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# Role stressors, service worker job resourcefulness, and job outcomes: An empirical analysis

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## Abstract

This article expands upon previous research on the job resourcefulness construct by examining the influence of role stressors (i.e., role ambiguity and conflict) on job resourcefulness and by examining the influence of job resourcefulness on job satisfaction and intentions to leave the firm. Given the current focus of businesses to “do more with less”, the research highlights the importance of role stressors in improving overall organizational efficiency and work outcomes. Drawing from previous work in both hierarchical personality and fit theories, the authors propose that situational determinants play an important role in overall job resourcefulness. An empirical study which utilized data obtained from a financial services institution supports the hypothesized relationships between role stressors, job resourcefulness, and job outcomes. Implications for practitioners and suggestions for future research in the area are discussed.

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*Keywords:* Job resourcefulness; Personality; Role perceptions; Job performance; Job satisfaction

## 1. Introduction

Recent cutbacks in service industries highlight the importance of finding service personnel who are able to satisfy customers while being given decreasing levels of organizational support and resources (Mayer, 2004). Managers are expected to produce results in the face of dwindling support, and even a casual review of practitioner literature reveals that “do more with less!” is a popular theme across business settings (Chang, 2004; Cruz, 2003; Messmer, 2002). As firms attempt to improve organizational efficiency through efforts such as cutting back on resources and downsizing, it is important to understand how employees react to such measures especially when considering the crucial role that employees play in service delivery (Booms and Bitner, 1981). Of utmost importance for managers in today’s environment, therefore, is

identifying employees who are able to work productively under resource constraints.

Licata et al. (2003) recently addressed the issue of employee performance given limited resources with the development of the *job resourcefulness* construct. Defined as “an enduring disposition to garner scarce resources and overcome obstacles in the pursuit of job-related goals” (Licata et al., 2003, p. 257), the construct is a timely addition to the literature, given the current focus on operational efficiency and effectiveness. As Licata et al. (2003) reveal, job resourcefulness impacts overall work performance, and the construct is influenced by basic personality traits such as conscientiousness and openness to experience.

Although the addition of the job resourcefulness construct to the literature has been valuable, a number of important questions may now be raised by researchers and practitioners. Of special importance is identifying factors beyond personality that influence employee job resourcefulness. First, given that role stressors affect overall work performance (Brashear et al., 2003) and are frequently present in

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environments marked by cutbacks (Appelbaum et al., 1999), how do role ambiguity and conflict affect job resourcefulness? The answer to this question is especially crucial when one considers that management (a) directly influences role perceptions (Singh et al., 1996), and (b) plays an important part in communicating employee expectations after downsizing (Tourish et al., 2004).

Second, what is the influence of job resourcefulness on job satisfaction and intentions to leave the service firm? Because employee perceptions of the working environment influence work attitudes (Parker et al., 2003) and turnover intentions (Kundu and Vora, 2004), it is imperative that managers recognize the need to create environments in which employees are satisfied and intend to stay. Employee satisfaction requires successful relationship management between contact employees and the organization (Yoon et al., 2001). Fit theory (Edwards, 1991) suggests that employees who have a good match of personal characteristics to job demands will be more satisfied. From this perspective, it may be expected that in resource scarce environments employees who possess a high degree of resourcefulness may be more satisfied with their jobs and be less inclined to leave. Given the high cost of turnover in service settings (Reichheld, 1993), this is especially important.

The current research is motivated by these primary research issues. First, we expand current work in the area by addressing the influence of role stressors on job resourcefulness, specifically examining the impact of role conflict and ambiguity on service worker job resourcefulness. Second, we follow calls from Licata et al. (2003) to assess the influence of job resourcefulness on important job outcome variables such as job satisfaction and intentions to leave the firm. In the process, we also seek to corroborate the influence of job resourcefulness on customer orientation (Licata et al., 2003). By establishing relationships between job resourcefulness and important outcome measures (e.g., satisfaction and intentions to leave), the role of the job resourcefulness construct in business today becomes more evident. Our conceptual framework is presented in Fig. 1.

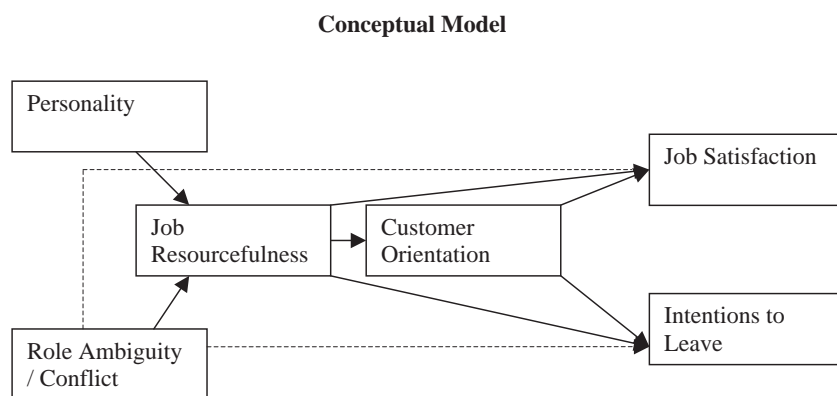
Our work is structured as follows. First, we examine the job resourcefulness construct and its importance in today's business climate. In doing so, we present hypotheses that relate job resourcefulness to role stressors, customer orientation, job satisfaction, and intentions to leave the firm. Second, we present an empirical study that was performed in a retail banking context. Although examining a single research setting may limit the generalizability of our findings, this industry is well suited for exploration given a renewed focus on efficient operations and resource constraints in bank marketing (Eagle, 2003; Maher and Wilson, 2003). Third, we present our results and discuss implications for researchers and practitioners. Finally, we address limitations to our study and suggest opportunities for future research in the area.

## 2. Literature review and conceptual framework

### 2.1. Employee job resourcefulness

Although academic inquiry into employee job resourcefulness has been limited, the ability of employees to “do more with less” is currently a major issue in the U.S. economy. In organizations where productivity gains are expected with limited resource support employee resourcefulness is a major concern (Fields, 2004). Even with resource scarcity and cutbacks, employees are expected to continue to produce results (Hymowitz, 2003). Furthermore, this situation is found across service industries, including both non-profit and public service sectors (Cragg, 2003).

As noted previously, Licata et al. (2003) defined job resourcefulness as “the enduring disposition to garner scarce resources and overcome obstacles in the pursuit of job-related goals” [p. 257]. This definition conceptualizes job resourcefulness as a trait rather than any particular set of behaviors, essentially describing an internal motivation that directs behaviors over time. Licata et al. (2003) noted that environmental conditions leading to cutbacks in front-line service workers have resulted in a scarcity of human resources,



**Note:** (dashed line represents control variable effects)

Fig. 1. Conceptual model.

wherein employees are simply expected to produce results with less in the way of organizational support. Employees who are high in job resourcefulness are able to perform their job-related duties even though they are given few resources with which to complete these duties. Not surprisingly, job resourcefulness has been shown to significantly predict both self- and supervisor-ratings of work performance, and intrapersonal factors (i.e., personality) have been shown to influence the construct (Licata et al., 2003).

## 2.2. Personality and job resourcefulness

Utilizing a hierarchical model approach (i.e., the “3M,” Mowen (2000)), Licata et al. (2003) proposed that job resourcefulness may be influenced by basic personality traits, such as those found in the Five-Factor Model (Costa and McCrae, 1992) of personality (i.e., extraversion, agreeableness, openness to experience, conscientiousness, and stability). From the 3M perspective, personality traits exist in varying degrees of abstraction consisting of elemental, compound, situational, and surface level traits. Licata et al. (2003) conceptualize job resourcefulness as a situational level trait that operates within general work situations and, as such, represents tendencies to perform behaviors in broadly-defined contexts (e.g., when “on the job”). Situational traits (e.g., job resourcefulness) are influenced by lower level traits (e.g., openness to experience, conscientiousness), and in turn, influence higher level (e.g., surface) traits. Surface traits (e.g., customer orientation) represent dispositions to perform behaviors within very specific contexts (e.g., when working with customers). This conceptualization was supported in the Licata et al. (2003) work as the elemental traits of *openness to experience* and *conscientiousness* influenced job resourcefulness while job resourcefulness influenced customer orientation across three service industries. It is important to note, however, that the hierarchical perspective also suggests that external influencers may influence resourcefulness (e.g., the work environment). Situational influencers, including role ambiguity and conflict, may therefore impact resourcefulness beyond the effects of personality alone. If this assertion was supported empirically, this finding would be of special value to service managers who are attempting to cultivate service productivity within scarce resource environments. As noted earlier, unclear and conflicting role perceptions often surface in environments marked by cutbacks (Appelbaum et al., 1999), making role conflict and ambiguity important variables to consider in job resourcefulness research.

## 2.3. Role stressors and job resourcefulness

Role conflict and ambiguity frequently lead to psychological and behavioral withdrawal from the workplace (Bettencourt and Brown, 2003). As conceptualized by Rizzo et al. (1970), role ambiguity occurs when an employee perceives that insufficient information exists for him/her to actively perform their job. Role conflict occurs when an employee perceives

incompatibility between expectations and demands from various workgroups. Both of these stressors are frequently found in the business setting and each has detrimental effects on performance (Tubre and Collins, 2000). Role stressors (i.e., conflict and ambiguity) tend to lessen an employee’s ability to perform by diverting effort away from focal tasks, thus reducing the mental resources available for job duties (Tuten and Neidermeyer, 2004). As Jackson and Schuler (1985) discuss, cognitive and motivational processes may explain the effects of ambiguity and conflict on job performance. From a cognitive perspective, performance levels may be impacted by both information insufficiency and information overload. The effects of the constructs on performance may also decrease motivation by lessening effort-to-performance expectancies and increasing psychological withdrawal from job related activities (Bettencourt and Brown, 2003). The negative effects of role conflict and ambiguity on job performance have been found in both services (Babin and Boles, 1998) and sales settings (Brashear et al., 2003).

It is expected that because role conflict and ambiguity reduce an employee’s ability to perform by diverting effort away from job duties, the influence of both constructs on job resourcefulness will be negative. Adopting the perspective suggested by Mowen (2000), we assert that situational influencers (e.g., role perceptions) combine with basic personality traits to influence behavioral tendencies to act. Given that role stressors account for significant variance in overall job performance (Sullivan and Baghat, 1992) and that both personality and environmental factors influence behavior (Endler and Rosenstein, 1997), we expect that role ambiguity and conflict will significantly influence job resourcefulness when controlling for the effects of personality. Specifically, we hypothesize the following:

**H1.** Controlling for the effects of personality (i.e., openness and conscientiousness), role ambiguity is negatively associated with job resourcefulness.

**H2.** Controlling for the effects of personality (i.e., openness and conscientiousness), role conflict is negatively associated with job resourcefulness.

Previous evidence also suggests that role ambiguity impacts resourcefulness more strongly than does role conflict. In their meta-analysis, Tubre and Collins (2000) found that the influence of role ambiguity on job performance is greater than the influence of role conflict, which had only negligible effects. The explanation for this finding may be that ambiguity leads one to be unsure of what accomplishments are expected, while conflict diverts attention across a number of defined, albeit incompatible, tasks (Bettencourt and Brown, 2003). Because ambiguity leads one to be unsure of what is expected, and because research indicates that ambiguity has a stronger impact on performance than does conflict, we hypothesize that ambiguity will have a greater impact on resourcefulness than will role conflict.

**H3.** The influence of role ambiguity on job resourcefulness is greater than the influence of role conflict on job resourcefulness.

#### 2.4. Job resourcefulness and customer orientation

Customer orientation, or “an employee’s tendency or predisposition to meet customer needs in an on-the-job context” (Brown et al., 2002, pg. 111), has received much attention in the literature and has been shown to be a valuable concept in business thought. The construct has been related to performance evaluations (Brown et al., 2002), job satisfaction (Donavan et al., 2004), and organizational commitment (Pettijohn et al., 2002). Work by Licata et al. (2003) revealed that job resourcefulness positively influences customer orientation. The authors reasoned that because resourceful employees are able to work effectively under conditions of resource scarcity they should be expected to use energy finding innovative ways of satisfying customers. We expect to corroborate this finding in the current work.

**H4.** Job resourcefulness is positively associated with customer orientation.

#### 2.5. Job resourcefulness and job outcomes

We further assert that the ability to be resourceful in the pursuit of work-related goals is likely to lead to feelings of satisfaction on the job. As Dorman and Zapf (2001) discuss, job satisfaction may be influenced by both dispositional characteristics and general working conditions. According to fit theory, the correct match of an employee to the job context leads to high levels of job satisfaction (e.g., Edwards, 1991). An example of a correct match of person to the job context can be found in the work of Donovan et al. (2004) who recently found that highly customer-oriented employees are more satisfied when placed in high customer-contact positions. Consistent with the person/job fit perspective, we propose that because highly resourceful employees fit well in climates marked by resource constraints job resourcefulness is positively associated with job satisfaction.

**H5.** Job resourcefulness is positively associated with job satisfaction.

We further hypothesize that the effect of job resourcefulness on job satisfaction will be mediated by customer orientation. From the hierarchical model perspective, surface level traits mediate the effects of more general, situational level traits on outcome variables such as job satisfaction (Mowen, 2000). Licata et al. (2003)’s finding that customer orientation mediates the effect of job resourcefulness on self-rated performance supports this perspective. In the current work, we expect that customer orientation is the mechanism through which job resourcefulness influences satisfaction. Service personnel often work closely with customers and the satisfaction that they derive from fitting well within a resource-scare environment is likely to be mediated by their focus on satisfying customers. Previous research also supports the hypothesized linkages between job resourcefulness, customer orientation, and job satisfaction. For example, job resourcefulness has been shown to influence customer orientation (Licata et al., 2003), and

customer orientation has been shown to positively influence job satisfaction (Donavan et al., 2004). Consistent with the hierarchical perspective, we therefore assert that the hypothesized effect of job resourcefulness on job satisfaction will be mediated by customer orientation.

**H6.** Customer orientation mediates the effect of job resourcefulness on job satisfaction.

From the fit theory perspective, we also expect that job resourcefulness is negatively associated with intentions to leave the service firm. The fit between the employee and the working environment directly impacts intentions to leave the firm (Kristoff, 1996). In settings marked by resource constraints, resourceful employees should be less inclined to want to leave the service firm. From this perspective, the demands put on less resourceful employees to produce results with little in the way of organizational support would lead to withdrawal and coping behaviors. Although the lack of organizational resources may lead to psychological stress and withdrawal for less resourceful employees, resourceful employees are comfortable in such conditions (Licata et al., 2003), and should be expected to exhibit lower tendencies to want to leave the firm.

**H7.** Job resourcefulness is negatively associated with intentions to leave.

Again consistent with the hierarchical personality perspective, we expect that customer orientation will mediate the effects of job resourcefulness on intentions to leave the firm. Customer-oriented employees enjoy the process of serving customers and attending to their needs (Brown et al., 2002) and should be expected to exhibit lower intentions to leave than employees who are not customer-oriented. Donovan et al. (2004) utilized a similar conceptualization when they found that customer orientation was positively related to a closely related construct, organizational commitment. Furthermore, service employee attitudes have been shown to be related to turnover intentions (Schneider and Bowen, 1985). As fit theory suggests, customer-oriented employees would be less inclined to leave service firms than would employees who are less customer-oriented, and as such, we hypothesize that customer orientation mediates the effect of job resourcefulness on intentions to leave.

**H8.** Customer orientation mediates the effect of job resourcefulness on intentions to leave.

### 3. Methodology

#### 3.1. Research setting

The research setting selected for the current study was retail banking. This setting is well suited for our study because bank managers must get the most out of scarce resources in a highly competitive environment (Eagle, 2003). A large bank in the southeastern United States was selected for the study. A series of executive interviews confirmed that the ability of employees to work under job resource constraints was important as the



firm strived to improve both the efficiency and effectiveness of operations. A survey which contained measures central to the study along with several unrelated constructs was administered to bank employees (all levels). The surveys were returned directly to the researchers via U.S. mail. Respondents were assured of both the confidentiality and anonymity of their responses. In all, 200 surveys were distributed and 140 returned in usable form for a response rate of 70%. Importantly, respondents did not differ significantly from non-respondents on demographic measures or on tenure. The average age of the respondents was 38 years and the average tenure with the bank was 5 years. The sample consisted of 87% female respondents and 13% male respondents.

### 3.2. Measures

All measures in the study were adapted from existing studies and are presented in Table 1.

#### 3.2.1. Personality traits

Items for the personality measures were adapted from Licata et al. (2003) and Mowen (2000). These scales were each four-item measures that have exhibited acceptable psychometric properties in previous studies. The personality items asked respondents how they describe themselves with endpoints of “not at all descriptive [1]” and “extremely descriptive [9].” The coefficient alpha ( $\alpha$ ) was 0.91 for conscientiousness and 0.95 for openness.

#### 3.2.2. Job resourcefulness

Job resourcefulness was assessed on the four-item measure developed by Licata et al. (2003). This scale was a Likert-type scale bounded by “strongly disagree [1]” and “strongly agree [9]”. The coefficient alpha ( $\alpha$ ) was 0.88.

#### 3.2.3. Customer orientation

Customer orientation was assessed via a twelve-item measure developed by Brown et al. (2002). This measure includes two dimensions of customer orientation—“enjoying serving customers” and “attend to customer needs”. The scale was measured with a 9-point Likert scale ([1]=“strongly disagree” and [9]=“strongly agree”). The reliability of linear components was 0.94.

#### 3.2.4. Role ambiguity/role conflict

The role ambiguity and conflict scales were adapted from Rizzo et al. (1970). The role ambiguity items were reverse coded so that higher values indicate higher levels of ambiguity. The role ambiguity scale was a six-item measure while the role conflict measure consisted of eight items. These constructs were measured with 9-point Likert scales ([1]=“strongly disagree” and [9]=“strongly agree”). The coefficient alphas for each scale were  $\alpha=0.89$ .

#### 3.2.5. Job satisfaction

Job satisfaction was assessed on a five-item scale adapted from Hartline and Ferrell (1996). This measure represents a

Table 1  
Measures and reliabilities

<i>Openness to experience</i> ( $\alpha=0.95$ )	
Frequently highly creative	Imaginative
More original than others	Novel
<i>Conscientiousness</i> ( $\alpha=0.91$ )	
Orderly <sup>a</sup>	Precise
Efficient	Organized
<i>Job resourcefulness</i> ( $\alpha=0.88$ )	
When it comes to completing tasks at my job I am very clever and enterprising	
I am able to make things happen in the face of scarcity at my job	
At my job, I think I am a fairly resourceful person	
On the job I am clever and inventive in overcoming barriers	
<i>Role ambiguity</i> ( $\alpha=0.89$ )	
I feel certain about how much authority I have	
There are clear, planned goals and objectives for my job	
My job's explanation is clear of what has to be done	
I know what my responsibilities are	
I know exactly what is expected of me	
I know that I divide my time properly <sup>a</sup>	
<i>Role conflict</i> ( $\alpha=0.89$ )	
I work with two or more groups who operate quite differently <sup>a</sup>	
I work on unnecessary things	
I have to buck a rule or policy in order to carry out an assignment	
I do things that are apt to be accepted by one person and not by another	
I receive incompatible requests from two or more people <sup>a</sup>	
I receive an assignment without the manpower to compete it <sup>a</sup>	
I have to do things that should be done differently	
I receive an assignment without the adequate resources to execute it	
<i>Customer orientation</i> ( $\alpha=0.94$ )	
I find it easy to smile at each of my customers	
It comes naturally to have empathy for customers	
I enjoy responding quickly to my customers' requests	
I take a problem solving approach with my customers	
I keep the best interests of my customer in mind	
I really enjoy serving customers	
I try to help customers achieve their goals	
I am able to answer a customer's questions correctly	
I enjoy remembering my customers' names	
I get customers to talk about their needs with me	
I get satisfaction from making my customers happy	
I achieve my own goals by satisfying customers	
<i>Job satisfaction</i> ( $\alpha=0.80$ )	
Your overall job	
Your firm's policies	
Your opportunities for advancement	
Your supervisor	
The support provided by your firm	
<i>Intentions to leave</i> ( $\alpha=0.75$ )	
I would turn down an offer from another company if it came tomorrow	
I plan to be with this company for a while	
I plan to be with this company five years from now	
Sometimes I get so irritated I think about changing jobs <sup>a</sup>	

<sup>a</sup> Items dropped during validation stage.

holistic measure of satisfaction pertaining to the job, the supervisor, organizational policies, support from the organization, and opportunities for job advancement. This construct was also measured with a 9-point Likert scale ([1]=“strongly disagree” and [9]=“strongly agree”). The coefficient alpha ( $\alpha$ ) was 0.80.

Table 2  
Descriptive statistics and correlations

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Job resourcefulness	7.18	1.14	(.88)							
2. Conscientiousness	7.61	1.17	.37**	(.91)						
3. Openness	5.47	1.97	.45**	.23**	(.95)					
4. Role ambiguity	3.00	1.48	-.46**	-.20*	-.04	(.89)				
5. Role conflict	3.22	1.90	-.19*	-.24**	.13	.37**	(.89)			
6. Customer orientation	7.92	.86	.58**	.36**	.20*	-.23**	-.16	(.94 <sup>+</sup> )		
7. Job satisfaction	6.77	1.43	.33**	.12	.02	-.37**	-.44**	.33**	(.80)	
8. Intentions to leave	3.11	1.95	-.33**	-.13	.04	.33**	.28**	-.34**	-.70**	(.75)

\*\* $p < 0.01$ ; \* $p < 0.05$  ( $n = 140$ ); reliabilities are presented on the diagonal; +reliability of linear combinations.

### 3.2.6. Intentions to leave

The intentions to leave measure was adapted from Mitchell (1981) and Good et al. (1996). This scale was also measured with a 9-point scale anchored by ([1] = “not likely” and [9] = “very likely”) and the scale was reversed scored with higher values indicating higher intentions to leave ( $\alpha = 0.75$ ).

## 4. Empirical results

### 4.1. Measurement results

The first stage of the analysis assessed the adequacy of the measures via exploratory and confirmatory factor analyses. Consistent with previous work (e.g., Licata et al., 2003; Brown et al., 2002), index scores were created for the two dimensions of customer orientation. The results indicated a marginal overall fit ( $\chi^2_{601} = 1011.87$ ,  $\chi^2/df < 2.00$ ,  $p < 0.05$ , CFI = 0.84, SRMR = 0.09, RMSEA = 0.07<sub>[90% confidence interval = 0.06 → 0.08]</sub>), with six items having large standardized residuals given the relatively small sample size. As suggested by Anderson and Gerbing (1988), these items were removed and the model was again estimated. The modified model indicated an improvement over the original model with acceptable fit statistics ( $\chi^2_{406} = 633.05$ ,  $\chi^2/df < 2.00$ ,  $p < 0.05$ , CFI = 0.89, SRMR = 0.07, RMSEA = 0.06<sub>[90% confidence interval = 0.05 → 0.07]</sub>). Furthermore, for each pair of constructs, the average variance extracted (AVE) exceeded the square of the interfactor correlations ( $\Phi$ ), the Chi-square difference test when moving from one to two-factor solutions was significant, and the confidence intervals around  $\Phi$  did not contain 1.00, thereby supporting the discriminant validity of the measures (Fornell and Larcker, 1981). Summated scores were then created for each construct. Table 2 presents the descriptive statistics and correlations for the constructs.

### 4.2. Hypothesis testing

Regression analyses were utilized to test the hypotheses. These results are presented in Table 3. Hypothesis 1 stated that role ambiguity is negatively associated with job resourcefulness, controlling for the effects of personality. To test this hypothesis, job resourcefulness was regressed on role ambiguity while including the traits of openness and conscientiousness as control variables. As shown in the table, the influence of both openness ( $\beta = 0.39$ ,  $p < 0.001$ ) and conscientiousness

( $\beta = 0.21$ ,  $p < 0.001$ ) was significant. Furthermore, role ambiguity significantly influenced job resourcefulness ( $\beta = -.40$ ,  $p < 0.001$ ) and Hypothesis 1 was supported.

Hypothesis 2 was tested in a similar way. Conscientiousness and openness both significantly predicted job resourcefulness at  $p < 0.001$ , and the effect of role conflict was significant ( $\beta = 0.19$ ,  $p < 0.01$ ). Hypothesis 2 was therefore supported. Hypothesis 3 stated that the influence of role ambiguity on job resourcefulness is stronger than is the effect of role conflict. To test this hypothesis, all predictors were included in a model with job resourcefulness as the dependent measure. As Hair et al. (1998) discuss, beta coefficients may be examined to measure the relative influence of each variable on an outcome variable given that collinearity concerns are minimal. The beta coefficients were  $\beta = -.38$  ( $p < 0.001$ ) for role ambiguity and  $\beta = -.06$  ( $p > 0.10$ ) for role conflict. The variance inflation factor and tolerance variables suggested minimal collinearity (1.16 and 0.86, respectively). A test of the difference of the coefficients revealed that the influence of role ambiguity was stronger at  $p < 0.001$  and the 95% confidence intervals around each coefficient did not overlap (RA = [-.40, -.19], RC = [-.12, 0.05]). In sum, Hypothesis 3 was supported.

Hypothesis 4 was also supported as the influence of job resourcefulness on customer orientation was significant ( $\beta = 0.58$ ,  $p < 0.001$ ). Hypothesis 5 stated that job resourcefulness is positively associated with job satisfaction. To test this hypothesis job satisfaction was regressed on job resourcefulness and role ambiguity and conflict were used as control variables given their previously supported effect on job satisfaction (Babin and Boles, 1998). As shown in the table, this hypothesis was supported ( $\beta = 0.19$ ,  $p < 0.05$ ). Hypothesis 6 stated that the effect of job resourcefulness on job satisfaction is mediated by customer orientation. As shown in the table, when considering job satisfaction as the dependent measure, the coefficient associated with job resourcefulness dropped to non-significance ( $\beta = 0.07$ ,  $p > 0.10$ ) when customer orientation was added to the analysis ( $\beta = 0.20$ ,  $p < 0.05$ ) suggesting that customer orientation fully mediates the influence of job resourcefulness on job satisfaction. Hypothesis 6 was therefore supported.

Hypothesis 7 was tested by regressing intentions to leave on job resourcefulness while controlling for previously established relationships between role ambiguity (Brown and Peterson, 1993), role conflict (Chung and Schneider, 2002), and intentions to leave. As shown in the table, this hypothesis

Table 3  
Regression analysis results

Independent variables	DV=job resourcefulness		DV=customer orientation		DV=job satisfaction		DV=intentions to leave	
<i>H1:</i>	$\beta$	<i>p</i>						
Openness	0.39	0.00****						
Conscientiousness	0.21	0.00***						
Role ambiguity	-0.40	0.00***						
<i>F</i> -stat=34.84***								
Adj. $r^2$ =0.42								
<i>H2:</i>	$\beta$	<i>p</i>						
Openness	0.42	0.00***						
Conscientiousness	0.23	0.00***						
Role conflict	-0.19	0.01***						
<i>F</i> -stat=20.66***								
Adj. $r^2$ =0.30								
<i>H3:</i>	$\beta$	<i>p</i>						
Openness	0.40	0.00***						
Conscientiousness	0.19	0.00***						
Role ambiguity	-0.38	0.00***						
Role conflict	-0.06	0.42						
<i>F</i> -stat=26.22***								
Adj. $r^2$ =0.42								
<i>H4:</i>			$\beta$	<i>p</i>				
JR			0.58	0.00***				
<i>F</i> -stat=68.11***								
$r^2$ =0.33								
<i>H5:</i>					$\beta$	<i>p</i>		
Role ambiguity					-0.16	0.08		
Role conflict					-0.34	0.00***		
JR					0.19	0.02**		
<i>F</i> -stat=16.57***								
Adj. $r^2$ =0.25								
<i>H6:</i>					$\beta$	<i>p</i>		
Role ambiguity					-0.17	0.05*		
Role conflict					-0.33	0.00***		
JR					0.07	0.46		
CO					0.20	0.03*		
<i>F</i> -stat=13.99**								
Adj. $r^2$ =0.27								
<i>H7:</i>						$\beta$	<i>p</i>	
Role ambiguity						0.17	0.07	
Role conflict						0.17	0.04*	
JR						-0.22	0.01**	
<i>F</i> -stat=9.68***								
Adj. $r^2$ =0.16								
<i>H8:</i>						$\beta$	<i>p</i>	
Role ambiguity						0.19	0.05*	
Role conflict						0.16	0.06	
JR						-0.08	0.42	
CO						-0.23	0.02*	
<i>F</i> -stat=8.96***								
Adj. $r^2$ =0.19								
Role ambiguity						0.08	0.31	
Role conflict						-0.05	0.44	
JR						-0.04	0.66	
CO						-0.10	0.19	
JS						-0.65	0.00***	
<i>F</i> -stat=27.43***								
Adj. $r^2$ =0.49								

\*  $p < 0.05$ .\*\*  $p < 0.01$ .\*\*\*  $p < 0.001$ .



was supported ( $\beta = -.22, p < 0.01$ ). Hypothesis 8 stated that customer orientation mediates the effect of job resourcefulness on intentions to leave. This hypothesis is also supported as the beta coefficient for job resourcefulness dropped to non-significance ( $\beta = -.08, p > 0.10$ ) when customer orientation was added to the model. In a post hoc analysis we more closely examined this relationship by adding job satisfaction as a predictor of intentions to leave given its well supported influence on intentions to leave (e.g., Tett and Meyer, 1993). This analysis revealed that the effects of all other predictors fall below significance when job satisfaction was included, suggesting that the effects of these constructs on intentions to leave are fully mediated by job satisfaction.

## 5. Discussion

### 5.1. Contributions and implications

This research represents the next step in exploring an important new construct in services marketing. Whereas original work on job resourcefulness focused on personality antecedents of the construct and its effect on performance, the current work extends our understanding of job resourcefulness by revealing that (a) role stressors are also important antecedents of the construct and (b) job resourcefulness is associated with job satisfaction and intentions to leave. The implications of these findings are discussed below.

As businesses continue to remain under the mandate of “do more with less” it is imperative that employees clearly understand what is expected of them and feel little in the way of role stress. The results of the current research reveal that role ambiguity and conflict both negatively influence job resourcefulness. While cutting back on resources may tend to raise levels of work-related stress, managers must ensure that employees clearly understand their roles. Employees may be predisposed to be resourceful on the job, but managers should also develop working environments that foster these tendencies. Although calls for managers to minimize ambiguity and conflict among employees have been made in other works (e.g., Bettencourt and Brown, 2003), our results reveal that these actions may enable employees to do more with less and perform more efficiently in the face of resource constraints.

Although the effect of role stressors on job resourcefulness is important, the effect of job resourcefulness on job satisfaction also deserves careful managerial attention. Resourceful employees may be expected to be more satisfied with their jobs than less resourceful employees. Because job satisfaction has been shown to directly impact employee service quality (Yoon et al., 2001), job resourcefulness may therefore play an important role in overall service delivery. Furthermore, employee job satisfaction may lead to higher levels of customer satisfaction (Heskett et al., 1994), and Reichheld (1993) notes that the longer the employee's tenure with a firm the better able the employee is to serve customers. As such, job resourcefulness may play an important role in delivering both high quality service and customer satisfaction. Future research is needed, however, to investigate these assertions.

It is important that managers identify employees who have a high degree of job resourcefulness to ensure that organizational efficiencies are realized in environments marked by resource constraints. Combined with efforts to foster the resourcefulness of existing employees, selecting new employees who are high in job resourcefulness is also important. As Licata et al. (2003) suggest, managers may include the job resourcefulness measure in employee selection criteria or by assessing the trait in job interviews. We echo Licata et al. (2003) assertion that additional work needs to be done on the job resourcefulness measure to ensure that it satisfies job-related validity according to Equal Employment Opportunity Commission guidelines.

For researchers, the current work places the job resourcefulness construct into existing role stressor frameworks. The results reveal that both role ambiguity and role conflict influence job resourcefulness. The work also contributes to our understanding of the antecedents of job satisfaction and turnover intentions by linking these important outcomes to job resourcefulness. Additional work is needed, however, to develop a better understanding of the importance of job resourcefulness in services marketing.

### 5.2. Limitations and future research

Although our work provides insight into the inter-relationships between personality, role stressors, job resourcefulness, and job outcomes, this study is only a first step in extending work on this construct. Furthermore, a number of limitations should be noted. First, self-report measures were used exclusively in this study. Future research that utilizes measures taken from multiple sources (e.g., supervisor ratings of resourcefulness, objective measures) is suggested. Also, a single context was utilized to explore the hypothesized relationships. Future work should explore other services settings (e.g., professional services, hospitality, food service, etc.). Also, work to date on the job resourcefulness construct has been performed exclusively in service settings. Research is needed that explores other work environments. How do role stressors influence resourcefulness in settings such as sales or manufacturing? We also note that our work focused on two personality variables (openness and conscientiousness) that have been supported previously. Additional personality traits should be considered in future work.

Moderating conditions of the job resourcefulness → job satisfaction relationship is suggested for future inquiry. Does tenure with the firm moderate the effects of job resourcefulness? Does supervisory leadership style moderate job resourcefulness effects? We also note that our analysis does not allow for the input of customers. Future work that considers the customer viewpoint is suggested. We have asserted positive linkages between job resourcefulness, job satisfaction, service quality, and customer satisfaction. How does job resourcefulness influence customer perceived service delivery and satisfaction?

We highlight the finding that the effects of job resourcefulness and customer orientation on intentions to leave may be

mediated by job satisfaction. These relationships should be examined more closely in future research. Also, we note that our analysis has focused on intrapersonal factors that influence job resourcefulness, customer orientation, and the outcome variables. Future research should consider other organizational variables (e.g., organizational culture) that may influence the relationships examined in this work. Finally, we call for additional work on the measurement and conceptualization of the job resourcefulness construct. As service firms continue to attempt to “do more with less” the job resourcefulness topic will remain an important construct for expanded research and managerial attention.

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