

University of Houston

From the Selected Works of L. A. Witt

2004

When conscientiousness isn't enough: Emotional exhaustion and call volume performance among call center customer service representatives



Available at: <https://works.bepress.com/witt/21/>

Journal of Management

<http://jom.sagepub.com/>

When Conscientiousness Isn't Enough: Emotional Exhaustion and Performance Among Call Center Customer Service Representatives

L. A. Witt, Martha C. Andrews and Dawn S. Carlson

Journal of Management 2004 30: 149

DOI: 10.1016/j.jm.2003.01.007

The online version of this article can be found at:

<http://jom.sagepub.com/content/30/1/149>

Published by:



<http://www.sagepublications.com>

On behalf of:



[Southern Management Association](#)

Additional services and information for *Journal of Management* can be found at:

Email Alerts: <http://jom.sagepub.com/cgi/alerts>

Subscriptions: <http://jom.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://jom.sagepub.com/content/30/1/149.refs.html>

>> [Version of Record](#) - Feb 1, 2004

[What is This?](#)



Pergamon

Journal of Management 2004 30(1) 149–160

**JOURNAL OF
MANAGEMENT**

When Conscientiousness Isn't Enough: Emotional Exhaustion and Performance Among Call Center Customer Service Representatives

L.A. Witt*

University of New Orleans, Department of Management, New Orleans, LA 70148-1560, USA

Martha C. Andrews

*University of North Carolina at Wilmington, Department of Management and Marketing,
Wilmington, NC 28403-5969, USA*

Dawn S. Carlson

Baylor University, Department of Management, Waco, TX 76798, USA

Received 15 June 2002; received in revised form 1 November 2002; accepted 16 January 2003

The authors examined the relationship of the interaction between emotional exhaustion and conscientiousness with objectively-measured call volume performance and subjectively-measured service quality ratings among 92 call center customer service representatives (CSR's) of a financial services institution. Results supported the interactive effects on call volume but not service quality. Specifically, the relationship between emotional exhaustion and call volume was stronger among high- than low-conscientiousness CSR's. Among CSR's reporting low levels of emotional exhaustion, those high in conscientiousness achieved higher call volumes than those low in conscientiousness. In contrast, among CSR's reporting high levels of emotional exhaustion, those high in conscientiousness achieved lower call volumes than those low in conscientiousness. Implications for both the personality and stress literatures are discussed. Practical implications for human resources managers also are offered.

© 2003 Elsevier Inc. All rights reserved.

The concept of emotional exhaustion gained widespread research attention following Maslach and Jackson's (1981) conceptualization of burnout. Emotional exhaustion is characterized by "... a lack of energy and a feeling that one's emotional resources are used up" (Cordes & Dougherty, 1993: 623). Emotional exhaustion occurs as individuals faced

* Corresponding author. Tel.: +1-504-280-6960; fax: +1-504-280-3951.

E-mail addresses: lwitt@uno.edu (L.A. Witt), andrewsm@uncw.edu (M.C. Andrews), Dawn_Carlson@Baylor.edu (D.S. Carlson).

with emotional and psychological demands experience a general loss of feeling and concern (Gaines & Jermier, 1983).

The consequences of emotional exhaustion for organizations are significant, as it leads to increased withdrawal behavior (Lee & Ashforth, 1996) and decreased job performance (Babakus, Cravens, Johnston & Moncrief, 1999). Based on evidence suggesting that burnout is associated with job context and that the level of emotional exhaustion experienced depends largely on the nature of the employee-client relationship (Cordes & Dougherty, 1993), we consider emotional exhaustion to be a state-like individual difference that is largely determined by context. This view is consistent with the historical conceptualization of emotional exhaustion as a situationally-induced phenomenon that leads to lower job performance (Freudenberger, 1974; Maslach & Jackson, 1981). Indeed, almost all of the research effort has been focused on situational antecedents, such as role clarity, role conflict, workload, and work pressure (Lee & Ashforth, 1996). However, findings from recent studies suggest that some workers are more predisposed to experience emotional exhaustion than others (e.g., Klein & Verbeke, 1999; Zellars, Perrewe & Hochwarter, 2000). If individual differences affect the level of emotional exhaustion experienced, do they also affect the degree to which emotional exhaustion impacts work outcomes? If so, managers might be able to more effectively identify targets for emotional support (Cohen & Wills, 1985) and therefore help them enhance their job performance.

Since the mid-1980s, there has been a resurgence of interest in personality as a paradigm through which to capture the variance of job performance contributed by individual differences (e.g., Barrick, Mount & Judge, 2001). Conscientiousness is the personality dimension among the Big Five most consistently and strongly linked with job performance across most occupations (Barrick & Mount, 1991; Barrick et al., 2001; Hough, Eaton, Dunnette, Kamp & McCloy 1990; Hertz & Donovan, 2000; Salgado, 1997; Tett, Jackson & Rothstein, 1991). Behling (1998) argued that next to intelligence, conscientiousness is the most valid individual differences predictor of job performance. Conscientiousness has been equated with being thorough, efficient, organized, reliable, and responsible (McCrae & John, 1992). In an effort to link the emotional exhaustion and personality literatures to better understand the manner in which emotional exhaustion influences job performance, we examined the interactive effects of emotional exhaustion and conscientiousness on quality and quantity aspects of job performance.

Emotional Exhaustion and Job Performance in Call Centers

Hobfoll's (1989, 2001; Hobfoll & Shirom, 2001) conservation of resources (COR) theory has been used as a basis for understanding the correlates of emotional exhaustion (Lee & Ashforth, 1996). According to COR theory, individuals become emotionally exhausted when they do not have enough resources to meet work demands. Such resources may include various types of social support, autonomy, participation in decision-making, and control (Cordes & Dougherty, 1993). Work demands can include role conflict and ambiguity, role overload, and work pressure. According to COR theory, when demands exceed resources, job performance is reduced (Babakus et al., 1999; Maslach & Jackson, 1985; Wright & Bonett, 1997; Wright & Cropanzano, 1998).

Conscientious individuals are hardworking, dependable, responsible, and achievement-oriented (Barrick & Mount, 1991, 1993). We suggest that highly conscientious employees are more likely to be affected by emotional exhaustion than employees low in conscientiousness. When not emotionally exhausted, workers high in conscientiousness are likely to perform at high levels, while those low in conscientiousness are likely to perform at low levels. However, when work demands exceed resources (i.e., when emotionally exhausted), highly conscientious individuals are unlikely to be capable of maintaining high levels of performance. Simply put, they may have nothing left to give. In contrast, because they are not as concerned with performing at high levels and therefore generally put forth little effort, workers low in conscientiousness are unlikely to be as affected by emotional exhaustion.

We continue to develop this line of reasoning by focusing on a job that may be susceptible to emotional exhaustion, namely call center customer service representatives (CSRs). Maslach and Jackson (1981) initially proposed that those who have the most frequent and intense interpersonal contact experience the highest level of emotional exhaustion. Hence, many of the studies examining emotional exhaustion have been concentrated in the health-care industry (e.g., Zellars & Perrewe, 2001). However, Cordes and Dougherty (1993) predicted that CSR's also experience high levels of burnout. They typically have frequent and intense interactions with multiple others. Moreover, CSR's are often considered boundary spanners, as they interact with at least three groups of constituencies—supervisors, coworkers, and customers (Singh, Goolsby & Rhoads, 1994). They are apt to experience high levels of emotional exhaustion, because each constituent group places different demands on them (Von Emster & Harrison, 1998). This is most likely to occur when they believe that customer demands may not be met by the organization (Cordes & Dougherty, 1993). Singh et al. (1994) reported that CSR's experience higher levels of emotional exhaustion than social and welfare workers, mental health workers, medical residents, and law enforcement officers.

The emergence of the call center industry in recent years has spawned research specifically focusing on the unique characteristics of call centers (e.g., Adler, 2002; Adorno & Bining, 2001; Bennington, Cummane & Conn, 2000; Holman, Chissick & Totterdell, 2002; McCulloch & Turban, 2001). Designed with the intention of helping companies achieve economies of scale in service delivery and sales/marketing efforts, call centers typically consist of five to several hundred workers who conduct customer transactions by phone. These transactions are either initiated by the customer (i.e., in-bound) or the worker (i.e., out-bound). Call center CSR's typically are provided with explicit, specific operational guidelines in the forms of "talk time" (i.e., the phrase used in call centers to refer to targeted average call length) and customer interaction scripts. Scripts may specify not only phrases to be used at different points in the conversation (e.g., "Thank you for calling Company A. How may I help you?") but also "display rules" (Hochschild, 1983; i.e., emotions to be manifested during the interaction with the customer). Following display rules may provide sufficient stress to bring on emotional exhaustion for many workers. Indeed, as experiencing emotions increases both psychological and physiological arousal (Ashforth & Humphrey, 1995), the frequent, continuous expression of emotion is likely to lead to emotional exhaustion (Morris & Feldman, 1996, 1997). However, anecdotal evidence from call center employees and their managers suggests that the pressure to handle calls quickly while simultaneously following scripts and expressing emotion to create a positive customer experience is what leads to emotional exhaustion.

The focus on talk time and customer interaction scripts reflects the performance criteria common to call centers. Call center CSR's are expected to handle a specified number of calls daily along with a target for the average call length (e.g., 230 s). The call center's abandonment rate (i.e., percentage of customers who hang up before being answered) is often a heavily weighted criterion of managerial performance. Accordingly, the speed and volume of calls comprise an important criterion of CSR performance. CSR's are also expected to deliver quality service by showing care and concern for the customer (Singh et al., 1994). Thus, call center managers place emphasis on both transaction speed and the quality of the customer service experience during the call (Batt, 1999). Given the industry emphasis on speed and quality, we considered both as appropriate to examine the joint effects of emotional exhaustion and conscientiousness. We examined speed objectively in terms of call volume. Call volume performance refers to the number of phone transactions handled in a defined period. We examined quality subjectively in terms of a rating.

Placing a high valence on maintaining high quality service within the specified talk time, highly conscientious CSR's are likely to consistently exert effort to perform congruent with operational guidelines (i.e., creating a positive customer service experience by manifesting the appropriate displayed emotions within the specified time parameters). When not emotionally exhausted, they are likely to maintain high call volumes and delivery quality experiences to customers. However, when psychologically spent, the CSR's high in conscientiousness may be incapable of high volumes and quality service. The energy needed to display the scripted emotions at a fast pace is unavailable. In contrast, because they generally do not exert themselves to perform well, the CSR's low in conscientiousness are less likely to be hampered when demands exceed their resources. In other words, the low-conscientious CSR's may be less likely to draw on their diminished capacity of resources. Thus, the highly conscientious CSR's are more likely to be affected by emotional exhaustion than CSR's low in conscientiousness.

Hypothesis 1: Emotional exhaustion and conscientiousness interact in the prediction of call volume performance. Specifically, emotional exhaustion is more strongly related to call volume among high- than low-conscientiousness CSR's.

Hypothesis 2: Emotional exhaustion and conscientiousness interact in the prediction of customer service quality. Specifically, emotional exhaustion is more strongly related to service quality among high- than low-conscientiousness CSR's.

Method

A total of 92 call center CSRs employed by a financial services institution participated in the study. Of the 92, 20 (22%) were men, 72 (78%) were women, 40 (43%) were non-minorities, and 52 (57%) were minorities.

Measures

Emotional exhaustion. We developed a 5-item scale ($\alpha = .72$) specific to the call center CSR occupation. Items were based not only on theory but also on interviews of 37 CSR's,

eight members of the management team, and the human resources director responsible for the call center. There were several reasons for this undertaking. First, while the Maslach and Jackson (1981) burnout inventory (MBI) is the most widely used measure of burnout, it has been accused of having restricted applicability (Pines & Aronson, 1988). The MBI has often been used in the human services professions including nursing (e.g., Zellars et al., 2000), social work (e.g., Wright & Cropanzano, 1998), and police work (Gaines & Jermier, 1983), but it has had to be modified to be used in the field of marketing (e.g., Singh et al., 1994; Von Emster & Harrison, 1998). Second, attempts such as Pines and Aronson's (1988) burnout measure, while resulting from attempts to be sufficiently generic to capture a wide variety of occupations, failed to adequately capture the three dimensions of burnout (Enzmann, Schaufeli, Janssen & Rozeman, 1998). Hence, many researchers have returned to the MBI and modified it to be occupation-specific (e.g., Balogun, Helgemoe, Pellegrini & Hoerberlein, 1995; Lee & Ashforth, 1993; Singh et al., 1994). We followed along these lines, as we incorporated results of the content analysis of the interview in developing the items. The items are: "I find myself feeling angry or frustrated with my customers," "I often feel drained after dealing with customers," "Constant efforts to satisfy customers or help co-workers can become very tiresome," "Many of the customers whom I try to help seem to never be satisfied" and "Often, near the end of the day, it gets difficult to feel sympathy for the problems of my customers." The CSR's were responded to the items on a five-point Likert scale (1 = disagree to 5 = agree). Higher scores reflect greater levels of emotional exhaustion.

Conscientiousness. We assessed conscientiousness with the 30-item conscientiousness scale ($\alpha = .76$) of the Personal Characteristics Inventory (PCI; Mount & Barrick, 1995). CSR's rated each item on a three-point Likert-type scale (1 = disagree to 3 = agree). Higher scores reflect higher levels of conscientiousness.

Call volume performance. We acquired the CSR's average number of calls per quarter-hour from the call center's automated management information system. High scores reflect a greater number of calls being answered.

Customer service quality. The call center's quality control supervisor periodically monitored each of the CSR's phone conversations with customers and assigned an overall customer service quality rating, ranging from 1 ("fails to meet expectations") to 5 (significantly exceeds expectations"). We acquired the CSR's average customer service quality rating from the organization's archives.

Results

Descriptive statistics and the intercorrelation matrix are presented in Table 1. Emotional exhaustion was negatively related to call volume performance ($r = -.21, p < .05$) but unrelated to customer service quality scores ($r = .02, ns$). Conscientiousness scores were related to customer service quality scores ($r = .16, p < .05$) but not to call volume scores

Table 1
Intercorrelation matrix and descriptive statistics

Variable	Mean	S.D.	1	2	3	4
1. Call volume	3.51	1.99	–			
2. Service quality	3.24	.99	.12	–		
3. Emotional exhaustion	2.46	.71	–.21**	–.02	(.72)	
4. Conscientiousness	2.65	.23	.13	.16*	–.40***	(.76)

* $p < .10$.

** $p < .05$.

*** $p < .01$.

($r = .13$, *ns*). The sizes of the validity coefficient of conscientiousness are consistent with mean observed validity coefficients reported in meta-analytic studies (e.g., Salgado, 1997).

Before testing the hypothesized relationships, we examined the construct validity of the emotional exhaustion measure. First, we established face validity by comparing the items to those in the Maslach Burnout Inventory (Maslach & Jackson, 1981). Second, we conducted a confirmatory factor analysis to assess the dimensionality of the scale. Each of the items had strong standardized factor loadings and low standardized residuals; the goodness of fit index was .94. Out of a concern that our measure of emotional exhaustion might reflect predisposition (i.e., low emotional stability) rather than a response to the situation, we examined correlations of emotional exhaustion and PCI-measured emotional stability with seven conceptually relevant personality scales of the Occupational Personality Questionnaire (Saville, Holdsworth, Nyfield, Cramp & Mabey, 1984)—social confidence, change-oriented, relaxed, worrying, tough-minded, optimistic, and social desirability—and with two constructs reflecting reactions to the situation—organizational commitment and perceptions of organizational politics. Data collected from a sample of 144 private sector workers revealed that emotional exhaustion scale scores were more strongly related to commitment and politics scores, while emotional stability scale scores were more strongly related to the personality scale scores.¹ Comparison of these correlations provided evidence of discriminant validity.

Hierarchical moderated multiple regression analysis tested the hypotheses. We separately regressed call volume performance scores and service quality scores on emotional exhaustion and conscientiousness scores as a block at step 1². We entered the emotional exhaustion \times conscientiousness cross-product term at step 2. The changes in R -squared (ΔR^2) at both steps and the standardized regression coefficients at step 2 are presented in Table 2. For the criterion of call volume performance, the main effect of conscientiousness was not significant ($\beta = .05$, *ns*), while the main effect of emotional exhaustion approached significance ($\beta = -.19$, $p < .10$). The addition of the cross-product term added a significant amount of variance in the prediction of call volume performance (total adjusted $R^2 = .06$, $F = 2.845$, $p < .05$, $\Delta R^2 = .03$, $F = 3.96$, $p < .05$). Thus, Hypothesis 1 was supported. For the criterion of service quality, neither the main effects of conscientiousness ($\beta = .18$, *ns*) nor emotional exhaustion ($\beta = .05$, *ns*) were significant. The cross-product of conscientiousness and emotional exhaustion also was not significant for service quality ($\beta = -.41$, *ns*), failing to support Hypothesis 2.

Table 2
Regression results for call volume and service quality criteria

Variable	Call volume			Service quality		
	β	R^2	ΔR^2	β	R^2	ΔR^2
Step 1						
Main effects		.026			.029	
Conscientiousness	.05			.18		
Emotional exhaustion	-.19*			.05		
Step 2						
Emotional exhaustion \times conscientiousness	-2.07**	.057**	.031**	-.41	-.00	.00

Note. The standardized coefficients presented are of the full model. The adjusted R^2 s are reported.

* $p < .10$.

** $p < .05$.

In order to visualize the form of the significant interaction, we plotted the call volume scores at the mean as well as at high and low levels of conscientiousness (+1.0, and -1.0 standard deviations from the mean; Stone & Hollenbeck, 1989). As shown in Figure 1, we found that the relationship between emotional exhaustion and call volume was stronger among high- than low-conscientiousness CSR's. Among CSR's reporting low levels of

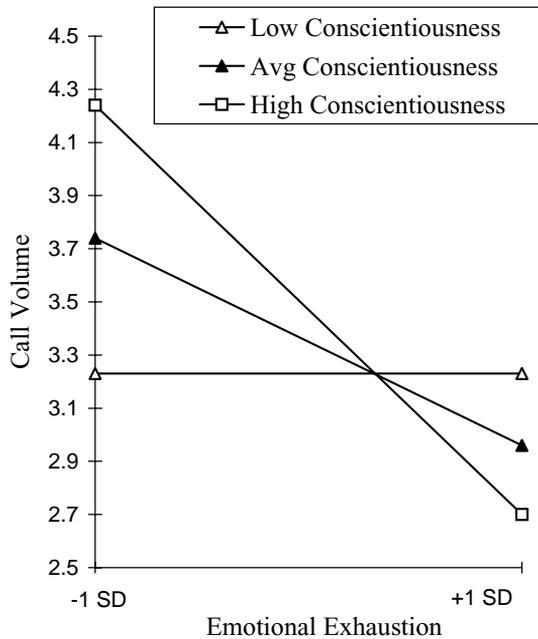


Figure 1. Call volume scores regressed on emotional exhaustion scores: low, average, and high levels of conscientiousness. Low score: 1 standard deviation below the mean; high score: 1 standard deviation above the mean. Only score ± 1 standard deviation from the mean of emotional exhaustion are plotted.

emotional exhaustion, those high in conscientiousness achieved higher call volumes than those low in conscientiousness. In contrast, among CSR's reporting high levels of emotional exhaustion, those high in conscientiousness achieved lower call volumes than those low in conscientiousness.

Discussion

As predicted, the emotional exhaustion-call volume relationship was strongest among CSR's high in conscientiousness. Low levels of emotional exhaustion may be necessary for conscientious CSR's to attain high call volume. In other words, with moderate-to-high levels of emotional exhaustion, conscientious CSR's may not achieve high call volume. Consistent with Hobfoll's (1989, 2001; Hobfoll & Shirom, 2001) COR theory, we suggest that conscientious CSR's who are emotionally exhausted have depleted their resources and are unable to meet work requirements for quantity (call volume). This was not the case for quality of work (customer service), as we found no support for the emotional exhaustion \times conscientiousness interaction. However, conscientiousness was a stronger predictor of quality than exhaustion. Thus, it is possible that while highly conscientious workers perform fewer transactions when emotionally exhausted, they may not necessarily sacrifice on the quality of the exchange with the customers.

Implications for Theory

The results from the present study contribute to and extend previous research in at least three ways. First is by demonstrating that the impact of emotional exhaustion on quantity performance depends on the individual's level of conscientiousness. Emotional exhaustion was more strongly related to quantity performance among highly conscientious workers than among those low in conscientiousness. Only highly conscientious CSR's performed worse when emotionally exhausted. These results extend the emotional exhaustion literature by suggesting the way that stress affects work performance may depend on the personality trait of conscientiousness. Accordingly, one of the contributions of this study is identification of a new path for future empirical research and theoretical development to follow in the area of expanding COR theory (Hobfoll, 1989, 2001; Hobfoll & Shirom, 2001) by including the impact of individual differences, such as conscientiousness.

Second is the finding that highly conscientious workers who were experiencing emotional exhaustion sacrificed quantity but not quality. This finding suggests that researchers investigating links between emotional exhaustion and job performance should explicitly examine different aspects of job performance. Quantity is a dimension of customer service performance that is often not explicitly considered. However, quantity is important to many, if not most, service jobs. When service providers (e.g., cable TV installers, bank tellers, department store clerks, etc.) spend too much time with some customers, other customers are not receiving good service. Moreover, we suggest that balancing speed and quality is a critical component of the maturation process for employees in most occupations. Understanding how emotional exhaustion affects efforts to achieve this balance is an underdeveloped area of the literature. Future research is needed to explore more fully how generally effective

workers (i.e., those high in conscientiousness) cope with emotional exhaustion to make decisions about accomplishing work tasks. Further work in this area may provide insight into the processes by which individuals manage emotional exhaustion at work.

Third is our addition to an emerging literature that has demonstrated that constructs reflecting situational influences interact with conscientiousness to predict job performance (e.g., Hochwarter, Witt & Kacmar, 2000).

Implications for Practice

Anecdotal evidence from managers suggests that they trust their conscientious employees to maintain high levels of effectiveness and thus pay relatively little attention to them. However, this strategy may not be wise. An effective strategy may be to provide appropriate levels of social support (Cohen & Wills, 1985) to their high-conscientious workers. Such an approach may either delay the onset of emotional exhaustion or reduce its impact overall. Alternatively, managers may find it helpful to rotate conscientious CSR's into projects and other alternative job assignments when they manifest signs of emotional exhaustion. In doing so, managers may provide their high-potential CSR's with opportunities for recovering from emotional exhaustion before returning to the frontline. In addition, managers may find it helpful to send high-conscientiousness CSR's to training programs focused on coping skills appropriate for recognizing and dealing with emotional exhaustion.

Strengths/Limitations

We emphasize three limitations of the present study. First, replication is needed. While our sample size is similar in size or larger than the single samples of some previous studies examining relationships of personality or emotional exhaustion with work-related outcomes (e.g., Wright & Cropanzano, 1998), we urge caution, given our small and single sample. Second, Arthur, Woehr and Graziano (2001) pointed out the role of personality-based self-selection into specified jobs and the resultant range restriction on the personality dimension of interest. Thus, our conscientiousness-call volume performance validity coefficient may have been artificially restricted by a certain personality type of individuals seeking employment in the call center. Third, our measure of customer service quality was comprised of only one item. Researchers pursuing work in this area might find it useful to employ multi-item measures, which would not only better assess the criterion space but also permit assessment of reliability.

We offer three strengths. First, although while possibly restricted, the conscientiousness-performance relationship was similar in size to coefficients reported in previous studies (e.g., Salgado, 1997), suggesting that our sample may not be different from other populations. Second, we replicated previous findings of an emotional exhaustion-CSR performance relationship (Singh et al., 1994; Von Emster & Harrison, 1998), extending the literature by showing evidence of the relationship when CSR performance was measured objectively rather than by self ratings. Third, this is one of the first studies to present evidence of an interaction between emotional exhaustion and conscientiousness in the prediction of job performance.

In conclusion, the consequences of emotional exhaustion for organizations are significant and warrant consideration. This research provided insight into the complex relationship of

emotional exhaustion and the personality trait of conscientiousness with both quantity and quality performance outcomes. Examining the interactive effects of personality with the situationally-influenced factor of emotional exhaustion on the critical variable of performance provides value to both theory and practitioners alike.

Notes

1. The correlations are available from the first author.
2. In additional analyses, we also included demographic characteristics, education, and emotional stability as control variables at step one. Inclusion of these control variables had no appreciable effects on the results. While we did not report those results here, they are available from the first author.

Acknowledgments

The authors appreciate the insightful and helpful suggestions on an earlier draft made by John M. Schaubroeck.

References

- Adler, S. 2002, April. *Can I help you? Studies of call center service representatives*. Symposium presented at the conference of the Society for Industrial and Organizational Psychology, Toronto.
- Adorno, A. J., & Bining, J. F. 2001, April. *Personality and emotional labor as predictors of turnover in call center customer service*. Paper presented at the conference of the Society for Industrial and Organizational Psychology, San Diego.
- Arthur, W., Jr., Woehr, D. J., & Graziano, W. G. 2001. Personality testing in employment settings: Problems and issues in the application of typical selection practices. *Personnel Review*, 30: 657–676.
- Ashforth, B. E., & Humphrey, R. H. 1995. Emotion in the workplace: A reappraisal. *Human Relations*, 48: 97–125.
- Babakus, E., Cravens, D. W., Johnston, M., & Moncrief, W. C. 1999. The role of emotional exhaustion in sales force attitude and behavior relationships. *Journal of the Academy of Marketing Science*, 27: 58–70.
- Balogun, J. A., Helgemoe, S., Pellegrini, E., & Hoerberlein, T. 1995. Test-retest reliability of a psychometric instrument designed to measure physical therapy students' burnout. *Perceptual and Motor Skills*, 81: 667–672.
- Barrick, M. R., & Mount, M. K. 1991. The Big Five personality dimensions and performance: A meta-analysis. *Personnel Psychology*, 44: 1–26.
- Barrick, M. R., & Mount, M. K. 1993. Autonomy as a moderator of the relationship between the Big Five personality dimensions and job performance. *Journal of Applied Psychology*, 78: 111–118.
- Barrick, M. R., Mount, M. K., & Judge, T. A. 2001. The FFM personality dimensions and job performance: Meta-Analysis of meta-analyses. *International Journal of Selection and Assessment*, 9: 9–30.
- Batt, R. 1999. Work organization, technology, and performance in customer service and sales. *Industrial and Labor Relations Review*, 52: 539–552.
- Behling, O. 1998. Employee selection: Will intelligence and conscientiousness do the job? *Academy of Management Executive*, 12: 77–86.
- Bennington, L., Cummane, J., & Conn, P. 2000. Customer satisfaction and call centers: An Australian study. *International Journal of Service Industry Management*, 11: 162–173.
- Cohen, S., & Wills, T. A. 1985. Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98: 310–357.

- Cordes, C. L., & Dougherty, T. W. 1993. A review and integration of research on job burnout. *Academy of Management Review*, 18: 621–656.
- Enzmann, D., Schaufeli, W. B., Janssen, P., & Rozeman, A. 1998. Dimensionality and validity of the burnout measure. *Journal of Occupational and Organizational Psychology*, 71: 331–351.
- Freudenberger, H. J. 1974. Staff burn-out. *Journal of Social Issues*, 30: 159–165.
- Gaines, J., & Jermier, J. M. 1983. Emotional exhaustion. *Academy of Management Journal*, 26: 567–586.
- Hobfoll, S. E. 1989. Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44: 513–524.
- Hobfoll, S. E. 2001. The influence of culture, community, and the nested self in the stress process: Advancing Conservation of Resources theory. *Applied Psychology: An International Review*, 50: 337–370.
- Hobfoll, S. E., & Shirom, A. 2001. Conservation of resources theory: Applications to stress and management in the workplace. In R. T. Golembiewski (Ed). *Handbook of organizational behavior*: 2nd. ed; 57–80. New York, NY, US: Marcel Dekker, Inc.
- Hochschild, A. R. 1983. *The managed heart*. Berkeley, CA: University of California Press.
- Hochwarter, W. A., Witt, L. A., & Kacmar, K. M. 2000. Perceptions of organizational politics as a moderator of the relationship between consciousness, and job performance. *Journal of Applied Psychology*, 85: 472–478.
- Holman, D., Chissick, C., & Totterdell, P. 2002. The effects of performance monitoring on emotional labor and well-being in call centers. *Motivation and Emotion*, 26: 57–81.
- Hough, L. M., Eaton, N. K., Dunnette, M. D., Kamp, J. D., & McCloy, R. A. 1990. Criterion-related validities of personality constructs and the effect of response distortion on those validities. *Journal of Applied Psychology*, 75: 581–595.
- Hurtz, G. M., & Donovan, J. J. 2000. Personality and job performance: The big five revisited. *Journal of Applied Psychology*, 85: 869–879.
- Klein, D. J., & Verbeke, W. 1999. Autonomic feedback in stressful environments: How do individual differences in autonomic feedback relate to burnout, job performance, and job attitudes in salespeople? *Journal of Applied Psychology*, 84: 911–924.
- Lee, R. T., & Ashforth, B. E. 1993. A longitudinal study of burnout among supervisors and managers: Comparisons between the Leiter and Maslach 1988 and Golembiewski et al., 1986 models. *Organizational Behavior and Human Decision Processes*, 54: 369–398.
- Lee, R. T., & Ashforth, B. E. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81: 123–133.
- Maslach, C., & Jackson, S. E. 1981. The measurement of experienced burnout. *Journal of Occupational Behavior*, 2: 99–113.
- Maslach, C., & Jackson, S. E. 1985. The role of sex and family variables in burnout. *Sex Roles*, 12: 837–851.
- McCrae, R. R., & John, O. P. 1992. An introduction to the five-factor model and its applications. *Journal of Personality*, 60: 175–216.
- McCulloch, M. C., & Turban, D. B. 2001, April. *Using person-organization fit to predict job departure in call centers*. Paper presented at the conference of the Society for Industrial and Organizational Psychology, San Diego.
- Morris, J. A., & Feldman, D. C. 1996. The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21: 986–1010.
- Morris, J. A., & Feldman, D. C. 1997. Managing emotions in the workplace. *Journal of Managerial Issues*, 9: 257–274.
- Mount, M. K., & Barrick, M. R. 1995. *Manual for the Personal Characteristics Inventory*. Libertyville, IL: Wonderlic Personnel Test, Inc.
- Pines, A. M., & Aronson, E., Kafry, D. 1988. *Burnout from tedium to personal growth*. New York: Free Press.
- Salgado, J. 1997. The Five Factor Model of personality and job performance in the European community. *Journal of Applied Psychology*, 82: 30–43.
- Saville, P., Holdsworth, R., Nyfield, G., Cramp, L., & Mabey, W. 1984. *Occupational Personality Questionnaire Manual*. Thames Ditton, Surrey, England: Saville-Holdsworth, Ltd.
- Singh, J., Goolsby, J. R., & Rhoads, G. K. 1994. Behavioral and psychological consequences of boundary spanning burnout of customer service representatives. *Journal of Marketing Research*, 31: 558–569.
- Stone, E. F., & Hollenbeck, J. R. 1989. Clarifying some controversial issues surrounding statistical procedures for detecting moderator variables: Empirical evidence and related matters. *Journal of Applied Psychology*, 74: 3–10.

- Tett, R. P., Jackson, D. N., & Rothstein, M. 1991. Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology*, 44: 703–742.
- Von Emster, G. R., & Harrison, A. A. 1998. Role ambiguity, spheres of control, burnout, and work-related attitudes of teleservice professionals. *Journal of Social Behavior and Personality*, 13: 375–385.
- Wright, T. A., & Bonett, D. G. 1997. The contribution of burnout to work performance. *Journal of Organizational Behavior*, 18: 491–499.
- Wright, T. A., & Cropanzano, R. 1998. Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83: 486–493.
- Zellars, K. L., Perrewe, P. L., & Hochwarter, W. A. 2000. Burnout in health care: The role of the five factors of personality. *Journal of Applied Social Psychology*, 30: 1570–1598.
- Zellars, K. L., & Perrewe, P. L. 2001. Affective personality and the content of emotional support: Coping in organizations. *Journal of Applied Psychology*, 86: 459–467.

L.A. Witt (Ph.D., Tulane University) is an Associate Professor of Management at the University of New Orleans.

Martha C. Andrews is an Assistant Professor of Management at the University of North Carolina at Wilmington. Her Ph.D. in Organizational Behavior and Human Resources Management is from Florida State University. Dr. Andrews' general research interests are in the areas of politics, personality, and impression management.

Dawn S. Carlson is an Associate Professor of Management at Baylor University. Her Ph.D. in Organizational Behavior and Human Resources Management is from Florida State University. Dr. Carlson's general research interests are in the areas of work-family conflict and impression management.