Personality and Job Performance:
Test of the Mediating Effects of Motivation Among Sales Representatives

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RUNNING HEAD: Motivation Mediating FFM - Performance
Abstract

Research shows consistent relations between personality and job performance. In this study we develop and test a model of job performance that examines the mediating effects of cognitive-motivational work orientations on the relationships between personality traits and performance in a sales job (N = 164). Covariance structural analyses revealed proximal motivational variables to be influential mechanisms through which distal personality traits affect job performance. Specifically, striving for status and accomplishment mediate the effects of extraversion and conscientiousness on ratings of sales performance. Although agreeableness was related to striving for communion, neither agreeableness nor communion striving was related to success in this sales job. The importance of the proposed motivational orientations model is discussed.
Research related to personality has recently clarified the utility of using personality variables for predicting job performance. This research (Barrick & Mount, 1991; Hough, 1992; Salgado, 1997; Tett, Jackson, & Rothstein, 1991) demonstrates that personality constructs are indeed associated with work performance, with some traits such as conscientiousness predicting success across jobs. Other traits are correlated with specific criteria or specific occupations. For example, extraversion correlates with success in sales and management jobs, as well as with training performance. However, very little research has examined the mechanisms through which personality traits influence performance.

Barrick, Mount, and Strauss (1993) found autonomous goal setting, and to a lesser extent goal commitment, to mediate relationships between conscientiousness and two measures of job proficiency—supervisory ratings of job performance and sales volume for sales representatives. Gellatly (1996) found goals and expectancy to mediate relationships between conscientiousness and performance on arithmetic tasks. The purpose of this study is to build on these findings and increase our understanding of personality by assessing the cognitive motivational processes that mediate relationships between personality traits and work performance.

Measuring Motivation

Researchers in both personality and industrial-organizational psychology have converged on a five-factor model (FFM) as a widely accepted framework of personality. The FFM includes extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience (Costa & McCrae, 1992; Digman, 1990; Goldberg, 1992). Several recent meta-analyses have revealed consistent relationships between FFM traits and work performance (Barrick & Mount, 1991; Hough, 1992; Mount & Barrick, 1995; Salgado, 1997; Tett et al., 1991). Yet, little is known about why these relationships exist.

There is general agreement that distal measures of personality such as the FFM link to work behavior through proximal motivational constructs (Kanfer, 1990; McCrae & Costa, 1996). However, unlike personality, an accepted framework does not exist for measuring motivational constructs. Yet, one theme that continually emerges in discussions of motivational models is the importance of cognitive processes. In fact, Locke and Latham (1990, p. 10) state that “[a]lthough cognition and motivation can be separated by abstraction for the purpose of scientific study, in reality they are virtually never separate.” The centrality of cognition is also captured by Mitchell’s (1997, p. 60) definition of motivation as “those psychological processes involved with the arousal, direction, intensity, and persistence of voluntary actions that are goal directed.” Motivational constructs can thus be measured by first identifying basic goals that regulate personal behavior, and then determining the arousal, intensity, and persistence associated with those goals.

The number of specific goals an individual may choose is virtually unlimited. However, a broadly applicable theory of work motivation requires the identification of a limited number of basic goals that regulate human behavior in the workplace. We thus set out to identify a broad set of cognitive goals—or intentions—that influence behavior across work settings. This focus on broad goals seems appropriate given that the FFM traits and work performance are both relatively broad constructs. Mediators of the two constructs that are similarly broad should provide the most explanatory power (Stewart, 1999).

Wiggins and Trapnell (1996) and R. Hogan (1996; R. Hogan & Shelton, 1998) have identified two broad motivational intentions focusing on social interactions. Building on concepts from evolutionary biology, anthropology, and sociology, as well as socioanalytic theory, they have found that individuals strive for communion and for agency and status. Communion striving represents actions directed toward obtaining acceptance in personal relationships and getting along with others (at work, in our study). Status striving captures actions directed toward obtaining power and dominance within a status hierarchy (at work, in our study).

Communion striving and status striving have been identified as broad goals associated
with social interactions (Bakan, 1966). However, because work tasks are often completed without social interaction, these two goals may not comprehensively capture an individual’s motivational intentions at work. We thus include a measure of task achievement that is independent of other people. We label this construct accomplishment striving.

Accomplishment striving reflects an individual’s intention to accomplish tasks and is characterized by a high task orientation. Task oriented employees have a strong desire to accomplish task-related goals as a means of expressing their individual attributes and preferences (Brewer & Gardner, 1997). The desire for an independent self-construal arises from a belief in the inherent separateness of individuals and inherent growth tendencies or innate psychological needs for competence (Baumeister, 1998; Brewer & Gardner, 1997; Cross & Madsen, 1997; Harter, 1978; Markus & Kitayama, 1991; McClelland, Atkinson, Clark, & Lowell, 1953; Ryan & Deci, 2000) as a fundamental motivational orientation. Thus, accomplishment strivings is expected to be unique from status striving and communion striving.

Communion striving, status striving, and accomplishment striving thus represent goals that are at a level of breadth similar to the FFM and job performance. However, relationships between these broad goals and work performance are expected to vary across jobs. Individuals motivated primarily by communion striving will likely work harder and ultimately be more successful in jobs that require cooperation (e.g., team production, customer service), whereas individuals motivated by status striving will likely excel in jobs that require competition and opportunity for advancement relative to others (e.g., sales, administration). Linkages between performance and either communion or status striving are thus expected to be highly dependent on the nature of the work that individuals are asked to do. In the present study, we examine the motivational strivings of sales personnel. Given this context, we predict effects related to status striving, but not communion striving in this study.

Hypothesis 1: Status striving corresponds with high performance for sales representatives.

Turning to accomplishment striving, an unexplored question concerns how accomplishment striving operates in relation to communion striving and status striving. From one perspective, accomplishment striving operates independent from communion and status. This notion is supported by group psychology (e.g., Bales, 1950) and leadership research (e.g., Fiedler, 1967; Fleishman, 1953), which advances task-related behaviors as being separate from social-related behaviors. From this perspective, communion and status are within the realm of social behaviors, whereas accomplishment is within the realm of task behaviors. Many achievement theories have also identified a drive for excellence that is independent of others (Kanfer & Heggestad, 1997).

From a different perspective, accomplishment striving may affect performance through communion and status striving. For instance, employees may seek to accomplish work tasks in order to obtain approval and acceptance from other people (communion striving). It also seems possible that employees seek to accomplish work tasks in order to excel above others (status striving). This means that employees may accomplish work tasks either in pursuit of harmonious social relations or in pursuit of resources, power, and social status (Wiggins & Trapnell, 1996). From this perspective goals related to task accomplishment are expected to correspond with goals for either communion striving or status striving depending on the context of the job in question. In the present context, communion striving is not expected to relate to performance, suggesting that the effect of accomplishment striving on performance may be mediated through status striving.

Because the relationships among status striving, communion striving, and accomplishment striving are unclear, we thus test two competing hypotheses:

Hypothesis 2: Accomplishment striving and ratings of sales performance exhibit a positive, direct relationship.

Hypothesis 3: The positive relationship between accomplishment striving and ratings of sales performance is mediated by status striving.
Linking personality to the Motivational Constructs

**Agreeableness.** The proximal motivational intention of communion striving is expected to be associated with the distal FFM trait of agreeableness. Costa and McCrae (1992) suggest that agreeable people are altruistic, sympathetic, and eager to help others. Goldberg (1992) found agreeableness to be associated with tendencies toward kindness, unselfishness, generosity, and fairness. Moreover, agreeable people usually strive for cooperation rather than competition (Costa & McCrae, 1992). Descriptions of agreeableness thus suggest that it is the fundamental trait associated with the intention to strive for communion with others.

Limited empirical evidence also supports a relationship between agreeableness and communion striving. A meta-analysis by Mount, Barrick, and Stewart (1998) found a consistent correlation ($r = .27$) between agreeableness and performance for team-oriented jobs, even though earlier studies had not identified a relationship for jobs not specifically requiring teamwork and cooperation. When faced with stress, agreeable people have also been found to cope through self-sacrifice rather than creation of an image of superiority above others (Costa, Zonderman, & McCrae, 1991). People who are described as agreeable are thus predicted to have cognitive motivations consistent with goals to strive for communion.

Hypothesis 4: Individuals scoring high on agreeableness report stronger intentions regarding communion striving.

As stated earlier, communion striving is not expected to relate to performance for sales representatives. Therefore, communion striving will not mediate relationships between performance in a sales job and agreeableness.

**Extraversion.** The proximal motivational intention for status striving is expected to be associated with the distal FFM dimension of extraversion. Extraverts are described as social, assertive, active, bold, energetic, and adventurous (Costa & McCrae, 1992; Goldberg, 1992). The desire to excel and obtain rewards has also been identified as a basic motivation of extraverts (Gray, 1987; Lucas et al., 2000; Stewart, 1996). Because rewards (e.g., promotions, salary increases) are usually obtained by excelling relative to others, extraverts are expected to be motivated by a desire to get ahead of others.

Empirical evidence also links extraversion with status striving. Barrick and Mount (1991) found extraversion to predict performance in sales occupations, which are characterized by competition and striving to excel above others. Stewart (1996) further found that extraversion was positively correlated with high performance in sales only when that performance was explicitly rewarded. J. Hogan, Rybicki, Motowidlo, and Borman (1998) also found measures of surgency to predict performance in jobs that provide opportunity for advancement through promotion. People who are extraverted are thus predicted to have cognitive motivations consistent with striving for status. Because a motivational intention for status striving is expected to relate strongly to supervisory ratings of sales performance, status striving should in turn result in behavior that facilitates job performance.

Hypothesis 5: Individuals scoring high on extraversion report stronger intentions regarding status striving.

Hypothesis 6: Intentions for status striving mediate a positive relationship between extraversion and job performance for sales representatives.

**Conscientiousness.** In addition to extraversion, meta-analyses (Barrick & Mount, 1991; Vinchur, Schipmann, Switzer, & Roth, 1998) suggest that conscientiousness is associated with sales performance. Conscientious people are described as organized, reliable, hardworking, determined, self-disciplined, and achievement-oriented (Costa & McCrae, 1992; Goldberg, 1992). Researchers have found a consistent relationship between conscientiousness and job performance, regardless of an individual’s job (Barrick & Mount, 1991; Salgado, 1997).

At its root, conscientiousness relates to a desire to exercise self-control and thereby follow the dictates of one’s conscience (Costa & McCrae, 1992). Conscientious employees thus seek to fulfill their obligations. In work contexts, these obligations normally center on task accomplishment. Barrick, Mount, and
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Strauss (1993) found sales representatives high in conscientiousness to be more likely to set sales goals and to be committed to those goals. In turn, higher sales goals were associated with greater sales volume and higher supervisory ratings of performance. Gellatly (1996) also found conscientiousness to link to performance through expectancy and goal choice. The content of these goals corresponds to accomplishment striving. Based on the work of Barrick et al. (1993) and Gellatly (1996), we expected individuals reporting high levels of conscientiousness to establish goals related to accomplishment striving.

Hypothesis 7: Individuals scoring high on conscientiousness report stronger intentions regarding accomplishment striving.

Hypothesis 8: Intentions for accomplishment striving mediate a positive relationship between conscientiousness and job performance for sales representatives.

Emotional stability and openness to experience. Emotional stability and openness to experience—the two remaining FFM dimensions—are not expected to correspond with either motivational measures or job performance. Emotional stability entails anxiety and depression (Barrick & Mount, 1991; Costa & Mcrae, 1992), characteristics that do not link to the motivational goals and potentially detract from rather than enhance performance. Openness to experience similarly does not appear to be related to any of the motivation strivings as it entails creativity, sophistication, and curiosity (Barrick & Mount, 1991). Moreover, meta-analyses (Barrick & Mount, 1991; Vinchur et al., 1998) have not linked emotional stability or openness to performance in a sales job.

Method

Participants and Procedure

Participants were 164 telemarketing sales representatives at a large financial services company. The sales representatives receive inbound calls from prospective buyers and follow structured procedures to obtain needed information and generate sales. There were 49 men (30%) and 115 women (70%). The mean level of job experience was 29.45 months (sd = 30.17).

Data were obtained during a concurrent test validation project. Sales representatives from four offices of a single organization participated (all offices contain the same position). The personality inventory (OPQ) was administered in group-sessions with a maximum of 16 participants attending each session. Prior to testing, all participants were given a letter containing a brief explanation of the purpose of the study (i.e., test validation) and a statement ensuring the confidentiality of their individual test results. Immediately after testing, participants completed the motivational orientation questionnaire, a short demographic form requesting background information, and a job satisfaction questionnaire. Supervisors received the performance rating forms in staff meetings along with a brief explanation of the study and a reminder of the importance of completing the forms carefully.

Measures

Occupational Personality Questionnaire (OPQ). The OPQ was used to measure personality. The OPQ is a 248-item measure of work-related personality characteristics. Thirty-one, eight-item scales are measured. Responses are based on a five-point rating scale ranging from agree to disagree. A more thorough description of the item content, development methods, and construct validity of the inventory is reported by Saville and Holdsworth Ltd. (1998).

Based on a review of several analyses of the OPQ factor structure and a comparison with the NEO-PI-R from an undergraduate sample (Ones & Anderson, 1999; Page, 1999; Saville & Holdsworth Ltd, 1998), 20 OPQ scales were used in this study. Four scales were used to measure each FFM construct. Coefficient alphas obtained from the OPQ manual (Saville & Holdsworth, 1998) are given in parentheses. Extraversion was measured by persuasiveness (.82), controlling (.83), outgoing (.90), and active (.81). Emotional Stability was measured by relaxed (.84), worrying (reverse scored; .78), tough minded (.81), and optimistic (.78). Conscientiousness was measured by forward planning (.77), detail conscious (.80), conscientious (.77), and achieving (.75). Agreeableness was measured by democratic...
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(.79), caring (.81), competitive (reverse scored; .76), and decisive (reverse scored; .73).

Openness to Experience was measured by practical (.91), artistic (.87), conceptual (.83), and innovative (.87).

The scale scores derived in this study were factor analyzed by the principal components method and varimax rotation. The average factor loading for the 20 scales “assigned” to specific FFM constructs was .67, providing convergent validity evidence. Furthermore, the average loading on other “nonassigned” FFM constructs was .14, demonstrating divergent validity evidence. Additional evidence of construct validity is shown in a comparison with responses on the NEO and OPQ from an undergraduate sample (N = 197). Average correlations between the 20 “assigned” OPQ scales and NEO FFM traits were .66 for extraversion, conscientiousness, and emotional stability (.58 over all FFM traits). The OPQ scales also were not highly correlated with other FFM traits (mean r = .18). The remaining OPQ scales that were not assigned to an FFM dimension had lower correlations on the FFM trait they were most strongly related to (mean r = .43), yet had higher correlations with the trait they were second most highly correlated with (.32). As this illustrates, the 20 OPQ scales used in this study were strongly related to only one FFM construct, while the remaining scales were not strongly related to any one FFM trait, and often had substantial correlations on two or more FFM constructs. Each FFM score represents the sum of the four lower level facets. Coefficient alphas for the big-five personality constructs were .89 for extraversion, .84 for emotional stability and conscientiousness, .83 for agreeableness, and .91 for openness to experience in this study.

Motivational Orientation Measure. We developed measures of motivational orientation by examining the motivation literature. Based on Mitchell’s (1997) conceptualization, we used three psychological processes to measure each of the three motivational intentions: communion striving, status striving, and accomplishment striving. The psychological processes we focused on are arousal, intensity, and persistence. A pool of 50 items was specifically developed to assess, within the work context, each of the associated processes for each of the three intentions.

The pool of 50 items was used to develop an instrument called the Motivational Orientation Inventory (MOI). All items were administered to 518 respondents (354 undergraduate students and the 164 telemarketing sales representatives in this study). Respondents indicated their degree of agreement with each item on a 5-point scale (1 = strongly agree to 3 = neither agree nor disagree to 5 = strongly disagree).

The accumulated data were factor analyzed by the principal components method followed by varimax rotation. Several factor analytic procedures were performed on the data, including different extraction methods and the extraction of several different sets of factors (i.e., 2, 4, 5, 6). Regardless of the procedures used, the results were very similar to those reported in Appendix A.

The three construct scales were revised on the basis of the factor analytic results and the psychometric properties of the items and dimensions. We retained items that had high factor loadings on a priori factors and exhibited a simple structure (i.e., did not also load on other factors). Of the 50 items in the trial questionnaire, 31 items were selected as measures of the three motivational orientation measures: 9, 11, and 11, respectively, for communion striving, status striving, and accomplishment striving. These shortened scales were administered to 612 additional undergraduate students. Coefficient alpha reliability estimates were .76, .89, and .88, respectively, in this study, and .78, .89, and .91 across all respondents (N = 1,130).

Performance Ratings. The instrument used to rate performance in the study was based on a job analysis consisting of interviews, focus groups, and questionnaires. Supervisors were asked to rate the employee’s effectiveness in eight performance areas, which included generating sales, quality of work, accuracy, length of telephone calls, availability to take calls, customer satisfaction, retaining customers, and following procedures. Supervisors also provided an overall job performance rating using the same rating scale that was used to evaluate these performance areas. A seven-point rating scale was used for these ratings with response options ranging from 1 (far below expectations) to 7 (greatly exceeds expectations). Overall
performance was the mean of all nine rating dimensions. The alpha coefficient was .86.

Results

Table 1 presents correlation coefficients and other descriptive statistics for all variables assessed in this study. Relationships between personality constructs and motivational variables are generally as predicted: the largest correlation for agreeableness is with communion striving ($r = .15$), extraversion is with status striving ($r = .48$), and conscientiousness is with accomplishment strivings ($r = .39$). Conscientiousness is also correlated with status striving ($r = .39$). Furthermore, the personality traits expected to correspond with sales performance are indeed correlated with supervisory ratings ($r = .21$ and .26 for extraversion and conscientiousness, respectively). Finally, as expected, status striving and accomplishment striving are correlated with job performance ($r = .36$ and .21, respectively), while communion striving is not significantly related to success in these sales jobs ($r = -.10$). Taken together, the correlational results support many of the hypotheses postulated in this study and prompted an examination of the relations among these variables using the maximum likelihood method of covariance structure analysis (EQS; Bentler, 1995) to test for mediation.

The first three hypotheses, concerning relationships among the motivational variables and performance, were specifically tested via comparisons of three substantive models. First, a saturated model (Model 1) was tested that includes all hypothesized paths between the personality variables and mediator variables, direct paths from extraversion and conscientiousness to performance, paths from status and accomplishment striving to performance, and paths from accomplishment striving to status and communion striving. Second, a model was tested that eliminates the path between accomplishment striving and status striving (Model 2). Third, a model was tested that retained the striving for accomplishment-status path but eliminated the accomplishment striving-performance path (Model 3). Results of these analyses, as well as additional models to be described below, are shown in Table 2.

Models 2 and 3 are both nested within Model 1, allowing the use of chi-square difference tests to compare models. A comparison of the saturated model (Model 1) and the model leaving out the striving for accomplishment-status link (Model 2) yields a significant chi-square difference of 31.16 (1 df, $p < .01$), supporting at least partial mediation of the accomplishment striving-performance relationship. A comparison of Model 1 with the model leaving out the accomplishment striving-performance link (Model 3) yields an insignificant chi-square difference of .13 (1 df, ns), supporting complete mediation of the accomplishment striving-performance relationship by status striving. Hypothesis 3 is thus supported over Hypothesis 2, as the relationship between accomplishment striving and performance is not direct but rather completely mediated by status striving. Hypothesis 1 is also supported by a significant relationship ($\beta = .41$) between status striving and supervisory ratings of sales performance.

Hypotheses related to the personality variables were similarly tested via a series of comparisons whereby Model 3 was compared to two additional nested models. The first additional model (Model 4), the direct effects only model, eliminated the extraversion-status striving and conscientiousness-accomplishment striving paths. The second additional model (Model 5), the indirect effects only model, retained the personality-mediator paths but eliminated the direct effects from extraversion and conscientiousness on performance. A comparison of Model 3 and Model 4 yields a significant chi-square difference of 57.64 (2df, $p < .01$), suggesting that the effects of extraversion and conscientiousness on performance are at least partially mediated by the motivational variables. A comparison of Model 3 and Model 5 yields an insignificant chi-square difference of 2.48 (2 df, ns), suggesting that the motivational variables mediate the effects of extraversion and conscientiousness on performance.

The hypothesized model of mediation (Model 5, the indirect effects only model) thus fit the data acceptably $\chi^2 (20, N=164) = 27.90$, CFI = .97, NFI = .90, RMSEA = .05. The standardized solution for this model is presented in Figure 1. Hypothesis 4 is supported by the significant linkage between agreeableness and communion striving ($\beta = .18, p < .05$).

Hypothesis 5 is supported, as there is a significant relationship between extraversion and
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status striving (β = .39, p < .01). Hypothesis 6, predicting status striving to mediate the extraversion-performance relationship, is supported by finding the hypothesized mediation model (Model 5) to have a fit equivalent to the fit of the model that also included a direct path between extraversion and performance (Model 3). The extraversion-performance relationship is mediated approximately 76 percent by status striving.

Hypothesis 7 is supported by the link between conscientiousness and accomplishment strivings (β = .48, p < .01). Hypothesis 8, predicting accomplishment striving to mediate the conscientiousness-performance relationship, is supported by finding the hypothesized mediation model (Model 5) to have a fit equivalent to the fit of the model that also included a direct path between conscientiousness and performance (Model 3). To further explore the nature of the effect for conscientiousness, we examined whether the association between conscientiousness and performance was also mediated directly through status striving. To test this, we examined an additional model. The model added a path between conscientiousness and status striving to the model reported in Figure 1. The fit indices did not improve, suggesting no direct relationship between conscientiousness and status striving. This test suggests that a direct path between conscientiousness and status striving is not an alternative to the mediated relationship through accomplishment striving. The overall indices, along with the nested model comparison tests, thus indicate that the theoretical model of mediation (model 5) fits the data well. The conscientiousness-performance relationship is mediated approximately 35 percent by accomplishment and status striving.

Discussion

Relatively little is known about the mechanisms through which distal personality traits affect job performance. Limited research (e.g., Barrick et al., 1993; Borman, White, Pulakos, & Oppler, 1991; Gellatly, 1996) has provided initial support for the long held view (Kanfer, 1991; Mount & Barrick, 1995; Murray, 1938) that the proximal means by which personality affects performance is through a person’s motivation. The present study extends the knowledge of this relationship by focusing on three fundamental cognitive-motivational orientations people may pursue at work, including accomplishment striving (exerting effort to complete work assignments), status striving (exerting effort to perform at a higher level than others), and communion striving (exerting effort to cooperate with coworkers).

Our results demonstrate that status striving and accomplishment striving (indirectly through status striving) mediate relationships between two FFM personality traits (conscientiousness and extraversion) and supervisory ratings of sales performance. Extraverted employees were more likely to be motivated by status striving, which in turn, enabled them to perform better as sales representatives. Conscientious sales representatives were more likely to strive for accomplishments, which linked to performance through status striving. Mediation for the extraversion-performance relationship is relatively easy to interpret. The major portion of the relationship between extraversion and performance was indirect through status strivings, as expected.

The nature of mediation for the conscientiousness-performance relationship is somewhat weaker and more complex. The indirect effect of conscientiousness on striving for status is mediated through accomplishment strivings. Thus, in this sales position striving for achievement operates through competitive excellence (status) rather than directly on job performance. Nevertheless, a moderate direct effect also remained between conscientiousness and performance.

Our results suggest that striving for status, rather than accomplishment striving, is the motivational intention most strongly associated with performance. Nevertheless, the evidence suggests that accomplishment strivings should be retained in models explaining how personality affects work performance. First, modest correlations with status striving and with communion striving suggest that accomplishment striving is indeed a separate construct. Second, the post hoc analyses related to conscientiousness illustrate that the effect of conscientiousness on status striving is mediated by accomplishment striving. For these reasons, we believe it is important for future research to examine all three motivational variables, not just communion striving and status striving.
Communion striving was positively related to agreeableness, as expected. This supports our hypothesis that highly agreeable people are more likely to be motivated to get along with others at work, even though striving for communion was not related to performance in this sales job. Therefore, we are unable to test all dimensions of the proposed motivational model within the context of the present study, and any conclusions related to communion striving are tenuous and incomplete. Future research should examine whether a path between accomplishment striving and communion striving explains performance in jobs where there is greater opportunity to strive for communion.

We should also note that agreeableness, emotional stability, and openness to experience were not found to be strongly related to sales performance, as expected. These findings correspond to recent meta-analytic results reported by Vinchar et al. (1998) indicating that these personality traits were not related to either supervisory ratings or objective indicators of performance in sales jobs. In addition, a facet level analysis revealed that more specific personality scales were not found to be consistently better predictors than the FFM traits. That is, no lower level trait had a significantly larger correlation with both the “relevant” motivational variable (i.e., facets of extraversion with status striving) and the performance variable than those reported for the FFM variables. These results were expected, as the mediator variables and measure of job success in this study were “broad” constructs. In such situations, the most relevant personality predictors are likely to be equally “broad” measures (Stewart, 1999).

Although our empirical findings support the utility of a motivational model based on the broad goals of achievement striving, communion striving, and status striving, we acknowledge that other perspectives of motivation exist. Some perspectives (e.g., Weiss & Cropanzano, 1996; Kanfer & Heggestad, 1997) include emotional processes. Other perspectives focus on differences such as mastery versus learning goals (Dweck, 1986) and autonomous versus controlled goals (Sheldon & Elliott, 1998). Still other perspectives focus more on environmental factors like job design (Hackman & Oldham, 1980). Additional research is needed to integrate these concepts within our model. Moreover, support for the motivational perspective we adopt should not necessarily be interpreted as evidence against other perspectives that similarly help us understand the complex process of human motivation.

A potential limitation of this study is the fact that personality measures and our motivational measures were both obtained from self-responses. This introduces common method bias. Because intentions are virtually impossible to measure except through self-response, future studies may reduce this confound by obtaining alternative indicators of personality. Nevertheless, given the personality-motivation correlations obtained in this study (mean r = .18; maximum r = .48), it seems reasonable to conclude that our measures of personality and motivation are likely assessing separate constructs. A second limitation of this study is the cross-sectional design, which does not allow for an assessment of causality. Thus, for example, we are unable to definitively test the validity of the assumption that accomplishment striving causes status striving. An alternative explanation is that people are motivated to attain status in order to accomplish things.

Overall, this study extends current theory in two primary ways. First, it provides support for a process model of motivation that combines distal personality traits and proximal motivational state variables into one model (Barrick et al., 1993; Kanfer, 1991). In particular, motivational (mediating) mechanisms based on self-regulation are supported as proximal paths through which personality influences behavior at work. Such findings enhance our understanding of how personality affects job performance. These findings also underscore the central role of the individual in determining his or her level of success at work.

Second, our study supports and extends the development of theoretical models of job performance. Motivation has long been viewed as having a central role in performance. Our study adopts the goal perspective and identifies broad motivational constructs that encompass both goal choice and goal striving towards three fundamental orientations at work, striving for communion (e.g., getting along with co-workers), status (e.g., getting ahead of other employees and managers), and accomplishment (e.g., getting things done or being task oriented). Although the relative importance of these
motivational orientations may differ depending on the demands of specific jobs, the proposed framework appears to comprehensively specify a motivational explanation for what people are trying to achieve at work – striving for communion, status, and accomplishment. Assessing an individual’s motivational orientation through these three broad intentions provides one method for comprehensively measuring motivation at work. Future models investigating the determinants of job performance may thus benefit from including measures of communion striving, status striving, and accomplishment striving as indicators of motivation.

References


Appendix A. Factor Structure of the Motivational Orientation Inventory (N = 518)

<table>
<thead>
<tr>
<th>Measures of:</th>
<th>Accomplishment Strivings</th>
<th>Status Strivings</th>
<th>Communion Strivings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accomplishment Strivings (Item Description)</strong></td>
<td>Varimax-rotated principle component</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Attention and Direction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I frequently think about getting my work done.</td>
<td>.62</td>
<td>.16</td>
<td>-.01</td>
</tr>
<tr>
<td>13. I focus my attention on completing work assignments.</td>
<td>.69</td>
<td>.16</td>
<td>-.18</td>
</tr>
<tr>
<td>23. I set personal goals to get a lot of work accomplished.</td>
<td>.64</td>
<td>.19</td>
<td>-.01</td>
</tr>
<tr>
<td>33. I spend a lot of time thinking about finishing my work tasks.</td>
<td>.54</td>
<td>.14</td>
<td>.23</td>
</tr>
<tr>
<td>43. I often consider how I can get more work done.</td>
<td>.54</td>
<td>.14</td>
<td>.18</td>
</tr>
<tr>
<td><strong>Intensity and Persistence</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. I try hard to get things done in my job.</td>
<td>.69</td>
<td>.22</td>
<td>-.12</td>
</tr>
<tr>
<td>16. I put a lot of effort into completing my work tasks.</td>
<td>.73</td>
<td>.15</td>
<td>-.10</td>
</tr>
<tr>
<td>26. I never give up trying to finish my work.</td>
<td>.70</td>
<td>.19</td>
<td>.00</td>
</tr>
<tr>
<td>36. I spend a lot of effort completing work assignments.</td>
<td>.62</td>
<td>.18</td>
<td>.14</td>
</tr>
<tr>
<td>46. I always try to get a lot of work finished.</td>
<td>.57</td>
<td>.41</td>
<td>-.01</td>
</tr>
<tr>
<td><strong>Arousal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I get excited about the prospect of getting a lot of work done.</td>
<td>.62</td>
<td>.41</td>
<td>.17</td>
</tr>
<tr>
<td>19. I feel enthused when I think about finishing my work tasks.</td>
<td>.55</td>
<td>.18</td>
<td>.01</td>
</tr>
<tr>
<td>29. It is very important to me that I complete a lot of work.</td>
<td>.56</td>
<td>.26</td>
<td>.06</td>
</tr>
<tr>
<td>39. I am challenged by a desire to get a lot accomplished.</td>
<td>.39</td>
<td>.20</td>
<td>.16</td>
</tr>
<tr>
<td>49. I get worked up thinking about finishing work.</td>
<td>.20</td>
<td>.22</td>
<td>.38</td>
</tr>
</tbody>
</table>

NOTE: Loadings over .40 in absolute magnitude are given in boldface and items included in each respective scale are also highlighted in boldface.
Appendix A. (Continued)

<table>
<thead>
<tr>
<th>Measures of:</th>
<th>Varimax-rotated principle component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Strivings</td>
<td>Accomplishment</td>
</tr>
<tr>
<td>(Item Description)</td>
<td>Strivings</td>
</tr>
</tbody>
</table>

**Attention and Direction**

2. I frequently think about ways to advance and obtain better pay or working conditions.  
   [.21 .43 .00]

12. I focus my attention on being the best sales representative in the office.  
   [.29 .70 -.01]

22. I set personal goals for obtaining more sales than anyone else.  
   [.18 .77 -.01]

32. I spend a lot of time contemplating ways to get ahead of my coworkers.  
   [-.10 .56 .29]

42. I often compare my work accomplishments against coworkers' accomplishments.  
   [-.01 .44 .23]

**Intensity and Persistence**

5. Every day, I try to be the most successful employee in the office.  
   [.42 .53 -.06]

15. I put a lot of effort into moving up and obtaining a better job.  
   [.41 .47 .11]

25. I never give up trying to perform at a level higher than others.  
   [.19 .74 .01]

35. I expend a lot of effort to develop a reputation as a high achiever.  
   [.39 .50 .25]

45. I always try to be the highest performer.  
   [.25 .73 -.05]

**Arousal**

8. I get excited about the prospect of being the most successful sales representative.  
   [.28 .67 .06]

18. I feel a thrill when I think about getting a higher status position at work.  
   [.23 .56 .01]

28. I care a lot about being the best at my job.  
   [.41 .65 -.01]

38. I am challenged by a desire to perform my job better than my coworkers.  
   [.01 .70 .13]

48. I get worked up thinking about ways to become the highest performing sales representative.  
   [.02 .62 .27]
## Measures of: __Varimax-rotated principle component__

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Accomplishment Strivings</th>
<th>Status Strivings</th>
<th>Communion Strivings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention and Direction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.  I frequently think about ways to better cooperate with coworkers and supervisors.</td>
<td>0.40</td>
<td>0.14</td>
<td>0.21</td>
</tr>
<tr>
<td>11. I focus my attention on getting along with others at work.</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.50</td>
</tr>
<tr>
<td>21. I set personal goals to help me build better relationships and work cooperatively with coworkers and supervisors.</td>
<td>0.45</td>
<td>0.19</td>
<td>0.15</td>
</tr>
<tr>
<td>31. I spend a lot of time contemplating whether my coworkers like me.</td>
<td>-0.18</td>
<td>0.00</td>
<td>0.64</td>
</tr>
<tr>
<td>31. I spend a lot of time contemplating whether my coworkers like me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. I often consider how I can be a better team player.</td>
<td>0.37</td>
<td>0.09</td>
<td>0.40</td>
</tr>
<tr>
<td><strong>Intensity and Persistence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.  I try hard to get along with my coworkers and supervisors.</td>
<td>0.40</td>
<td>-0.02</td>
<td>0.18</td>
</tr>
<tr>
<td>14. I put a lot of effort into being a team player.</td>
<td>0.53</td>
<td>0.08</td>
<td>0.16</td>
</tr>
<tr>
<td>24. I never give up trying to be liked by my coworkers and supervisors.</td>
<td>0.13</td>
<td>0.01</td>
<td>0.52</td>
</tr>
<tr>
<td>34. I expend a lot of effort developing a reputation as someone who is easy to get along with.</td>
<td>0.12</td>
<td>0.01</td>
<td>0.68</td>
</tr>
<tr>
<td>44. Since starting this job, I have always tried to get along with everyone.</td>
<td>0.42</td>
<td>0.04</td>
<td>0.27</td>
</tr>
<tr>
<td><strong>Arousal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.  I get excited about the prospect of having coworkers who are good friends.</td>
<td>0.22</td>
<td>0.10</td>
<td>0.44</td>
</tr>
<tr>
<td>17. I enjoy thinking about cooperating with my coworkers and supervisors.</td>
<td>0.35</td>
<td>0.12</td>
<td>0.47</td>
</tr>
<tr>
<td>27. I care a lot about having coworkers and supervisors who are like me.</td>
<td>-0.03</td>
<td>0.10</td>
<td>0.52</td>
</tr>
<tr>
<td>37. I am challenged by a desire to be a team player.</td>
<td>0.31</td>
<td>0.08</td>
<td>0.42</td>
</tr>
<tr>
<td>47. I get worked up thinking about ways to make sure others like me.</td>
<td>-0.15</td>
<td>0.11</td>
<td>0.70</td>
</tr>
</tbody>
</table>
Author Notes

Murray R. Barrick, Broad Graduate School of Management; Greg L. Stewart, Marriott School of Management; Mike Piotrowski, The Hartford Financial Services Group.

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Table 1.

Descriptive Statistics and Intercorrelations Among all Variables.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>103.8</td>
<td>14.9</td>
<td>(.89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>86.7</td>
<td>18.4</td>
<td>.41**</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>107.5</td>
<td>13.5</td>
<td>.47**</td>
<td>.34**</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeable</td>
<td>97.3</td>
<td>12.5</td>
<td>-.23**</td>
<td>-.18**</td>
<td>-.01</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>95.8</td>
<td>16.1</td>
<td>.36**</td>
<td>.20**</td>
<td>.21**</td>
<td>-.03</td>
<td>(.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communion Striving</td>
<td>28.3</td>
<td>5.2</td>
<td>.04</td>
<td>-.11</td>
<td>.01</td>
<td>.15*</td>
<td>.09</td>
<td>(.76)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status Striving</td>
<td>43.3</td>
<td>7.6</td>
<td>.48**</td>
<td>.18**</td>
<td>.39**</td>
<td>-.11</td>
<td>.12</td>
<td>.14*</td>
<td>(.89)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishment Striving</td>
<td>46.9</td>
<td>5.5</td>
<td>.32**</td>
<td>.15*</td>
<td>.39**</td>
<td>.10</td>
<td>.09</td>
<td>.08</td>
<td>.50**</td>
<td>(.88)</td>
<td></td>
</tr>
<tr>
<td>Job Performance</td>
<td>35.9</td>
<td>12.8</td>
<td>.21**</td>
<td>.14*</td>
<td>.26**</td>
<td>-.12</td>
<td>-.05</td>
<td>-.10</td>
<td>.36**</td>
<td>.21**</td>
<td>(.86)</td>
</tr>
</tbody>
</table>

aN = 164.

Reliabilities are reported in the diagonal. The 95% confidence interval for correlations ≥ .16 does not include zero (.01 < .16 < .31). The 90% confidence interval for correlations ≥ .14 does not include zero (.01 < .14 < .27).

** p < .05 (two-tailed).

* p < .05 (one-tailed).
Table 2

Fit Indices for Covariance Structure Analysis

<table>
<thead>
<tr>
<th>Model Number and Type</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>NFI</th>
<th>RMSEA</th>
<th>Comparison</th>
<th>$\Delta\chi^2$</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Saturated Model</td>
<td>25.29</td>
<td>17</td>
<td>.97</td>
<td>.91</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Without accomplishment-status path</td>
<td>56.45</td>
<td>18</td>
<td>.84</td>
<td>.79</td>
<td>.11</td>
<td>2 vs. 1</td>
<td>31.16**</td>
<td>1</td>
</tr>
<tr>
<td>3. Without accomplishment-performance path</td>
<td>25.42</td>
<td>18</td>
<td>.97</td>
<td>.91</td>
<td>.05</td>
<td>3 vs. 1</td>
<td>0.13</td>
<td>1</td>
</tr>
<tr>
<td>4. Direct Effects Only&lt;sup&gt;a&lt;/sup&gt;</td>
<td>83.06</td>
<td>20</td>
<td>.73</td>
<td>.70</td>
<td>.14</td>
<td>4 vs. 3</td>
<td>57.46**</td>
<td>2</td>
</tr>
<tr>
<td>5. Indirect Effects Only&lt;sup&gt;b&lt;/sup&gt;</td>
<td>27.90</td>
<td>20</td>
<td>.97</td>
<td>.90</td>
<td>.05</td>
<td>3 vs. 1</td>
<td>2.48</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. CFI = Comparative Fit Index; NFI = Normed Fit Index (any goodness of fit > .90 is an indication of acceptable overall model fit); RMSEA = Root Mean Square Error of Approximation (any RMSEA < .10 is an indication of acceptable fit).

<sup>a</sup>With direct effects on performance only. This model does not include paths from personality to the motivational variables.

<sup>b</sup>With indirect effects only for personality. This model does not include direct effects from personality to performance, although there are direct effects from the motivational variables to performance. Thus, this model represents the hypothesized mediation model.
Figure 1.
The Standardized Solution for the Indirect Effects Only Model (Model 3).