

Does Career Timing of Challenging Job Assignments Influence the Relationship with In-Role  
Job Performance?

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### **Abstract**

To prevent the potential threats of career plateauing for mid-career employees, it has been suggested to give them challenging assignments. This approach is inspired by empirical findings demonstrating that challenging job assignments generally have positive effects on job performance and career development. However, these studies have predominantly investigated the performance effects of job challenge for employees who are in their early career. Drawing on work experience theory and in line with contemporary career theories, we argue that the relationship between challenging assignments and in-role job performance may depend on when people encounter them in their career. Data were collected in a local branch of an international furniture retailer. For early-career employees, a positive relationship emerged between having challenging assignments and peer-rated in-role job performance. For mid-career employees, the relationship exhibited an inverted U-shaped curve, such that challenging assignments have a positive influence on in-role job performance up to some point and then begin to exhibit diminishing returns. Our findings suggest that challenging assignments should be tailored to the experiential background of the employee.

**KEY WORDS:** Challenging assignments – work tenure – career timing – work experience – in-role job performance

### **Does Career Timing of Challenging Job Assignments Influence the Relationship with In-Role Job Performance?**

“Mid-career employees and managers, who should be at their peak of productivity, are the most disaffected segment of the workforce. Companies need to find ways to rekindle the fires of this vast, neglected group of people” (Morison, Erickson, & Dychtwald, 2006, p. 79).

Mid-career employees make up more than half the workforce (Morison et al., 2006). Given the explicit and implicit job knowledge that they have developed through their experience (McDaniel, Schmidt, & Hunter, 1988; Sturman, 2003; Tesluk & Jacobs, 1998), they are a highly valuable resource for an organization. However, there is a tendency for organizations to neglect these effective and stable mid-career employees, which increases the risk that they will evolve into dissatisfied and underperforming ‘deadwood’ (FERENCE, Stoner, & Warren, 1977; McCleese, Eby, Scharlau, & Hoffman, 2007). Hence, organizations need to find ways to prevent this negative performance evolution.

One strategy that has been suggested is to give challenging assignments to mid-career employees (Brown, Bimrose, Barnes, & Hughes, 2012). This approach is inspired by empirical findings demonstrating that challenging job assignments generally have positive effects on job performance behaviors (e.g., DeRue, Nahrgang, Hollenbeck, & Workman, 2012; Dragoni, Tesluk, Russell, & Oh, 2009) and career development (e.g., De Pater, Van Vianen, Fisher, & Van Ginkel, 2009). However, despite agreement on the developmental effects of job challenge, studies investigating these effects have predominantly been conducted with employees who are *in their early career*. As employees gain experience and enter mid-career, their need for workplace challenge is pushed into the background and makes place for the fulfillment of nonwork demands, including family, friends, and personal interests (Ng & Feldman, 2007; Sullivan & Baruch, 2009). Given these shifts in priorities throughout a

career, it is unclear whether mid-career employees benefit to the same extent from challenging assignments as compared to early-career employees.

Our aim is to investigate whether the relationship between challenging assignments and in-role performance differs at different points in a career. Specifically, drawing on work experience theory (Tesluk & Jacobs, 1998) and along the lines of contemporary career theories (Briscoe & Hall, 2006; Mainiero & Sullivan, 2006; Sullivan & Arthur, 2006), we advance and test the idea that someone's time-based work experience moderates the relationship between having challenging assignments and in-role job performance.

### **Career Timing of Challenging Assignments**

Being challenged at work implies that performance expectations are set that are reasonably high ("a stretch") (Berlew & Hall, 1966). Challenging experiences motivate people to think about a situation in an alternative way; they force people to step out of their comfort zone of the daily routine (McCall, Lombardo, & Morrison, 1988). Through experimenting with new ways to deal with the situation at hand, having challenging assignments has been found to be predictive of a variety of adaptive outcomes, including job performance behaviors and career development (e.g., De Pater, Van Vianen, Fisher et al., 2009; DeRue, Nahrgang et al., 2012; Dragoni et al., 2009).

In their seminal work experience paper, Tesluk and Jacobs (1998) developed the career timing hypothesis, which posits that challenging experiences may influence individuals differently depending on when they occur during the career. Hence, the previously described adaptive effects of having challenging assignments may depend on the timing of these experiences. To date, research has been unable to test this career timing hypothesis due to the homogeneity of the samples in terms of time-based work experience (i.e., work tenure). For instance, the sample of Dragoni et al. (2009) consisted of early-career managers, whereas De

Pater, Van Vianen, Fisher et al. (2009) and DeRue, Nahrgang et al. (2012) were investigating the effects of challenging work experiences for interns.

Below, we draw on modern career theories to argue why and how challenging assignments may differentially relate to in-role job performance for early-career employees compared to mid-career employees. The protean career model (Hall, 1996), the boundaryless career model (Arthur & Rousseau, 1996), and the Kaleidoscope Career Model (Mainiero & Sullivan, 2006) all share the idea that careers are no longer defined by a corporation but by the individual worker, based on his/her own values and interests. Over the course of a career, employees' personal values and interests shift which influences their career decisions (Savickas et al., 2009). For instance, according to the Kaleidoscope Career Model, individuals determine changes in their career via three internal career parameters: (1) the need for challenge, (2) the need for balance between work and nonwork demands, and (3) the need for authenticity or to be true to one's self (Mainiero & Sullivan, 2006; Sullivan & Baruch, 2009). During a career, these three parameters are simultaneously active, but their salience and thus their impact on an employee's behavior shift across the career (Sullivan & Baruch, 2009).

### **Challenging Assignments Early on in One's Career**

The early career "is the time when the flame of challenge burns most brightly" (Mainiero & Sullivan, 2006, p. 116). As early-career employees enter the labor market, they are highly focused on attaining career success (Kanfer & Ackerman, 2004). Hence, they often aim to advance to new levels of responsibilities (Ng & Feldman, 2007), which is an important characteristic of job challenge (Carette, Anseel, & Lievens, 2012; McCauley, Ruderman, Ohlott, & Morrow, 1994). Additionally, as employees in their early career are generally younger than their tenured colleagues, they are more likely to be open to experience compared to their tenured and older counterparts (Roberts & Mroczek, 2008). Their openness for experience positively influences their motivation to engage in challenging work experiences

that require cognitive elaboration (De Dreu, Nijstad, & van Knippenberg, 2008; Dragoni, Oh, Vankatwyk, & Tesluk, 2011; Maurer, Lippstreu, & Judge, 2008).

Besides their high motivation to accept challenging assignments, we expect that employees in their early career are also highly capable to manage challenging assignments. Early in an individual's career, occupationally relevant schemes are likely to include relatively few elements due to the lack of experience. As a result, the schemes of early-career employees may be especially amenable to reintegration or restructuring with the inclusion of new information (Mumford & Gustafson, 1988; Schein, 1980), increasing the flexibility to adapt to new situations for employees in their early career (McClelland, Liang, & Barker, 2010; Mom, van den Bosch, & Volberda, 2009). This flexibility combined with their higher openness to experience may enhance their ability to learn (DeRue, Ashford, & Myers, 2012), which should yield a positive relationship with in-role job performance when having challenging assignments.

Taken together, we propose that in the early career, individuals will be highly motivated to accept challenging assignments and will be highly capable to cope with the demands set by these assignments. Therefore, we hypothesize that for employees early in their career, a positive relationship between having challenging assignments and in-role job performance will emerge.

*Hypothesis 1:* For employees early in their career, challenging assignments have a positive influence on in-role job performance.

### **Challenging Assignments Later on in One's Career**

By the time individuals enter mid-career, they have often reached some level of career achievement (Williams & Savickas, 1990). As a result, occupational achievement starts to play a smaller role in their lives (Bertolino, Truxillo, & Fraccaroli, 2011) and makes place for attaining work-life balance (Ng & Feldman, 2007). This often causes a hierarchical plateau,

referring to a decline in individual's vertical movement within an organization (Bardwick, 1986). Hierarchical plateauing does not necessarily have negative job performance effects. The employee often becomes a "solid citizen" in the organization whose performance is of an outstanding level (Briscoe & Hall, 2006; Ettington, 1998; Ference et al., 1977; Feldman & Weitz, 1988). Organizations need solid citizens to maintain stability, provide continuity, and keep the level of competition for higher level jobs within manageable bounds (Ference et al., 1977).

When solid citizens who are hierarchically, vertically plateaued also experience job content, horizontal plateauing (i.e., a lack of challenge, stability in responsibilities, and overall staleness of the job itself; Bardwick, 1986), they may evolve into ineffective, underperforming "deadwood" (Ference et al., 1977). Indeed, employees who simultaneously feel plateaued vertically and horizontally (i.e., double plateaued employees) report higher depression (McCleese et al., 2007) and less favorable job attitudes, including less job involvement, lower levels of commitment, and lower levels of job satisfaction (Allen, Poteet, & Russell, 1998), which may ultimately impede on optimal job performance. The fact that organizations have become flatter (increasing the prevalence of vertical plateauing) highlights the importance of attending to job content plateauing to prevent double career plateauing.

In order to prevent mid-career employees from becoming double plateaued "deadwood", organizations may consider giving them challenging assignments, which require them to break with the everyday routine and limit the risk of job content plateauing (Brown et al., 2012). Even though work-life balance often gets a more prominent role for the mid-career employee (Ng & Feldman, 2007), challenge still remains important (Maniero & Sullivan, 2006). Hence, similar to early-career employees, we expect that challenge will have a positive influence on in-role job performance for mid-career employees. However, as challenge gets a lower rank on the priority list (Maniero & Sullivan, 2006), we expect that mid-career

employees will not be willing to deal with an equal amount of challenge as compared to employees in their early career. Additionally, by the time employees enter mid-career, cognitive demands become more difficult to manage, which negatively influences their ability to deal with cognitively demanding challenging assignments (Fried, Grant, Levi, Hadani, & Slowik, 2007).

Taken together, we propose that for mid-career employees, cognitive and motivational declines will constrain them from dealing with an equal amount of challenge as compared to early-career employees. Therefore, we propose that passed a certain point, experiencing more challenge will negatively impact in-role job performance. Thus, we expect a curvilinear, inverted U-shaped relationship between challenge and in-role job performance for mid-career employees.

*Hypothesis 2:* For mid-career employees, the relationship between having challenging assignments and in-role job performance exhibits an inverted U-shaped curve, such that having challenging assignments has a positive influence on in-role job performance up to some point and then begins to exhibit decreasing, diminishing returns.

## **Method**

### **Sample**

A paper-and-pencil survey was personally distributed among 300 employees of a local branch of an international furniture retailer. 149 employees returned a usable questionnaire (49.67% response rate). The dataset was carefully screened on randomness of responses; if the number of years of work experience someone had was impossible with regard to the age of the participant, the case was deleted. Of the 144 remaining employees, 60% was female, 93% had at least a high school degree, the mean age was 34.23 years ( $SD = 10.73$ ), and their mean organizational tenure was 5.33 years ( $SD = 6.02$ ). Participants were recruited from different departments of the organization, with the majority of participants working in the sales



department (30.56%) or customer service department (20.83%). On average, participants had engaged in 3.28 different jobs over the course of their career. Work tenure ranged between 0 and 40 years, and the average participant had been working for 11.06 years. The standard deviation for work tenure was 10.25 years, indicating that our sample was more heterogeneous in time-based experience terms compared to prior studies (e.g., De Pater, Van Vianen, Fisher et al., 2009; DeRue, Nahrgang et al., 2012; Dragoni et al., 2009), which enabled us to investigate our hypotheses.

Subsequently, in each department where employees participated in our study, we approached colleagues (peers) of the respondents and invited them to rate the in-role job performance levels of the participating employees. The performance levels of 102 of our respondents were rated by their peers (70.83% response rate). 59% of these peers were female, the mean age was 32.75 years ( $SD = 8.31$ ), and the mean organizational tenure was 4.80 years ( $SD = 4.30$ ). The average time peers had been working together with the participating employees was 2.39 years.

## Measures

**Challenging assignments.** The extent to which respondents experienced challenging assignments during the last year, was measured with the challenge measure of De Pater and colleagues (De Pater, Van Vianen, Bechtoldt, & Klehe, 2009; De Pater, Van Vianen, Fisher et al., 2009). This 10-item scale was developed on the basis of the descriptions and items of the Developmental Challenge Profile (McCauley et al., 1994; McCauley, Ohlott, & Ruderman, 1999). Respondents were asked to indicate how well each statement described something they faced in their current jobs, ranging from 1 (*not at all descriptive*) to 5 (*extremely descriptive*). A sample item is “During the last year, it has been your responsibility to carry out tasks that your colleagues consider risky”. Cronbach’s alpha of this scale’s ratings was .85.

**Work tenure.** Work tenure was measured by asking people how many years they had been working since graduation from high school (cf. Lam, Ng, & Feldman, 2012; Stumpf & Tymon, 2012). In line with recommendations of Dawson and Richter (2006) and Edwards (2001), we treated work tenure as a continuous variable instead of categorizing it in subgroups.

**In-role job performance.** Peers of the respondents assessed the respondents' in-role performance during the last year with seven items measuring quality and quantity of work that we adapted from Williams and Anderson (1991). A sample item is "This employee adequately completes assigned duties". Each item needed to be rated on a scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Chronbach's alpha of this scale's ratings was .88.

**Control variables.** We controlled for respondents' organizational tenure, gender, and age.

## Results

Table 1 presents the means and standard deviations, as well as the correlations among the focal variables. As can be seen, age was highly correlated with work and organizational tenure (cf. Ng & Feldman, 2008). Furthermore, in line with previous research findings described above, having had challenging assignments during the last year was positively related to job performance.

We expected that career timing of challenging assignments would explain incremental variance in in-role job performance beyond challenge and time-based measures of experience. Our hypothesized pattern of diminishing returns for mid-career employees implied a quadratic relationship between challenge and in-role job performance, with work tenure moderating this relationship. Following the recommendations of Baron and Kenny (1986) and Cohen and Cohen (1983), this hypothesized quadratic moderation effect was tested by regressing in-role

job performance on (1) our control variables, (2) experienced challenge, (3) work tenure, (4) the interaction between challenge and work tenure, (5) the quadratic effect of challenge, and (6) the interaction between squared challenge and work tenure. The results are summarized in Table 2. The interaction term between squared challenge and tenure was significant,  $b = -.03$ ,  $p = .01$ . Adding the interaction term between squared challenge and work tenure to our model explained 5.9% of incremental variance in in-role job performance, yielding an overall explained variance of 21.0%.

For the interpretation of the career timing effect, early-career and mid-career timing were calculated by respectively subtracting one standard deviation from and adding one standard deviation to the mean of work tenure (Aiken & West, 1991). Accordingly, the average mid-career employee had 21 years of work tenure and was 44 years old, which corresponds with previous research (e.g., Chen, Veiga, & Powell, 2011; Morison et al, 2006; Rabinowitz & Hall, 1981). As depicted in Figure 1, in the early career, having had challenging assignments positively influenced in-role job performance. Conversely, for mid-career employees, the positive relationship between experiencing challenging assignments and in-role job performance was not unlimited. For them, too much challenge resulted in a decline in in-role job performance. In an exploratory way, we also investigated how job challenge affected in-role job performance of late-career employees (mean work tenure plus two standard deviations). Similar to our results for mid-career employees, we found a curvilinear, inverted U-shaped relationship between having challenging assignments and in-role job performance. Together, these data provided support for our hypotheses.

## Discussion

Having challenging assignments is often presented as a panacea to keep work life motivating and developmental (e.g., Brown et al., 2012; Dragoni et al., 2009). However, current research providing evidence for the positive effects of job challenge is limited in its

conclusions to the early career. Hence, there exists an urgent need to investigate whether challenging assignments have a differential impact on in-role performance for early-career employees compared to mid-career employees (Dragoni et al., 2009; McCall, 2004; Tesluk & Jacobs, 1998). In a first attempt to address this need, we examined the role of career timing on the relationship between challenging assignments and in-role job performance.

Our findings have several theoretical implications that extend previous work experience studies. According to Tesluk and Jacobs (1998), the career timing hypothesis refers to an interaction of two work experience measures: (1) the amount of challenge recent assignments carried with them, and (2) the number of years of work experience. Due to mutually exclusive operationalizations of work experience in whether quantitative (e.g., tenure) versus qualitative terms (e.g., challenge) (Dragoni et al., 2011), scant research has been able to investigate such interaction modes of work experience. Our findings indicated that adding the interaction term between work tenure and experienced challenge during recent assignments explained almost 6% of incremental variance beyond the variance explained by gender, age, and the main effects of these experience measures. The combination of all work experience features explained more than one fifth of the variance in peer-rated job performance.

The significance of the career timing effect provides new insights regarding individual differences that determine the effectiveness of employees to deal with challenging work experiences. For employees in their early career, having had challenging assignments was positively related to job performance. Conversely, for mid-career employees, the relationship between having challenging assignments and in-role job performance exhibited an inverted U-shaped curve. This provides support for contemporary career theories which state that interests and values are not stable but shift across the career (e.g., Sullivan & Baruch, 2009). The different influence challenging assignments have on in-role job performance at different

points in a career could be explained by a change in (1) motivation to thoroughly process a challenging assignment (i.e., epistemic motivation; Carette & Anseel, 2012) and (2) the subsequent emergence of adaptive learning processes (e.g., counterfactual thinking, feedback seeking; DeRue, Ashford et al., 2012). Evidently, future work is needed to empirically examine the explanatory value of these proposed mechanisms.

Our results may clarify previously inconsistent research findings. That is, whereas Dragoni et al. (2009) found a positive relationship between having challenging job stressors and end-state competencies that are critical for effective performance, others reported a curvilinear, inverted U-shaped curve between having challenging job stressors and the development of critical skills and job performance (DeRue & Wellman, 2009; Takeuchi, Wang, & Marinova, 2005). These conflicting findings may possibly be explained by the fact that the respondents in these different studies were at different stages in their career. The fact that the average age in the studies of DeRue and Wellman (2009) and Takeuchi et al. (2005) is slightly higher than in the study of Dragoni et al. (2009) is consistent with this idea.

Our findings have some practical implications. Given the changes in salience of individuals' need for workplace challenge over the course of a career, one single career counseling session will rarely be sufficient. As recommended by Savickas et al. (2009), as employees design and live their lives counselors should adapt their strategies for motivating them accordingly. For employees in their early career, career counselors may advise to proactively seek challenging assignments in order to diminish the performance gap between the employee and his/her more experienced colleagues. To protect the mid-career employee for the potential threats of the double plateau (i.e., hierarchical plateau and job-content plateau), s/he may also be advised to seek challenging assignments. However, as mid-career employees can cope with less challenge compared to their less experienced counterparts, it is

important to adjust the assignment to challenging tasks to the experiential background of the employee.

The present study is not without limitations. First, due to the cross-sectional nature of our study design, we cannot rule out the possibility that our findings are driven by cohort differences in cognitive and motivational functioning instead of career stage effects. It would be valuable for future research to examine whether the observed effect can be replicated with a longitudinal design. That is, by following people over the course of their career, it could be investigated whether the relationship between challenging job assignments and job performance changes as people move through different career stages. Such replications (with other study designs) would increase the robustness of the reported interaction effects.

Second, our dependent variable was assessed by another source than the study participant to limit common method variance. However, in contrast to previous studies investigating the effects of challenge, we measured our dependent variable with peer-ratings instead of supervisor-ratings. Future research may want to investigate whether the reported relationships hold when using supervisor-ratings of job performance.

Third, we are limited in our conclusion to the moderating role of career timing as only one interaction mode of work experience (Tetluk & Jacobs, 1998). Tetluk and Jacobs (1998) introduced density as a second interaction mode of experience, and defined it as the interaction between (1) the number of experiences and (2) the nature of these experiences. On a career level, density refers to the extent to which someone has executed a high number of jobs that are highly challenging within his/her career. In this respect, future research could examine whether the relationship between job mobility (i.e., having executed a high number of jobs) and job performance depends on the amount of challenge these jobs carry with them.

In sum, we extend career and work experience research by investigating the role of career timing of challenging assignments. A positive relationship between challenge and in-

role job performance only emerges for employees in their early career. As employees grow into mid-career, challenging assignments only have a positive influence on in-role job performance up to some point and then begin to exhibit decreasing, diminishing returns. Hence, challenging mid-career employees may be a meaningful way to rekindle their fires, but only if the challenging assignments are adjusted to their experiential background.

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*Table 1*

Descriptive Statistics of Study Variables, and Correlations Among Them

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.
1. Gender	144	.60	/					
2. Age	144	34.23	10.73	.25**				
3. Organizational Tenure	144	5.33	6.02	.13	.48**			
4. Work Tenure	144	11.06	10.25	.20*	.92**	.53**		
5. Challenging Assignments	144	2.89	.79	-.03	-.03	.01	-.02	
6. In-Role Job Performance	102	3.65	.70	.01	-.05	-.13	.06	.16

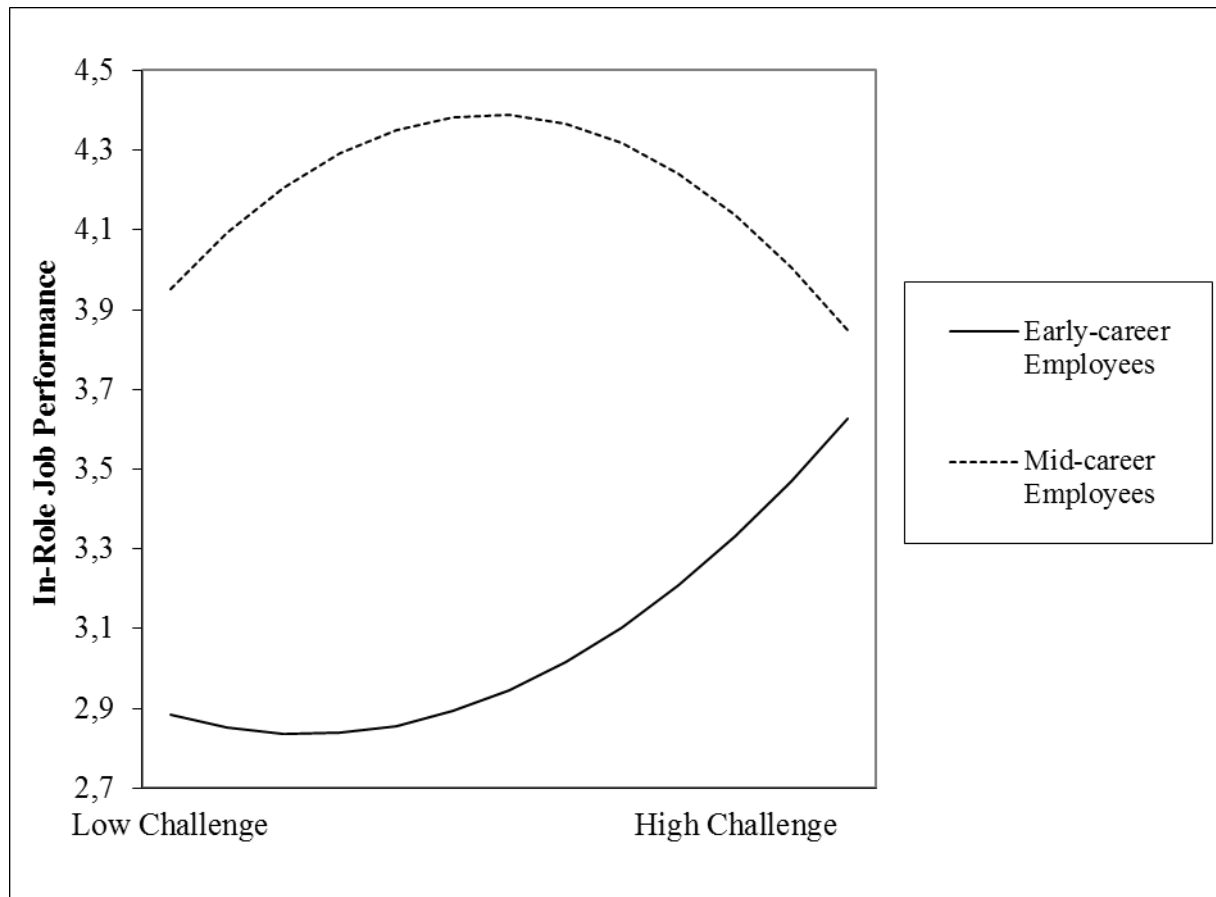
*Note.* \*  $p < .05$ , \*\*  $p < .01$ . For the dichotomous variable gender, the mean denotes the percentage of females.

Table 2

Results of Hierarchical Regression Analysis for In-Role Job Performance

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Control variables					
Gender	.02	.03	.03	.03	.00
Age	.00	-.05**	-.05**	-.05**	-.05**
Organizational tenure	-.02	-.02†	-.02†	-.02†	-.03*
Main effects					
Challenge		.13	.11	.11	.13
Work tenure		.06**	.06**	.06**	.07**
Interaction					
Challenge x work tenure			-.01	-.01	-.02†
Quadratic main effect					
Challenge squared				-.02	-.06
Quadratic interaction					
Challenge squared x work tenure					-.03**
$R^2$	.02	.14	.15	.15	.21
$\Delta R^2$	.02	.12	.01	.00	.06
$\Delta F$	.56	6.75**	1.35	.07	7.01**

Note.  $N = 102$ . †  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ .



*Figure 1.* The interaction effect of (1) the degree of challenge experienced during assignments in the last year and (2) work tenure on in-role job performance.