Personality and Emotional Labor as Predictors of Turnover in Customer Service Call Centers

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Call center customer service representatives were screened for (a) the extent to which they are likely to experience emotional labor at work, and (b) their general negative and positive affectivity. Both job-specific emotional labor and general emotional stability were significant predictors of various indices of withdrawal cognitions, job satisfaction, and withdrawal behaviors.

Theory and research about emotional functioning in the workplace is emerging in academic (e.g., Arvey, Renz, & Watson, 1993) and popular literature (e.g., Goleman, 1995). There is increasing interest in the explanatory role that emotions can play in understanding important individual and organizational outcomes. In particular, there is considerable interest in the relationship between emotional expression and employee effectiveness in customer service jobs (Morris & Feldman, 1996). Due to growth in the service sector, and the significant interpersonal and emotional demands of customer service jobs, there is a greater need for identifying which emotional constructs relate to various personal and organizational outcome variables. This then paves the way for effective pre-employment screening of employees based on their likelihood to experience emotionally disrupted job performance.

Emotional labor is being touted as a useful construct for understanding how performance of service role job duties can lead to emotional duress, lowered job satisfaction, and subsequent withdrawal from work via absenteeism and turnover. Recently, Grandey (2000) proposed a model of emotional labor that incorporates several individual differences and situational factors that combine to create conditions requiring emotional labor. Emotional labor is defined as the effort expended (and the concomitant physiological arousal) to manage or regulate one’s emotional reactions at work. This effort is necessary for exhibiting those performance behaviors valued by the organization, and suppressing the expression of less acceptable behaviors. Service employees are particularly vulnerable to a demand for emotional labor, because their jobs generally require maintaining a friendly and positive demeanor despite job characteristics that may engender negative emotional reactions (e.g., irate customers, complex problem solving, or hectic work pace). Any work setting which engenders negative emotional reactions from employees, while requiring the suppression of certain behaviors associated with these emotions (e.g., yelling, abruptly hanging up the phone, or scowling), is fertile ground for emotional labor. The stereotypical customer service call center is such a work place. The research reported here was conducted in several call centers.

Generally speaking, the greater the emotional labor, the greater the likelihood that an employee will experience such personal outcomes as stress (Lazarus, 1999), emotional exhaustion (Wright and Cropanzano, 1998), burnout, (Cordes & Dougherty, 1993; Jackson, Schwab, & Schuler, 1986; Klein & Verbeke, 1999), and job dissatisfaction (Morris & Feldman, 1997). These personal outcomes can then lead to predictable organizational outcomes such as absenteeism and turnover, not to mention performance decrements (Wright & Cropanzano, 1998).

The conceptual basis for measurement and prediction of emotional labor is in its infancy, but some foundation does exist. Emotional labor is expected to result from frequent and repeated performance of job activities that require the
employee to exhibit behaviors that are inconsistent with his/her emotional state. More specific to the customer service situation, the work setting that evokes emotional reactions is the combination of interactions with customers and the behavioral expectations of the organization. As noted by Grandey (2000), this can be viewed as both chronic and acute situational factors requiring emotional regulation. It follows logically that an employee who must expend more emotional labor to maintain job performance, is more prone to the deleterious personal outcomes mentioned above. Identifying those prospective employees who are more likely to experience job activities as negative, and thus labor emotionally in order to perform, would contribute to more effective HR management, and more effective management of organizational outcomes such as unwanted voluntary turnover.

Call center managers and HR representatives generally concur that voluntary turnover is one of the most significant problems facing the call center industry (Call Center Network Group, 1999). It is not uncommon for call centers to invest $5000 to $7000 in hiring and training costs for new hires, while also experiencing anywhere from 50% to 300% annual turnover (Call Center Network Group, 1999). This translates into millions of dollars lost annually in even medium-sized call centers. Initial screening of high turnover-risk job applicants could provide extraordinarily high utility to these employers.

There is little research on how individual differences relate to actual turnover (cf., Barrick & Mount, 1996). Clearly there is potential utility for this approach in that job satisfaction has been linked to trait affectivity (Arvey, Bouchard, Segal, & Abraham, 1989; Barrick & Mount, 1996), as well as job-specific emotional labor as mentioned above. In this paper we report on the development of an employment screening process designed to measure these affective constructs thought to underlie voluntary turnover. Specifically, we screened incumbent and prospective call center customer service representatives for (a) job-specific emotional reactions thought to underlie emotional labor, and (b) personality traits that contribute to employees’ general affective functioning. We measured a variety of turnover-related criterion variables (i.e., withdrawal cognitions, intentions to quit, job satisfaction, absenteeism, and tardiness), as well as actual turnover. Our primary research question was whether job-specific emotional labor and trait affectivity independently predicted job attitudes and turnover. We also were interested in whether the two combined to increment the predictive validity of turnover in the customer service environment.

**Method**

**Participants**

**Sample 1 (concurrent):** A total of 150 incumbent call center customer service representatives completed the CCFI™. This sample consisted of 67 men (45%), 69 women (46%), and 14 (8%) of unknown sex. There were 92 Whites (61%), 21 Blacks (14%), 25 (17%) non-Black minorities, and 12 (8%) of unknown ethnicity. The average age was 29.08 years (SD = 8.45). The participants were employees of four different call centers. The number of participants from each call center was 13 (.8%), 18 (12%), 34 (23%), and 74 (49%).

**Sample 2 (predictive):** A total of 71 applicants for entry-level customer service jobs in a call center were assessed with the CCFI™ between November, 1999 and March, 2000. This sample consisted of 17 men (24%), 54 women (76%). There were 31 Whites (44%), 19 Blacks (27%), 20 (28%) non-Black minorities, and 1 (1%) of unknown ethnicity.

**Description of the Call Center Fit Index (CCFI™)**

The CCFI™ was designed to measure both job-specific emotional labor, and trait emotionality for call center service employees. It consists of two sections. Section A comprises 40 forced-choice tetrads that were constructed in the manner described by Bernardin (1986). To summarize, a job analysis was conducted and data were collected via, direct observations, focus groups, and structured questionnaires. The focus was on identifying specific call center customer service job characteristics that were frequently encountered, and likely sources of frustration, discomfort, or negative emotional reactions. A pool of 160 descriptive statements was created, and each item was rated on a five-point scale by two independent groups. A total of 119 incumbent call center representatives from seven different call centers were asked to rate each statement with respect to its frequency of occurrence using a 5-point scale anchored with: Never, Rarely, Occasionally, Frequently, and Always.

Independently, 292 university students rated each item for “how frustrated they would be having to perform each job duty”. These data were used to create tetrads that had the following features: (1) two job relevant and two job-
irrelevant items, and (2) four items equated for the general level of frustration they would cause.

The 160 job statements were rank-ordered with respect to their job relevance. Any item that received a mean relevance rating below 2.00 was removed from consideration. This left 97 items. We performed a similar rank order analysis for the data gathered from the independent sample of university undergraduates. That is, we rank-ordered their average ratings of frustration for the 160 PDQ items. We then used a series of decision rules to group items into tetrads by using both the relevancy and frustration ratings. Thirteen tetrads were created from the most job relevant items (i.e., mean relevance ratings > 2.94), 14 from intermediate job relevance items (i.e., 2.51 < rating < 2.91, and 13 from modest job relevance items (i.e., 2.09 < rating < 2.49). Some items were used in more than one tetrad, but there were no duplicated pairings. The result was 40 tetrads. The coefficient alpha for the Section A Emotional Labor Scale is .84 while the split-half reliability is .82.

Section B was designed to measure Big Five traits. Specifically, it measures achievement, conscientiousness, emotional stability, and extraversion. Notice that the conscientiousness factor was split into its achievement versus orderliness sub-factors. Openness is not measured by Section B. The coefficient alphas for the five personality scales are Emotional Stability (.83), Conscientiousness (.78), Extraversion (.77), Achievement (.76), and Agreeableness (.65).

**Criterion Data**

**Sample 1:** The first two criterion measures assess turnover intentions. The first measure of turnover intentions was derived from items embedded in Section B of the CCFI™. Specifically, items describing various withdrawal cognitions were added to the end of Section B and were rated on the same scale as the personality items. These items were deliberately written to appear to be part of the Section B questions about general personality tendencies. In this way, the respondents were not alerted to the fact that they were providing unique information about job turnover intentions. The Withdrawal Cognitions measure is a linear composite of 16 items asking such things as: “I look through the classified job ads in the newspaper”, “I think about other jobs that I would enjoy more than my current one”, “I dread getting up to go to work”, “I make joking or sarcastic comments about my job”, and “I have been very close to quitting my current job”. The coefficient alpha for Withdrawal Cognitions is .89.

In addition to the items embedded in Section B, a separate criterion variable page was included in each research questionnaire. This page included various questions about turnover intentions, as well as job satisfaction items, and self-reports of absenteeism and tardiness. These also were rated on a 1 (seldom) to 5 (frequently) scale. The Intentions to Quit measure is a composite of three of these questions asking specifically about intentions to quit. These items are: “How often have you thought about quitting your current job?”, “What are the chances you will look for another job within the next six months or so?”, and “What are the chances that you will take another job within the next six months or so”? The coefficient alpha for Intentions to Quit is .89.

The third criterion measure assesses job satisfaction. It is a linear composite of six items asking about global job satisfaction as well as satisfaction with facets such as pay, supervision, and working conditions. The coefficient alpha for JOB SATISFACTION is .75.

The fourth criterion measure is self-reported absenteeism and tardiness. It is a combination of two items that asked each incumbent to indicate the number of days in the previous six months that they had been (a) late for work and (b) absent from work. The measure is called Withdrawal Behaviors.

**Sample 2:** The criterion was a dichotomous variable reflecting actual turnover. Specifically, each participant was coded as either working or not as of March, 2000. Recall that these participants were all screened in November, 1999. Therefore, this turnover variable reflects turnover in the first five months of employment in a specific call center. As of March, 2000, 28 representatives had quit and 42 were still employed.

**Results**

The results from Sample 1 will be presented first. Predictor and criterion intercorrelations appear in Tables 1 and 2. The predictors are relatively independent of each other except that
Achievement and Emotional Stability correlate $r = .63$. Agreeableness and Conscientiousness also correlate at $r = .52$. It is important to note that the Emotional Labor score does not significantly correlate with any of the Big Five measures. The criterion measures also are relatively independent except for the correlation between Withdrawal Cognitions and Job Satisfaction ($r = .71$).

The bivariate uncorrected validity coefficients between the predictor scores (CCFI™ Emotional Labor score and Personality Factor scores) and the four criterion measures appear in Table 3. The Emotional Labor, Emotional Stability, and Agreeableness scores correlate significantly with three criterion measures each. The other predictors correlate with two criterion measures each. Employees who reported being most bothered by job characteristics (i.e., lower Emotional Labor score) also reported more negative job cognitions, as well as higher absenteeism and tardiness. A similar pattern was found for Emotional Stability and Agreeableness, as well as the other personality factors.

The only two significant predictors of self-reported withdrawal behavior (i.e., absenteeism and tardiness) were the Emotional Labor and Emotional Stability scores.

To better determine the predictive roles of Emotional Labor and Emotional Stability, we conducted a series of regression analyses.
EMOTIONAL LABOR AND TURNOVER

Emotional Labor Score  .17  .16  .05  -.25  -.07
Emotional Stability     .47  -.06 .33  -.17  .09
Conscientiousness      .32  -.15 .19  -.07  -.05
Extraversion           .17  .02  .21  .12  .06
Achievement            .34  .00  .29  .10  .02
Agreeableness          .30  -.16 .29  -.09 .16

Note. Coefficients in boldface are significant p < .05; dfs range from 98 to 148; one-tailed tests. * These data are from Sample 2.

Hierarchical and Stepwise Regression Analyses

We conducted a series of hierarchical regression analyses to determine the incremental relationship between emotional labor and emotional stability. Emotional labor was a better predictor of Absenteeism and Tardiness, while Emotional Stability was a better predictor of Withdrawal Cognitions and Job Satisfaction. The two combined to explain between 10% and 26% of the variance in the criteria. Rather unexpectedly, neither measure of emotional constructs related to Intentions to Quit.

We conducted stepwise analyses to explore the configuration of emotional labor and personality factors that maximally predict each criterion measure. These results indicate the emotional labor and emotional stability were generally the best predictors of the various job attitude and withdrawal criteria. Table 5 reveals that the Emotional Labor and Emotional Stability scores significantly related to Withdrawal Cognitions, and Absenteeism and Tardiness. Interestingly, Agreeableness also predicted Withdrawal Cognitions and Job Satisfaction. Achievement also related to Absenteeism and Tardiness.

The results from Sample 2 in Table 3 indicate that the various predictors do not significantly predict the dichotomous turnover criterion. Despite the obvious artifacts of range restriction and sampling error associate with the sample of 70 job applicants, we were surprised at the lack of univariate relationships here. We explored several other predictor configurations. Specifically, we were interested in whether an operational decision rule that had been used to categorize applicants into turnover risk groups predicted turnover. The decision rule is a banding rule derived in another call center that combined emotional labor and emotional stability. We found that this decision rule did predict actual turnover (r = .22, p < .032).

Also, recall that the tetrads that assessed emotional labor were based on job descriptions of varying degrees of relevance to the call center job. We examined the differences between the highest, moderate and modest relevance tetrads scores. As expected, the highest and moderate relevance tetrads were more related to turnover than the modest relevance tetrads (rs = .18 and -.18, p < .07, and r = -.13, p < .133, respectively). In addition, preliminary item analyses have revealed that certain tetrad scales empirical derived from Sample 1, cross-validate in Sample 2. This suggests that meaningful variance is being assessed by the Emotional Labor score. We are currently investigating how the degree of relevance of the emotional labor items may moderate the predictive validity of this measure. We also are collecting actual turnover data for a large sample of call center customer service employees.
Table 4
Hierarchical Regression Analysis for Various Criterion Variables

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>β</th>
<th>p of β</th>
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<tr>
<td>Withdrawal Cognitions</td>
<td></td>
<td></td>
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<tr>
<td>1. Labor</td>
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<tr>
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<td>Job Satisfaction</td>
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<td>1. Labor</td>
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<tr>
<td>1. Stability</td>
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<td>“”</td>
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<tr>
<td>Absenteeism and Tardiness</td>
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<td></td>
</tr>
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<td>1. Labor</td>
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Note: Multiple Rs in boldface are significant p < .001.

Discussion

These results suggest that employees' emotional functioning is related to their experiences of work. Clearly there are individual differences in trait affectivity, and this has been shown to relate to affective reactions at work as well as withdrawal from work (Mount, Barrick, & Stewart, 1998). The current results suggest that the experience of emotional labor, at least in the customer service environment studied here, is relatively independent of trait affectivity. More importantly, these two constructs of emotional functioning explain unique variance in turnover-related job attitudes and cognitions. The operational decision rule that had been developed from another call center, predicted actual turnover results.

We also conducted a preliminary survival analysis on the Sample 2 turnover data. Figure 1 presents the survival functions for the three groups identified by the CCFI™. The CCFI™ combines Section A emotional labor scores with emotional stability and conscientiousness scores to yield a turnover risk designation. This mechanical scoring rule was developed in another organization, using data not reported here. Therefore, the data presented in Figure 1 represent a cross validation of the scoring scheme that underlies the turnover risk designations. The ordinate of the graph in Figure 1 is the proportion of the sample "surviving" or remaining employed for each duration of time on the abscissa. Clearly, the Low Risk group stays employed longer than either of the other groups. The Marginal and High risk groups are more similar, in that their rate of quitting increases more quickly.

Taken together, these results suggest that the independent assessment of both general personality traits as well as job-specific affective reactions can enhance the prediction of voluntary turnover. These results are consistent with the limited research that exists in this area. Specifically, Mount, Barrick, & Stewart's (1998) meta-analytic results revealed that three of the Big Five traits (i.e., emotional stability, agreeableness, and conscientiousness) were associated with performance in jobs involving interactions with others (e.g., customer service). These same three traits were significantly related to turnover-related job attitudes and cognitions. Future research can more fully explore how emotional labor and general personality functioning combine to explain turnover and other job withdrawal behaviors.

References

Bernardin, H.J. (1987). Development and validation of a forced choice scale to measure job-related...

Table 5
Stepwise Regression Analyses for Each of the Criterion Variables.

<table>
<thead>
<tr>
<th>Withdrawal Cognitions</th>
<th>Predictors</th>
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**FULL MODEL**

R = .54

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**FULL MODEL**

R = .38

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<th>Predictors</th>
<th>β</th>
<th>p of β</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>-.26</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Emotional Stability</td>
<td>-.40</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Achievement</td>
<td>.35</td>
<td>.001</td>
</tr>
</tbody>
</table>

**FULL MODEL**

R = .41

*Note*: Multiple Rs in boldface are significant p < .001.
Figure 1. The survival functions for CCFI-based high, marginal, and low risk turnover groups.