small changes
- 5—Would buy without changes

Appendix E

Mundane Task Instructions

You have been given a stack of completed university surveys. In the Excel document opened on the computer provided, enter the responses using the following rules:

- The survey ID numbers have already been entered. Make sure you are on the correct row when entering the responses.
- The column headers have also been entered. Make sure you are entering the responses for each item in the correct column.
 - Enter the “IMPORTANCE” response in ‘a’ and the “ACHIEVED” response in ‘b’
 - (i.e., numbers 1-20 have column headings #a and #b; for example, number 1 has two columns—1a and 1b)
 - For items 21-31 and 44-53, code NA as 0
 - For items 32-35, code 0-5 as 1, 6-10 as 2, 11-15 as 3, and 15+ as 4
 - DO NOT ENTER ANY INFORMATION FOR ITEMS 36-43 AND ALL OF SECTION IV.
- MAKE SURE YOU SAVE YOUR FILE FREQUENTLY AND WHEN YOU HAVE FINISHED

Appendix F

Individual Scenario for Conflict Management Task

Survival Simulation

Individual _____

You and your companions have just survived the crash of a small plane. Both the pilot and co-pilot were killed in the crash. It is mid-January, and you are in Northern Canada. The daily temperature is 25 below zero, and the night time temperature is 40 below zero. There is snow on the ground, and the countryside is wooded with several creeks criss-crossing the area. The nearest town is 20 miles away. You are all dressed in city clothes appropriate for a business meeting. You managed to salvage the items listed below. Your task is to rank order the items by importance to your survival from 1-12 (1 most important, 12 least important).

- A ball of steel wool _____
- A small ax _____
- Can of Crisco shortening _____
- Newspapers (one per person) _____
- Cigarette lighter (without fluid) _____
- A loaded .45-caliber pistol _____
- Extra shirt and pants for each survivor _____
- 20 x 20 ft. piece of heavy-duty canvas _____
- A sectional air map made of plastic _____
- One quart of 100-proof whiskey _____
- A compass _____
- Family-size chocolate bars (one per person) _____

Appendix G

Group Scenario for Conflict Management Task

Survival Simulation

Group _____

You and your companions have just survived the crash of a small plane. Both the pilot and co-pilot were killed in the crash. It is mid-January, and you are in Northern Canada. The daily temperature is 25 below zero, and the night time temperature is 40 below zero. There is snow on the ground, and the countryside is wooded with several creeks criss-crossing the area. The nearest town is 20 miles away. You are all dressed in city clothes appropriate for a business meeting. You managed to salvage the items listed below. Your task is to rank order the items by importance to your survival from 1-12 (1 most important, 12 least important).

Focus your discussion primarily on those items for which there is the most disagreement.

- A ball of steel wool _____
- A small ax _____
- Can of Crisco shortening _____
- Newspapers (one per person) _____
- Cigarette lighter (without fluid) _____
- A loaded .45-caliber pistol _____
- Extra shirt and pants for each survivor _____
- 20 x 20 ft. piece of heavy-duty canvas _____
- A sectional air map made of plastic _____
- One quart of 100-proof whiskey _____
- A compass _____
- Family-size chocolate bars (one per person) _____

Appendix H

Coding Questionnaire for Conflict Management Task

Coder :	Lyla	Sheeka	Becky	
Confederate Group:	Pat/Susan	Jeffrey/Laura		
Extreme Confederate:	Pat	Susan	Jeffrey	Laura
Wishy-Washy Confederate:	Pat	Susan	Jeffrey	Laura

Rate the participant on the following two scales:

Uncooperative		Equal		Cooperative
-3	-2	-1	0	1
				2
				3

Unassertive		Equal		Assertive
-3	-2	-1	0	1
				2
				3

Appendix I

Persuasive Task Information Packet

American Red Cross

Blood Donation

The life you save could be yours!



Why Should You Donate Blood?

Every two seconds there is someone in need of blood. If enough people donate regularly, then there is enough blood for the sick and the injured. However, a shortage of blood can cause unnecessary illnesses and even death.

Every time you donate blood, your temperature, pulse and blood pressure are taken. Over ten tests are then done on your blood, and any irregularities are reported back to you.

Many people consider it to be a right to be able to receive blood when they need it. Unfortunately, most people don't often consider their responsibility to donate blood as well.

In order to meet our nation's needs, 6 million donations to the American Red Cross are needed. There are some areas of the nation that receive more donations than needed, and some areas that don't receive as many donations as needed. Many places get blood from areas outside their own. Major medical centers that cater to people all over the country are always in need of blood. The solution? The American Red Cross needs more donors. They need more frequent donors. If every person who donated once a year went back to donate a second time, there would be no shortages. Here's your chance to do your part.

Interesting/Important Facts

- Each unit of blood can help up to 3 people
- Every 2 seconds, someone in the U.S. needs blood
- 1 in 10 persons entering the hospital need blood
- Women receive 57% of the blood transfused, men use 43%
- A newborn baby has 1 cup of blood in his/her body
- The average adult body has 10-12 units of blood
- 97% of us will receive blood products by age 72
- Blood is needed for emergencies
- Some people need regular blood transfusions to live
- For nearly 5 million people who receive blood transfusions every year, your donation can make the difference between life and death

The Four Blood Groups

Group A

Blood has A antigen on red cells and B antibody in the plasma

Group B

Blood has B antigen on red cells and A antibody in the plasma

Group AB

Blood has both A and B antigens on red cells but neither A antibody nor B antibody in the plasma. Since they lack the anti-A and anti-B, persons with AB blood are called universal donors for plasma products.

Group O

Blood has neither A nor B antigens on red cells, but both A antibody and B antibody are in the plasma. Since their red blood cells lack A and B antigens, persons with Group O are called universal donors for red blood cell units.

Donor Eligibility

You CAN donate today if...

Age

- You are at least 17 years old.

Allergies

- You have allergy symptoms; however donors with severe symptoms may require further evaluation.

Anemia

- With or without vitamin B12 treatment, provided that you pass the “iron” test.

Blood Pressure

- You have or are being treated for high blood pressure provided that your blood pressure is at or below 180/100. Donors with blood pressure 80/50 or lower require further evaluation and may be deferred.

Cancer

- If the treatment for your cancer was completed at least five years ago and you did not have a blood cancer.

Skin Cancer

- If the skin cancer was diagnosed as non-melanoma skin cancer (basal cell or squamous cell skin cancer) and the cancer has been removed or fully treated.

Diabetes

- Treated by insulin or oral medications in acceptable; however, check with the Red Cross if you have recently changed your medication dosage.

Preventative Antibiotics

- Provided that you have no active infection and are taking the antibiotic as prevention only for any of the following conditions: acne, gum disease, prior to dental work, peptic ulcer disease, chronic bronchitis, chronic prostatitis, and valvular heart disease. Antibiotics taken as preventative only for other conditions may be acceptable – check with the Red Cross.

You MIGHT be able to donate today if...

Body or Ear Piercing

- Piercing must be done with a sterile, single-use needle, otherwise there is a 12-month deferral. These rules are also the same for acupuncture and electrolysis.

Lyme Disease

- Donors who have had Lyme disease or have been vaccinated for this illness should discuss their situation with the Red Cross.

Tattoo Within the Last 12 Months

- Tattoo acceptability criteria vary depending on the state in which the tattoo occurred since the regulations for tattoos are determined by each state. Deferral criteria vary from no deferral to as long as 1 year following the tattoo-check with the Red Cross.

Travel Outside the United States

- Eligibility to donate due to travel outside the United States varies. Since the travel rules can be complex, please check with the Red Cross.

Vaccinations

- Eligibility following vaccination depends on the vaccine. Check with the Red Cross if you have any questions.

Frequently Asked Questions

Who Can Donate Blood?

In most states, donors must be age 17 or older. Donors must weigh at least 110 pounds, be in good health, and not at risk for HIV/AIDS or hepatitis.

How often can I donate blood?

You must wait at least eight weeks (56 days) between donations of whole blood.

Will it hurt when you insert the needle?

Only for a moment. Pinch the fleshy, soft underside of your arm. That pinch is similar to what you will feel when we put the needle in your arm.

Is it safe to give blood?

Yes. Sterile procedures and disposable equipment are used. Each donor's blood is collected through a new, sterile needle which is then discarded. Although most people feel fine after donating blood, a small number of people may feel lightheaded or dizzy, have an upset stomach, or experience a bruise or pain where the needle was. Very rarely, loss of consciousness, nerve damage, or artery damage could occur.

How long will it take?

The time varies with each person. The entire process takes about 45 minutes to an hour; the actual donation of whole blood unit takes six to eight minutes. Approximately one pint of blood will be collected.

What does the Red Cross do with my blood?

The blood will be delivered to a blood component laboratory at the Red Cross, where it is processed into several components (e.g., red blood cells, plasma, etc.). A single blood donation may help three different people or more.

What is the process like?

- Registration
 1. Read information about donating blood
 2. Complete a form with demographic and basic health information
 3. Show an ID card
- Health History and Mini Physical
 1. Health history questions will be asked in a private and confidential interview with a trained staff person.
 2. You will have your temperature, blood pressure, iron level and pulse checked.
- Donation
 1. Staff will cleanse your arm and insert a needle for blood drawing procedure
 2. You will have 7-10 minutes to relax while approximately a pint of blood has been collected in the bag.
 3. The needle will be removed and a bandage will be placed on your arm.
 4. Spend a few minutes enjoying the refreshments provided to allow your body to adjust to slight decrease in fluid volume.

How long will it take to replenish the unit of blood I donate?

Blood volume, or plasma, is replaced within about 24 hours. Red cells need about four to six weeks for complete replacement. That's why at least eight weeks are required between whole blood donations.

American Red Cross

National Website www.redcross.org

Local Website www.redcrossnrv.org

1-800-GIVELIFE

Location of the Donor Center

Kent Square

250 South Main Street, Suite 200

Blacksburg, VA 24060

Hours of Operation

Monday: appointments available from 7:30am until 4:00pm

Tuesday: appointments available from 7:30am until 4:00pm

Wednesday: Closed

Thursday: appointments available from 7:30am until 4:00pm

Friday: appointments available from 7:30am until 2:30pm

Saturday: appointments available from 7:30am until 2:30pm every other Saturday

Sunday: Closed

Helpful tips for a good donation experience

Before Donating

- Get a good night's sleep
- Have a good breakfast or lunch
- Drink extra water and fluids to replace the volume you will donate (avoid tea, coffee, or other beverages with caffeine)
- Avoid alcohol for 24-48 hours

- Eat iron-rich foods — red meat, fish, poultry or liver, beans, iron-fortified cereals, raisins and prunes
- Avoid fatty foods, such as hamburgers, fries, or ice cream before donating

During the Donation

- Wear clothing with sleeves that can be raised above the elbow
- Show the staff any "good veins" that have been used successfully in the past to draw blood
- Relax
- Take the time to enjoy a snack and a drink in the refreshments area immediately after donating

After Donation

- Re-hydrate by drinking plenty of fluids over the next 24-48 hours
- Avoid strenuous physical activity or heavy lifting for about five hours after donation
- If you feel light headed, lie down, preferably with feet elevated, until the feeling passes
- In rare cases when bleeding occurs after removing the bandage, apply pressure to the site and raise your arm for 3-5 minutes; if bleeding or bruising occurs under the skin, apply a cold pack to the area periodically during the first 24 hours
- Call the American Red Cross if something doesn't feel right at 1-800-GIVE-LIFE

Enjoy the good feeling that comes with knowing that you may have saved as many as three lives.

Reminder:

You have scheduled an appointment to donate blood on

_____ at _____.

(date)

(time)

You will be contacted via phone or e-mail to confirm or reschedule your appointment. If you do not receive confirmation within 2 days of your tentative appointment, or if you need to cancel or reschedule, please call 1-866-353-1030.

If you have any questions regarding blood donation, you may visit www.givelife.org.

Please see the Helpful Hints printed on the back of this page.

Appendix J

Coding Questionnaire for Persuasive Task

For each target, record the number of times the participant used each of the following influence tactics:

- 1) Pressure – The participant uses demands, threats, or intimidation to convince the target to comply with a request or to support a proposal (e.g., “what if you were in an accident and needed blood and there wasn’t enough blood available?”).
- 2) Upward – The participant seeks to persuade the target that the request is approved by higher management, or appeals to higher management for assistance in gaining the target’s compliance with the request (e.g., “this is supported by the psychology department”).
- 3) Exchange – The participant makes an explicit or implicit promise that the target will receive rewards or tangible benefits if they comply with a request or support a proposal, or reminds the target of a prior favor to be reciprocated (e.g., “you will be given refreshments after you donate”).
- 4) Coalition – The participant seeks the aid of others to persuade the target to do something or uses the support of others as an argument for the target to agree also (e.g., “three people have already volunteered”).
- 5) Ingratiating – The participant seeks to get the target in a good mood or to think favorably of him or her before asking the target to do something (e.g., “that is a really nice shirt you are wearing”).

- 6) Rational – The participant uses logical arguments and factual evidence to persuade the target that a proposal or request is viable and likely to result in the attainment of task objectives (e.g., “every two seconds, someone in the U.S. needs blood”).
- 7) Inspirational – The participant makes an emotional request or proposal that arouses enthusiasm by appealing to the target’s values and ideals, or by increasing the target’s confidence that they can do it (e.g., “my brother was in a car accident a year ago and needed blood; thank goodness there were people willing to donate”).
- 8) Consultation – The participant seeks the target’s participation in making a decision or planning how to implement a proposed policy, strategy, or change (e.g., “what can I do to make you change your mind?”).
- 9) What is the relationship between the participant and the target?
 - 1 – Stranger
 - 2 – Acquaintance
 - 3 – Friend
- 10) What was the sex of the target?
 - 1 – Male
 - 2 – Female
- 11) How long did the interaction between the participant and target last?
- 12) Was the participant successful in persuading the target to volunteer?
 - 1 – Yes
 - 2 – No

Table 1

NEO-PI-R Traits and Facets

N	E	O	A	C
Anxiety	Warmth	Fantasy	Trust	Competence
Angry Hostility	Gregariousness	Aesthetics	Straightforwardness	Order
Depression	Assertiveness	Feelings	Altruism	Dutifulness
Self-Consciousness	Activity	Actions	Compliance	Achievement- Striving
Impulsiveness	Excitement-Seeking	Ideas	Modesty	Self-Discipline
Vulnerability	Positive Emotions	Values	Tender-Mindedness	Deliberation

Table 2

Example of Assigned Confederate Rank Orders

Item	Participant	Confederate A	Confederate B
A ball of steel wool	10	9	10
A small ax	5	11	8
Can of Crisco shortening	9	10	11
Newspapers (one per person)	3	2	1
Cigarette lighter (without fluid)	2	1	2
A loaded .45-caliber pistol	1	7	4
Extra shirt and pants for each survivor	4	3	3
20 x 20 ft. piece of heavy-duty canvas	6	4	5
A sectional air map made of plastic	11	12	12
One quart of 100-proof whiskey	8	8	7
A compass	12	6	9
Family-size chocolate bars (one per person)	7	5	6

Table 3

Correlations between NEO-PI-R Traits and Facets and Performance Criteria

	Creative	Mundane		Conflict Management ^b		Persuasive			OP
	CrTS ^a	MC	M%	CoopS	AsstS ^c	Succ	TA	#SU	
Neuroticism	-0.12	-0.13	0.04	0.11	-0.15	-0.20*	-0.07	-0.10	-0.15*
Anxiety	-0.07	-0.11	0.06	0.14	-0.07	-0.21*	-0.08	-0.17*	-0.13
Angry Hostility	-0.05	-0.07	-0.10	-0.04	-0.11	-0.08	0.07	0.11	-0.02
Depression	-0.04	-0.05	0.03	-0.07	-0.10	-0.24*	-0.07	-0.07	-0.07
Self-Consciousness	-0.12	-0.10	0.13	0.18	-0.17	-0.16*	-0.01	-0.09	-0.10
Impulsiveness	-0.16*	-0.04	-0.02	-0.19	-0.09	-0.10	-0.19*	-0.09	-0.20*
Vulnerability	-0.13	-0.18*	0.07	0.18	-0.16	-0.13	-0.03	-0.08	-0.13
Extraversion	-0.03	-0.05	-0.05	0.10	0.23*	0.11	-0.11	-0.06	-0.08
Warmth	-0.01	0.06	0.08	0.18	0.21	0.12	-0.04	-0.07	0.00
Gregariousness	-0.04	-0.03	0.02	0.24*	0.07	0.09	-0.16*	-0.13	-0.13
Assertiveness	0.10	-0.02	-0.06	-0.07	0.20*	0.07	-0.02	0.06	0.04
Activity	-0.02	0.05	0.04	-0.08	0.21*	0.07	0.02	0.15*	0.06
Excitement-Seeking	-0.13	0.00	0.14	0.01	0.01	0.01	-0.09	-0.04	-0.09

Positive Emotions	-0.06	0.01	0.10	0.11	0.21*	0.08	-0.07	-0.03	-0.03
Openness to Experience	0.05	0.12	0.06	-0.09	0.16	-0.04	-0.01	0.08	0.10
Fantasy	-0.02	0.07	0.11	0.03	0.09	-0.06	0.01	0.04	0.04
Aesthetics	-0.01	0.05	-0.08	-0.14	0.09	0.05	0.01	0.14	0.02
Feelings	-0.08	0.02	0.13	0.00	0.12	-0.11	-0.13	-0.12	-0.08
Actions	0.01	-0.01	0.07	-0.24*	0.13	-0.08	0.01	-0.08	0.01
Ideas	0.14	0.17*	-0.04	-0.17	0.11	0.02	0.09	0.18*	0.20*
Values	0.06	0.11	0.13	0.14	0.10	-0.05	-0.04	-0.13	0.05
Agreeableness	-0.02	0.02	0.08	0.05	-0.14	0.01	-0.08	-0.17*	-0.04
Trust	-0.07	-0.04	-0.02	0.17	-0.19*	0.18*	-0.06	-0.11	-0.12
Straightforwardness	0.03	0.02	0.04	0.01	-0.23*	0.00	-0.13	-0.17*	-0.04
Altruism	0.01	0.11	0.06	0.07	0.08	0.11	-0.03	-0.10	0.01
Compliance	-0.10	0.07	0.18*	0.21*	-0.17	0.03	-0.03	-0.15*	-0.04
Modesty	0.05	-0.02	0.03	-0.06	-0.06	-0.15*	-0.06	-0.12	0.01
Tender-Mindedness	0.07	0.01	0.13	0.05	-0.02	0.07	-0.07	-0.15*	0.03
Conscientiousness	-0.06	-0.01	-0.02	-0.13	0.12	0.07	-0.03	0.05	-0.03
Competence	0.07	0.14*	-0.05	-0.16	0.19	0.10	0.07	0.08	0.10

Order	-0.11	-0.11	-0.12	-0.01	0.02	0.09	-0.06	0.04	-0.14
Dutifulness	-0.06	-0.02	0.00	-0.02	0.18	-0.01	-0.01	0.01	-0.04
Achievement Striving	-0.02	0.00	0.00	-0.19	0.08	0.06	-0.01	0.09	0.02
Self-Discipline	-0.05	0.01	0.01	-0.19	0.04	0.06	0.02	0.01	-0.01
Deliberation	-0.01	0.00	0.04	-0.02	0.12	0.05	-0.05	0.01	0.00

* $p < 0.10$

^a Criterion measure abbreviations: CrTS = Creative Task Score; MC = Mundane Task Correct Responses; M% = Mundane Task Percentage of Responses Entered Correctly; CoopS = Conflict Management Cooperative Scale; AsstS = Conflict Management Assertiveness Scale; Succ = Persuasive Successful Attempts; TA = Persuasive Task Total Approached; #SU = Persuasive Task Variety in Persuasive Styles Used; OP = Overall Performance (included only for NEO-PI-R traits, GSE, and goals)

^b Conflict management scale correlations include only the data from the included confederate group

^c Correlations are presented between the assertiveness scale residual scores after controlling for confederate role

Table 4

Means, Standard Deviations, and Intercorrelations of Goal Dimensions and GSE

	X	SD	1	2	3	4	5	6	7	8	9	10	11
1 Effective Work Teams	84.00	9.86	(0.88)										
2 Promoting Attendance	83.85	12.24	0.65*	(0.66)									
3 Environment of Helping Others	85.97	11.55	0.80*	0.63*	(0.84)								
4 Effective Customer Service	84.21	9.75	0.84*	0.62*	0.81*	(0.91)							
5 Effective Task Management	88.24	11.55	0.80*	0.59*	0.72*	0.71*	(0.84)						
6 Resolution of Conflict	81.56	10.51	0.71*	0.53*	0.65*	0.67*	0.45*	(0.84)					
7 Self-Leadership	83.82	11.86	0.77*	0.66*	0.75*	0.70*	0.73*	0.59*	(0.87)				
8 Effective Communication	81.00	13.30	0.69*	0.53*	0.60*	0.72*	0.56*	0.57*	0.57*	(0.87)			
9 Encouraging Flexibility and Adaptability	81.76	10.29	0.81*	0.66*	0.79*	0.80*	0.70*	0.69*	0.76*	0.64*	(0.84)		
10 Creative Problem Solving	80.20	14.78	0.59*	0.37*	0.49*	0.61*	0.45*	0.61*	0.59*	0.58*	0.60*	(0.87)	
11 GSE	4.19	0.46	0.59*	0.47*	0.49*	0.55*	0.51*	0.54*	0.60*	0.50*	0.59*	0.52*	(0.87)

* $p < 0.10$

Internal consistency reliabilities reported on the diagonal

Table 5

Correlations between GSE and Goal Dimensions and Performance Criteria

	Creative	Mundane		Conflict Management ^b		Persuasive			OP
	CrTS ^a	MC	M%	CoopS	AsstS ^c	Succ	TA	#SU	
GSE	0.05	-0.03	0.02	-0.08	0.09	0.21*	0.18*	0.10	0.09
Effective Work Teams	0.03	0.05	0.12	-0.06	0.16	0.19*	0.06	0.08	0.10
Promoting Attendance	0.04	-0.01	-0.03	-0.10	0.22*	0.12	0.04	0.17*	0.07
Environment of Helping Others	-0.05	0.01	0.09	-0.07	0.23*	0.19*	0.07	0.11	0.05
Effective Customer Service	-0.04	0.00	0.07	-0.04	0.23*	0.24*	0.07	0.10	0.04
Effective Task Management	-0.04	-0.02	0.07	0.00	0.17	0.16*	0.06	0.12	0.03
Resolution of Conflict	0.17*	0.08	0.06	-0.09	0.30*	0.17*	0.03	0.07	0.17*
Self-Leadership	0.08	-0.03	-0.01	-0.11	0.17	0.17*	0.09	0.17*	0.11
Effective Communication	0.13	0.06	0.03	-0.12	0.23*	0.25*	0.15*	0.18*	0.20*
Encouraging Flexibility and Adaptability	-0.02	-0.03	0.01	-0.04	0.19	0.17*	0.20	0.08	0.03
Creative Problem Solving	0.08	-0.09	0.03	-0.13	0.07	0.15*	0.07	0.08	0.08

* $p < 0.10$

^a Criterion measure abbreviations: CrTS = Creative Task Score; MC = Mundane Task Correct Responses; M% = Mundane Task Percentage of Responses Entered Correctly; CoopS = Conflict Management Cooperative Scale; AsstS = Conflict Management Assertiveness Scale; Succ = Persuasive Successful Attempts; TA = Persuasive Task Total Approached; #SU = Persuasive Task Variety in Persuasive Styles Used; OP = Overall Performance

^b Conflict management scale correlations include only the data from the included confederate group

^c Correlations are presented between the assertiveness scale residual scores after controlling for confederate role

Table 6

Intercorrelations among Performance Criteria

	Creative	Mundane		Conflict Management ^a		Persuasive		
	CrTS ^b	MC	M%	CoopS	AsstS	Succ	TA	#SU
Mundane								
MC	0.09							
M%	0.00	0.25*						
Conflict Management								
CoopS	-0.12	0.03	0.28*					
AsstS	0.21*	0.06	-0.25*					
Persuasive								
Succ	0.00	-0.05	-0.18*	0.07	0.02			
TA	0.10	0.11	-0.05	-0.10	-0.02	0.35*		
#SU	0.01	0.13	-0.11	0.00	0.16	0.46*	0.42*	
Overall Performance	0.69*	0.51*	0.34*	N/A ^c	N/A	0.17*	0.52*	0.45*

* $p < 0.10$ ^a Correlations between Conflict Management Criteria and all other criteria only include data from one confederate group (N = 67)

^b Criterion measure abbreviations: CrTS = Creative Task Score; MC = Mundane Task Correct Responses; M% = Mundane Task Percentage of Responses Entered Correctly; CoopS = Conflict Management Cooperative Scale; AsstS = Conflict Management Assertiveness Scale; Succ = Persuasive Successful Attempts; TA = Persuasive Task Total Approached; #SU = Persuasive Task Variety in Persuasive Styles Used; OP = Overall Performance

^c Correlations between the conflict management criteria and overall performance were not computed due to the exclusion of data from this task

Table 7

Best NEO-PI-R Facet Models for Task Criteria

Task and Criterion	N	E	O	A	C	R ²	AdjR ²
Creative							
Total Score	^a Impul ^b (-)					0.02	0.02
Mundane							
Correct	Vul (-)					0.03	0.03
Correct/Total Entered	S-C	E-S	Aes (-)	Comp		0.12	0.09
			Values				
Conflict Management							
Cooperative Scale	Impul	Greg	Act (-)	Comp		0.29	0.23
			Values				
Assertiveness Scale				Strfor (-)	Com	0.14	0.12
Persuasive							
Successes				Mod (-)		0.02	0.02
Total Approaches	AnHost					0.06	0.04
	Impul (-)						

# Styles Used	Anx (-)	Act	Ideas	Strfor (-)	0.18	0.14
	AnHost		Values (-)			

^aSignificant facets in best regression model; Abbreviations listed below

^bNegative sign indicates negative Beta weight in best regression model

Abbreviations: Impul = Impulsiveness; Vul = Vulnerability; S-C = Self-Consciousness; E-S = Excitement-Seeking; Greg =

Gregariousness; Aes = Aesthetics; Act = Activity; Comp = Compliance; Strfor = Straightforwardness; Com = Competence; AnHost =

Angry Hostility; Anx = Anxiety; Mod = Modesty

Table 8

Best Goals Models for Task Criteria

Task and Criterion	Significant Goals	R ²	Adj R ²
Creative			
Total Score	Resolution of Conflict Encouraging Flexibility and Adaptability	0.06	0.04
Mundane			
Correct	NONE		
Correct/Total Entered	NONE		
Conflict Management			
Cooperative Scale	NONE		
Assertiveness Scale	Resolution of Conflict Creative Problem Solving	0.13	0.10
Persuasive			
Successes	Effective Communication	0.06	0.06
Total Approaches	Effective Communication	0.02	0.02
# Styles Used	Effective Communication	0.03	0.02

Figure 1a. Pure Trait Perspective

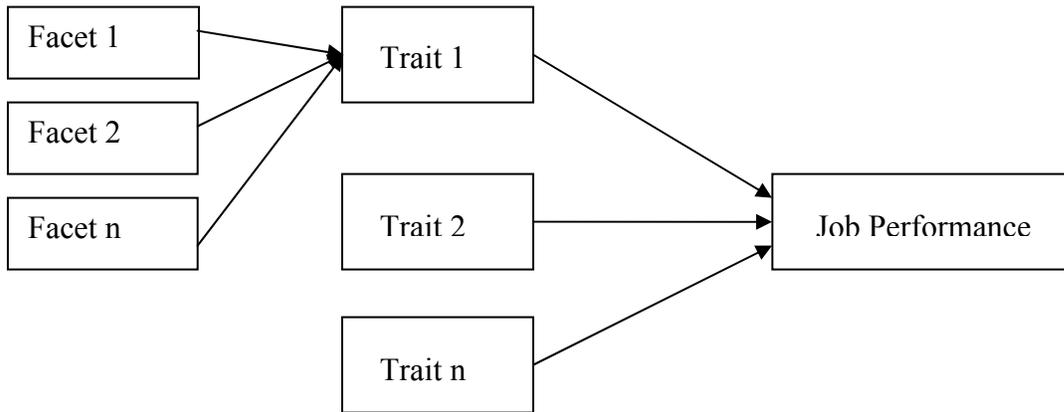


Figure 1b. GSE Perspective

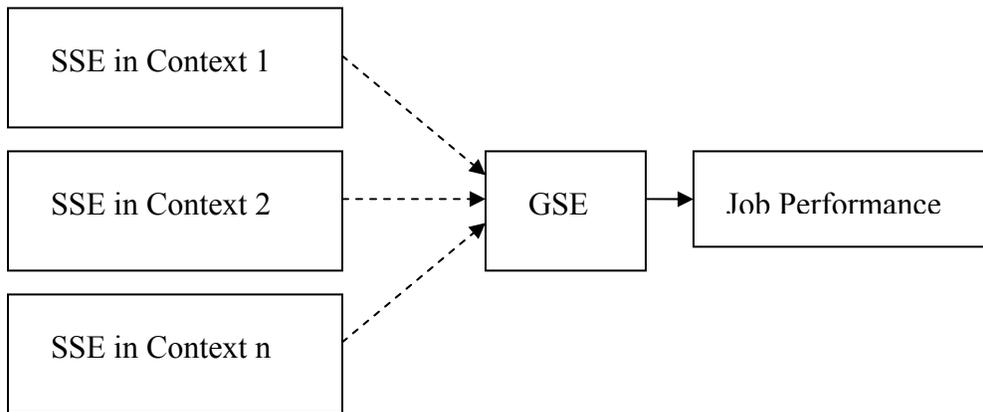


Figure 2a. Tagged Traits/FOR

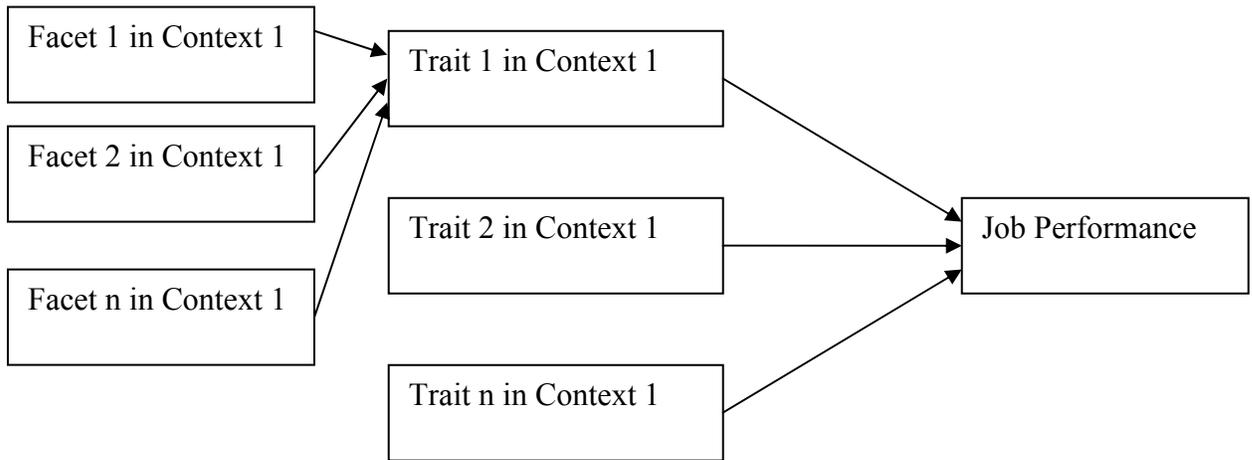


Figure 2b. SSE Perspective

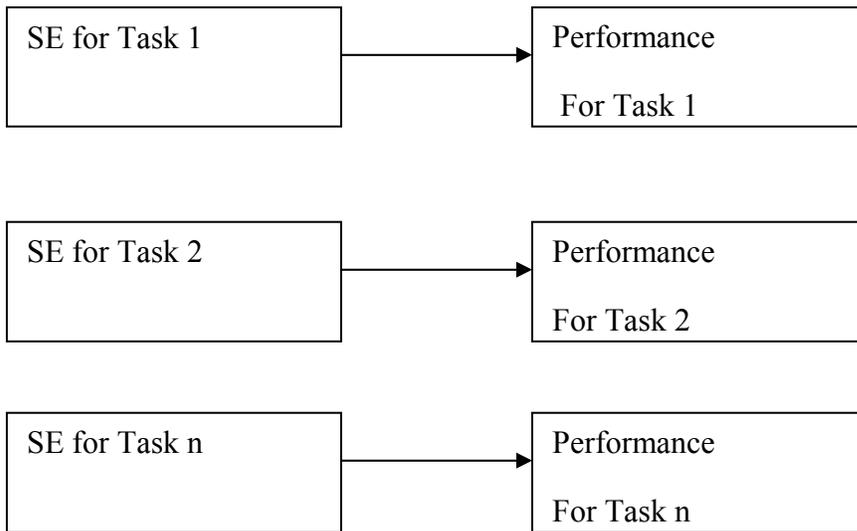


Figure 3. Social Cognitive Perspective

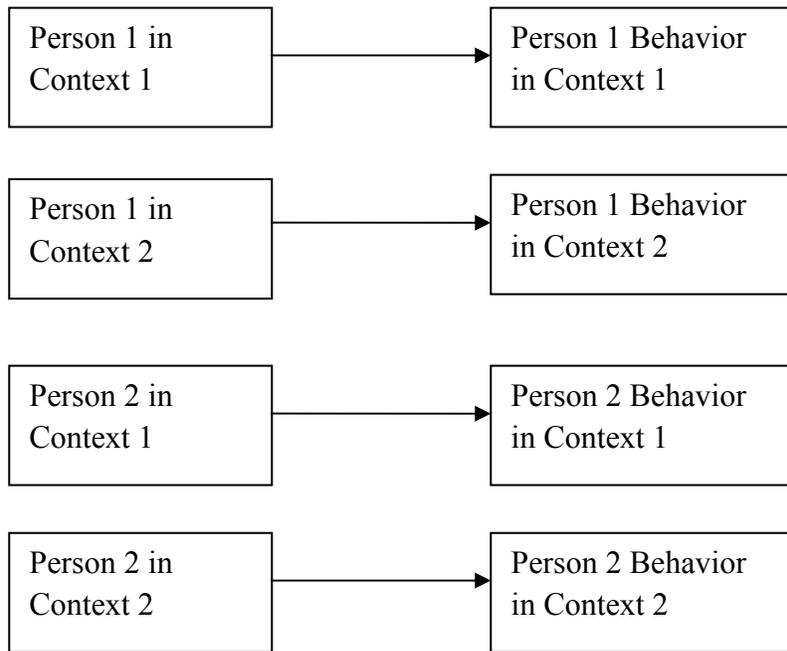


Figure 4. Goal Dimensions Model

