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Expatriates' Performance Profiles: Examining the Effects of Work Experiences on the Longitudinal Change Patterns

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Using four-wave, longitudinal, archival data sets from an expatriate sample (237 engineers and 191 managers) working in China, we explore whether different performance change patterns exist for expatriates during their international assignments and how work-related experiences accumulated prior to the assignments relate to performance change patterns. Using a latent class growth analysis, we identify the coexistence of four distinct longitudinal change patterns of expatriate job performance (i.e., u-curve, learning-curve, stable high-performance, and stable low-performance patterns). Further, we demonstrate that three different types of prior work experiences (i.e., international, job, and organizational) are important antecedents of such performance change patterns. Specifically, expatriates with moderate levels of work experiences displayed a u-curve pattern, expatriates with a high level of international work experience but low levels of job and organizational experiences displayed a learning-curve pattern, expatriates with an abundance of work experiences started off with a high level of job performance and maintained this performance level over the course of the international assignment, and

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expatriates with insufficient work experiences started off with a low level of job performance and were unable to improve their performance during the course of their international assignments. This set of findings contributes to the expatriation literature by highlighting the coexistence of multiple subgroups with different performance-change patterns based on prior work experiences and providing an effective integration of the social learning perspective and the human capital accumulation perspective.

Keywords: *expatriate performance profiles; international, job, and organizational experiences; trajectory/change patterns; latent class growth analysis*

Expatriates are “employees of business organizations, who are sent overseas on a temporary basis to complete a time-based task or accomplish an organizational goal” (Harrison, Shaffer, & Bhaskar-Shrinivas, 2004: 203). Their success in overseas assignments has been shown to have a substantial organization and individual impact (Sinangil & Ones, 2001; Wang, 2007a). For organizations, inadequate or suboptimal expatriate performance may lead to inferior productivity of foreign subsidiaries, lost opportunities for penetrating or capturing markets, loss of credibility, and damaged relationships with host country stakeholders, such as government officials and consumers (Dowling, Welch, & Schuler, 1999). For individuals, the costs associated with unsatisfactory expatriate performance include, but are not limited to, lost or derailed career opportunities, reduced self-esteem or self-efficacy, and reduced faith in the employing organization (Dowling et al., 1999; Wang, 2007a).

Given these numerous, potentially negative consequences, researchers have been interested in understanding how expatriates adjust and perform in international assignments (e.g., Kraimer & Wayne, 2004; Kraimer, Wayne, & Jaworski, 2001; Shaffer, Harrison, Gregersen, Black, & Ferzandi, 2006; Takeuchi, Wang, Marinova, & Yao, 2009; Wang & Takeuchi, 2007). While we are starting to understand many of the factors that influence expatriate performance (defined as those actions and behaviors that are under the control of the expatriates and contribute to the goals of the organization; Rotundo & Sackett, 2002), we know very little about how expatriate performance unfolds through a dynamic perspective (see Zhu, Wanberg, Harrison, & Diehn, 2016, for an exception). This is a critical theoretical issue because most of the conjecture in the expatriate adjustment area considers the cross-cultural adjustment process to fluctuate over time (see Bhaskar-Shrinivas, Harrison, Shaffer, & Luk’s [2005] meta-analysis). In addition, while we know that prior international experience matters (Takeuchi, Tesluk, Yun, & Lepak, 2005; Zhu et al., 2016), our understanding about how such experience influences expatriate longitudinal performance is fairly limited.

Given the state of expatriate performance literature, the current study adopts a person-centered dynamic approach and explores whether different performance-change patterns exist for expatriates during their international assignments using a latent class growth analysis. Further, we examine expatriates’ previous work experiences as antecedents of performance-change patterns, because the accumulation of human capital through such experiences may influence individuals’ learning patterns during their assignments (Takeuchi, Tesluk, et al., 2005). More specifically, using four-wave, longitudinal, archival data sets from an expatriate sample (237 engineers and 191 managers working in a multinational German car manufacturing company in China), we consider three different types of prior work experiences (i.e., international, job, and organizational) that expatriates have accumulated before

their assignments to be a critical set of potential predictors that influences expatriate job performance-change patterns. Here, we capture time-based, quantitative aspects of work experiences (Tesluk & Jacobs, 1998) in terms of the total length of the time that the expatriate had spent on international assignments before the current one (prior international work experience), on a particular job that was similar to the current job (prior job experience), and in his or her sponsoring organization (prior organizational experience).

The current study contributes to the literature in three major ways. First, taking a person-centered dynamic perspective, we explore the theoretical plausibility that expatriates may vary in terms of their performance-change patterns over the course of an international assignment such that multiple performance-change profiles coexist simultaneously. Such exploration challenges the implicit assumption underlying existing expatriation literature that an entire population of expatriates holds a uniform growth trajectory and that the average represents actual change patterns at the individual level (Hofmans, Vantilborgh, & Solinger, in press). In particular, using a latent class growth analysis, we identify the coexistence of different expatriate subgroups whose performance trajectories differed markedly from each other (i.e., u-curve, learning-curve, stable high-performance, and stable low-performance patterns). As such, this study contributes to the expatriation performance literature by demonstrating the coexistence of multiple growth trajectories that cannot be extrapolated from the extant prior research (e.g., Kraimer et al., 2001; Shaffer et al., 2006; Wang & Takeuchi, 2007). Second, taking a step further, we explore three types of work-related experiences as antecedents that relate differentially to these performance-change patterns. Inspecting our findings under the theoretical lenses of social learning and human capital accumulation perspectives (e.g., Bandura, 1977; Ployhart, Weekley, & Ramsey, 2009), our research advances the expatriation literature by shedding light on the importance of prior work experiences in shaping expatriates' longitudinal performance change patterns over time. Third, our study also provides new theoretical insights into the career management literature by demonstrating the importance of accumulating international and job experiences, which has important implications for boundaryless and protean career paths (e.g., Arthur & Rousseau, 1996; Hall, 1986; Wang & Wanberg, 2017).

Theoretical Background

Expatriation Experiences and Job Performance

While significant scholarly interests in examining expatriation experiences exist (see Bhaskar-Shrinivas et al.'s [2005] and Hechanova, Beehr, and Christiansen's [2003] meta-analyses as well as reviews provided by Church, 1982; Harrison et al., 2004; Maertz, Takeuchi, & Chen, 2016; and Takeuchi, 2010, for example), the majority of such studies consider expatriate adjustment as an end in itself, and only a handful have considered performance as an important outcome (Bhaskar-Shrinivas et al., 2005). Among the limited studies that have examined expatriate performance, Caligiuri (1997) found a positive relationship between self-reported dimensions of overall performance ($r = .37, p < .01$), contextual/managerial performance ($r = .35, p < .01$), expatriate-specific performance ($r = .49, p < .01$), and overall cross-cultural adjustment, for instance. However, none of these performance dimensions was significantly related to overall cross-cultural adjustment when using a leader rating or peer rating. Chen, Kirkman, Kim, Farh, and Tangilara (2010) found expatriate work adjustment (obtained 3 months prior to job performance ratings) to be

positively related ($b = .15, p < .05$) to expatriate job performance (retrieved from company record), even though work adjustment explained only a 1% variance in job performance ratings. Kraimer and Wayne (2004) found a significant relationship between work adjustment and task performance ($t = 1.89, p < .05$) as well as interactional adjustment and contextual performance ($t = 2.80, p < .01$), but they did not find overall adjustment (general, work, and interaction facets of adjustment combined) to be related to either task or contextual performance. Wang and Takeuchi (2007) found work adjustment to be related to job performance ($\beta = .28, p < .01$), which was somewhat corroborated in Takeuchi et al. (2009), who also found work adjustment ($\beta = .21, p < .05$) and general adjustment ($\beta = .38, p < .01$) to be related to affective commitment, which in turn was related to job performance ($\beta = .12, p < .01$). Work adjustment also had an additional, direct effect on job performance ($\beta = .15, p < .01$).¹ While Harrison et al. (2004: 235) could not account for more recently published studies, their conclusion that “adjustment-performance connections in these studies have been consistently positive, but not especially potent” still appears applicable. The key message here is that cross-cultural adjustment alone cannot explain the variation in expatriate job performance and we need to look beyond adjustment. In the current study, we begin with work experience literature (e.g., Tesluk & Jacobs, 1998) to consider how three different types of expatriates’ previous work experiences (prior international work experience, job experience, and organizational experience) before their current international assignments relate to current performance change patterns.

A Person-Centered Dynamic Approach to Longitudinal Expatriate Performance

An implicit general assumption held by existing expatriation literature is that an entire population of expatriates exhibits a uniform performance/adjustment change pattern (see *s* shape in Bhaskar-Shrinivas et al., 2005, and *u* curve in Black & Mendenhall, 1991, for example). Generating our research question through problematization (Alvesson & Sandberg, 2011), we challenge such an assumption by considering the theoretical plausibility that a population average may misrepresent the actual growth trajectories at the individual level and that unobserved heterogeneous subpopulations exist with different trajectories in sampled expatriates (Hofmans et al., in press). Specifically, in line with prior studies that take a person-centered approach to examining the profiles of relevant theoretical constructs (e.g., recovery experiences in Bennett, Gabriel, Calderwood, Dahling, & Trougakos, 2016; emotional labor strategies in Gabriel, Daniels, Diefendorff, & Greguras, 2015; and organizational commitment in Meyer, Stanley, & Parfyonova, 2012), we examine whether the expatriate sample may reflect multiple subgroups presenting differentiated performance-change patterns. While the traditional variable-centered approach assumes that all individuals from a sample are drawn from a single population, and thus a single set of averaged parameters can be estimated, the person-centered approach relaxes this assumption by identifying potential multiple subpopulations characterized by different sets of parameters (e.g., Wang & Hanges, 2011). Specifically, guided by Wang (2007b) and Solinger, van Olffen, Roe, and Hofmans (2013), we adopt a latent class growth analysis to identify the subgroups of expatriates with different performance-change patterns during their international assignments. One advantage of this technique is that it allows researchers to examine whether the population of interest is homogenous or heterogeneous with

respect to the longitudinal change patterns (Wang & Hanges, 2011). Such an investigation is important, as certain theoretical mechanisms are not universally applicable to all sub-populations (Gabriel et al., 2015).

Specifically, using four-wave data sets, our study examines whether different longitudinal performance-change patterns exist for sampled expatriates during their international assignments. Given that a multitude of performance-change profiles could emerge when accounting for low, moderate, and high levels of job performance across four time points, we follow prior research, (e.g., Bennett et al., 2016; Gabriel et al., 2015) by taking a relatively exploratory approach. In other words, we do not make formal predictions about the specific number of profiles that may empirically exist, given the inductive nature of this approach. As Zyphur (2009: 677) emphasized, methodology and theory tend to be intertwined in management research such that "not only do theoretical concerns drive methodological decisions but methodology also influences the nature of researcher's theorizing." Although we do not specify the number of performance-change patterns that may emerge, there are several distinct patterns that seem intuitively plausible. For example, Black and Mendenhall (1991) suggest that expatriates experience four stages of adjustment sequence (honeymoon, culture shock, adjustment, and mastery), which corresponds to a u-curve performance-change pattern. Further, Murphy (1989) suggests that employees experience a transition stage and a maintenance stage during their job tenure, which implies a learning-curve performance-change pattern. In addition, Bhaskar-Shrinivas et al.'s (2005) meta-analysis identifies a sideways-s shape of expatriate cultural adjustment over a time span of 80 months, which suggests an s-shape performance-change pattern. Given that adjusting and performing in a foreign cultural context requires a substantial amount of learning (Black & Mendenhall, 1991; Black, Mendenhall, & Oddou, 1991; Takeuchi, Tesluk, et al., 2005), expatriates are likely to exhibit different performance-change patterns depending on their specific learning processes. Thus, our first research question concerns whether distinct performance-change patterns coexist among expatriates over the course of international assignments.

Research Question 1: Do distinct types of performance change patterns coexist for expatriates during their international assignments?

Prior Work Experiences and Expatriate Performance Change Patterns

Assuming different performance-change patterns coexist, we further seek to explore the antecedents that differentiate membership of such patterns. Drawing on human capital theory, we focus on work experiences (international work experience, job experience, and organizational experience) as antecedents. According to Coleman (1988), *human capital* refers to the acquired knowledge, skills, and capabilities that enable people to act in new ways. Sources of human capital include, but are not limited to, personal experiences, training, judgment, intelligence, and relationships. Based on a fundamental tenet of human capital theory (Becker, 1964), human capital can be broadly classified into two types: firm-specific and general human capital. *General human capital* refers to productive capacities that would be useful to many employers, while *firm-specific human capital* represents productive capacities that are useful to a specific employer (Tomaskovic-Devey, Thomas, & Johnson, 2005). In this regard, different types of work experiences embody the accumulation of either

firm-specific or general human capital, allowing expatriates to perform better in their work tasks (Tesluk & Jacobs, 1998).

Specifically, job experience and organizational experience largely reflect firm-specific human capital, which contributes to organization-specific productivity that may be not readily transferable to alternative business settings. In particular, job experience accumulates knowledge, skills, and abilities that benefit individuals' work task performance in specific job positions, while organizational experience accumulates knowledge, skills, and abilities that benefit collective coordination in organizational processes. As such, long job and organizational tenures indicate that individuals "have developed expertise in their positions and obtained valuable firm-specific experiences" (Wayne, Liden, Kraimer, & Graf, 1999: 580). Nevertheless, due to the difficulty of transfer, in a reasonably efficient labor market, other prospective companies are unlikely to reward such firm-specific knowledge or skills because they may not help enhance their own organization's productivity. In contrast, international work experience largely reflects general human capital, which involves individuals' general knowledge, skills, and abilities regarding international assignments and cultural adaptation, and can be valuable to multiple organizations (e.g., Tomaskovic-Devey et al., 2005). With rich international work experience, expatriates can adapt to a foreign cultural environment quickly regardless of the specific assignment requirements. Owing to the transferability of general human capital, other organizations are also willing to compensate such knowledge, skills, and abilities for the promotion of workforce productivity. Such distinction of job and organizational experiences from international work experience corresponds with Tesluk and Jacobs' (1998) conceptualization regarding the level of specificity of work experiences. Based on Tesluk and Jacobs (1998), job and organizational experiences convey more specific knowledge and information, while international work experience conveys more general knowledge and information. Thus, these experiences may facilitate job performance in different ways (e.g., Rentsch, Heffner, & Duffy, 1994; Quinones, Ford, & Teachout, 1995).

We consider work experiences that individuals have accumulated over time as valuable resources that contribute to their job performance. We base our logic on the fact that firm-specific human capital accumulated from job and organizational experiences, as well as general human capital accumulated from international work experience, contains much tacit knowledge embedded in uncodified culture, routines, and social context, which is valuable and difficult to imitate (Boh, Slaughter, & Espinosa, 2007; Reagans, Argote, & Brooks, 2005; Szulanski, 1996). For example, Beus, Jarrett, Taylor, and Wiese (2014) found that work experience served as an important facilitator for newcomer performance in teams. Similarly, Dokko, Wilk, and Rothbard (2009) found that more task-relevant knowledge and skill was associated with better job performance. Zyphur, Chaturvedi, and Arvey (2008) further pointed out the need to account for employees' prior work experience when studying performance-change trajectories. Accordingly, we expect that expatriates may experience different performance-change patterns depending on the amount of work experiences accumulated prior to expatriation. Consequently, our second research question concerns how different types of work experiences relate to the membership of expatriate performance-change patterns.

Research Question 2: Do work experiences (international work experience, job experience, and organizational experience) differentiate expatriate performance-change patterns?

Method

Sample

Archival data sets used in the current study were retrieved from human resource (HR) department records of a multinational German automobile manufacturing company. The data reported here were from 428 expatriates (237 engineers and 191 managers) whose Chinese assignment entries were between 1998 and 2002 and who spent a 2-year minimum on assignment in China. The typical length of an international assignment in this company was 2 to 2.5 years, and a new cohort of expatriates entered every January. Job performance of each expatriate was evaluated every 6 months after job entry by his or her immediate supervisor. Although HR records showed 771 expatriates with Chinese assignment entries between 1992 and 2002, we were not able to locate formal performance records for expatriates who entered prior to 1998. Among 489 expatriates whose Chinese assignment entries were between 1998 and 2002, 61 left their assignments in less than 2 years (in most cases, within a year), thus not providing enough performance records for analysis, and were consequently excluded from the final sample. In the sampled expatriates, the majority was of German origin (92.1%) and male (95.1%). All expatriates used German as their working language. The average age of the expatriates was 41.76 years old ($SD = 6.49$) at their job entries.

Measures

Expatriate job performance. Different job performance appraisal measures were used for engineers and managers. For engineers, the expatriate job performance was assessed with a 12-item instrument. An immediate supervisor rated an individual's performance, and scores for the items were summed to form an expatriate performance index. Similarly, for managers, immediate supervisors assessed their job performance with a 10-item instrument. The rating format for both instruments was on a 5-point Likert-type scale, from 1 = *poor* to 5 = *excellent*. Although the HR records we retrieved did not contain the item-level job performance score for each expatriate, the reliability of these two instruments has been reported as acceptable ($\alpha = .93$ for engineers and $\alpha = .81$ for managers) in a technical report issued by a consulting company contracted by the multinational company (Beijing Hengyuan Psychology Research Center, 2003). For ease of comparison, we standardized engineers' and managers' expatriate job performance before merging the two subsamples into one big data set.

Expatriates' prior work experiences. Three types of expatriate previous work experiences were directly coded from the HR records. The work experiences had been originally obtained from expatriates' self-reports. Prior international work experience was measured as the total length of the time that the expatriate spent on international assignments before the current assignment. Prior job experience was measured as the total length of previous time that the expatriate spent on a particular job that was similar to the job performed on the current international assignment. Prior organizational experience was measured as the total length of the time that the expatriate spent in his or her sponsoring organization before the current assignment. To maintain consistency with previous expatriate studies

(Takeuchi, Tesluk, et al., 2005), we coded all three specific types of previous experiences in monthlong time periods.

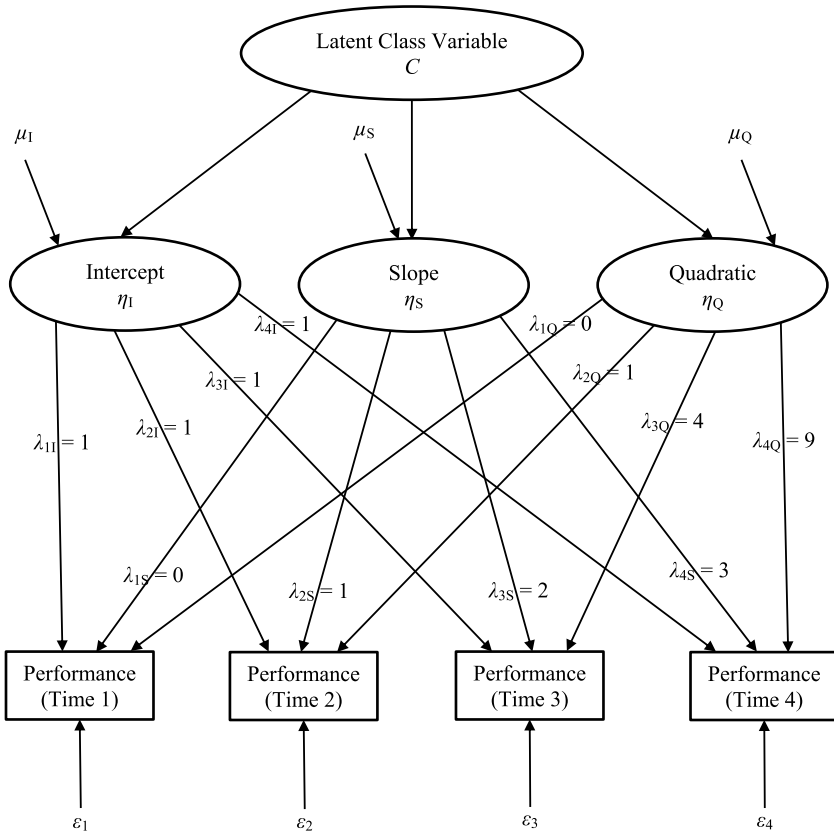
Covariates. During the analysis, we included age, gender, and job position (i.e., engineers or managers) as covariates. Based on our findings, job position was not significantly related to the latent classes of expatriate performance-change trajectories, warranting the combination of the two subsamples during hypotheses testing.

Analytical Strategy

The current study used a latent class growth analysis to reveal different change trajectories of expatriates' international assignment performance. This person-centered technique allowed us to estimate qualitatively different growth curve shapes (i.e., latent classes) and individuals' associated class probabilities (B. Muthén & Muthén, 2000; Wang & Hanges, 2011). In doing so, the latent class growth analysis assumes that all individuals belonging to the same latent class follow the same change trajectory and no within-class variability exists (Solinger et al., 2013). As such, the within-class variances in the growth factors are specified as zero, and only the means of growth factors for each class are estimated. The benefits of fixing the within-class variances to zero include a clearer identification of classes and less computational burden (Jung & Wickrama, 2008). Although the technique of growth mixture modeling (GMM) that allows within-class variation in growth factors is more sophisticated, we were unable to obtain model convergence when using GMM to analyze the current data, likely due to the relatively small sample size, the limited time points (i.e., four waves of expatriate performance), and the large number of model parameters (B. Muthén, 2004). We illustrate our latent class growth analysis approach in Figure 1. In this figure, *C* refers to the latent class variable that identifies unobserved subgroups, and separate latent growth models for different latent classes are estimated simultaneously. Guided by Asparouhov and Muthén (2014) and Bakk and Vermunt (2016), we used the recently developed BCH² approach to estimate class-specific means of auxiliary variables (i.e., age, gender, job position, and prior work experiences). The BCH approach has been demonstrated as the most robust approach compared to other available stepwise approaches (i.e., maximum likelihood [ML] and LTB³; Bakk & Vermunt, 2016).

Following previous studies (e.g., Solinger et al., 2013; Van den Akker, Deković, Asscher, Shiner, & Prinzie, 2013; Wang, 2007b), we considered the information criteria, the entropy, and the likelihood ratio test (i.e., the adjusted Lo-Mendell-Rubin likelihood ratio test [adjusted LRT]) when selecting the optimal latent class growth model. To be specific, the information criteria provide comprehensive model fit information and include Akaike information criterion (AIC), Bayesian information criterion (BIC), and sample-size-adjusted BIC (SSABIC). In general, lower values of AIC, BIC, and SSABIC suggest better-fitting models (Wang & Bodner, 2007). The entropy measures the latent classification accuracy, with higher values indicating better classification. Entropy values higher than .80 are considered as suggesting good classification (Clark & Muthén, 2009; Tein, Coxe, & Cham, 2013; Wang, 2007b). The adjusted LRT applies a corrected likelihood ratio distribution to comparing a $k-1$ -class model and a k -class model (Lo, Mendell, & Rubin, 2001). Significant

Figure 1
The Latent Class Growth Model for Multiple Expatriate Performance Change Trajectories



Note. λ = factor loading, η_I = latent intercept factor, η_S = latent slope factor, η_Q = latent quadratic factor, μ_I = mean of latent intercept factor, μ_S = mean of latent slope factor, μ_Q = mean of latent quadratic factor, and ϵ_1 through ϵ_4 = time-specific errors of expatriate performance at Time 1 through Time 4.

test results indicate that the k -class model is preferred and the $k-1$ -class model should be rejected. We used Mplus 8.0 (L. K. Muthén & Muthén, 2017) to conduct data analyses.

Results

Identifying Multiple Expatriate Performance-Change Patterns

Table 1 presents the descriptive statistics of the studied variables. To test our hypotheses, we performed a set of latent class growth analyses for the longitudinal expatriate performance from Time 1 to Time 4. Table 2 presents the fit indices, the entropy, and the model comparison results for the set of latent class growth models fitted to the

Table 1
Means, Standard Deviations, and Correlations of Studied Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	41.76	6.49									
2. Gender	0.95	0.22	-.05								
3. Job position	0.55	0.50	-.04	.01							
4. Prior international work experience	13.42	9.19	-.03	-.05	.17**						
5. Prior job experience	58.71	33.59	.01	-.02	.35**	.23**					
6. Prior organizational experience	51.90	31.68	.06	-.08	.19**	.19**	.13**				
7. Expatriate performance (Time 1)	0.00	1.00	.05	.04	.00	.32**	.23**	.14**			
8. Expatriate performance (Time 2)	0.00	1.00	.00	-.01	.00	.45**	.22**	.08	.66**		
9. Expatriate performance (Time 3)	0.00	1.00	.01	.00	.00	.53**	.25**	.06	.54**	.63**	
10. Expatriate performance (Time 4)	0.00	1.00	-.04	-.04	.00	.47**	.23**	.08	.53**	.58**	.70**

Note. *N* = 428. For job position, engineer = 1 and manager = 0; and for gender, male = 1 and female = 0.

**p* < .05.

***p* < .01.

Table 2
Fit Indices, Entropy, and Model Comparisons of Latent Class Growth Models for Expatriate Performance

Latent Class Growth Model	Log-Likelihood	AIC	BIC	SSABIC	Entropy	Adjusted LRT
Model 1 (two classes)	-2095.45	4212.90	4257.55	4222.64	.84	633.40**
Model 2 (three classes)	-2011.46	4052.92	4113.81	4066.21	.83	161.32**
Model 3 (four classes)	-1929.86	3897.72	3974.84	3914.55	.88	156.73*
Model 4 (five classes)	-1894.26	3834.53	3927.89	3854.90	.85	68.37

Note. *N* = 428. AIC = Akaike information criterion; BIC = Bayesian information criterion; SSABIC = sample-size-adjusted BIC; and adjusted LRT = Lo-Mendell-Rubin adjusted likelihood ratio test. Model 3 was selected as the optimal latent class growth model.

**p* < .05.

***p* < .01.

longitudinal expatriate performance data. As shown in the table, the values of information criteria (i.e., AIC, BIC, and SSABIC) become smaller when the number of latent classes increased, suggesting that models with more classes generally fit better to the data. The entropy value of the four-class model (entropy = .88) was better than the entropy values of the two-class (entropy = .84), three-class (entropy = .83), and five-class (entropy = .85) models, suggesting that the four-class model had the highest classification accuracy. In terms of the model comparison result, the adjusted LRT test was significant for the two-class model (adjusted LRT = 633.40, *p* < .01), indicating that the one-class model had to be rejected in favor of the two-class model. Similarly, the adjusted LRT test was significant for the three-class model (adjusted LRT = 161.32, *p* < .01), suggesting that the two-class model should be rejected in favor of the three-class model. In addition, the adjusted

Table 3
Parameter Estimates of Four-Class Latent Growth Models
for Expatriate Performance

Mean of Growth Factors	Estimate	SE
Class 1: U-curve pattern		
Latent intercept factor	0.05	.07
Latent slope factor	-0.45**	.08
Latent quadratic factor	0.12**	.03
Class 2: Learning-curve pattern		
Latent intercept factor	-1.39**	.23
Latent slope factor	1.62**	.14
Latent quadratic factor	-0.29**	.05
Class 3: Stable high-performance pattern		
Latent intercept factor	0.93**	.09
Latent slope factor	0.05	.10
Latent quadratic factor	-0.04	.03
Class 4: Stable low-performance pattern		
Latent intercept factor	-1.07**	.06
Latent slope factor	-0.08	.07
Latent quadratic factor	0.00	.03

$N = 428$. For the u-curve pattern, $n = 146$; for the learning-curve pattern, $n = 40$; for the stable high-performance pattern, $n = 155$; and for the stable low-performance pattern, $n = 87$.

* $p < .05$.

** $p < .01$.

LRT test was also significant for the four-class model (adjusted LRT = 156.73, $p < .05$), indicating that the four-class model was preferred to the three-class model. However, the adjusted LRT test was not significant for the five-class model (adjusted LRT = 68.37, $p > .05$). As such, the four-class model should not be rejected in favor of the five-class model. Moreover, after a close inspection of the five-class model, we found that two of the identified latent classes had similar performance change patterns (i.e., stable moderately-high-performance pattern and stable high-performance pattern), which might be combined into one class from a theoretical standpoint. Summarizing all the information above, we selected the four-class solution as the optimal model.

Table 3 presents the parameter estimates of the four-class latent growth model. Based on these parameters, we depicted the estimated latent growth trajectories for expatriate performance in Figure 2. As shown in the figure, there were four distinct classes of performance change trajectories. The first latent class (34.1%) had a u-curve pattern ($\mu_1 = .05$, $p > .05$; $\mu_5 = -.45$, $p < .01$; and $\mu_Q = .12$, $p < .01$), indicating negative performance changes at the beginning but subsequent positive performance improvements. The second latent class (9.3%) had a learning-curve pattern ($\mu_1 = -1.39$, $p < .01$; $\mu_5 = 1.62$, $p < .01$; and $\mu_Q = -.29$, $p < .01$), indicating positive changes in performance with a negative accelerated speed. The third latent class (36.2%) was the subgroup of expatriates with stable high performance ($\mu_1 = .93$, $p < .01$; $\mu_5 = .05$, $p > .05$; and $\mu_Q = -.04$, $p > .05$). The fourth latent class (20.3%) was the subgroup of expatriates with stable low performance ($\mu_1 = -1.07$, $p < .01$; $\mu_5 = -.08$, $p > .05$; and $\mu_Q = .00$, $p > .05$).

Figure 2
Fitted Expatriate Performance-Change Trajectory Classes

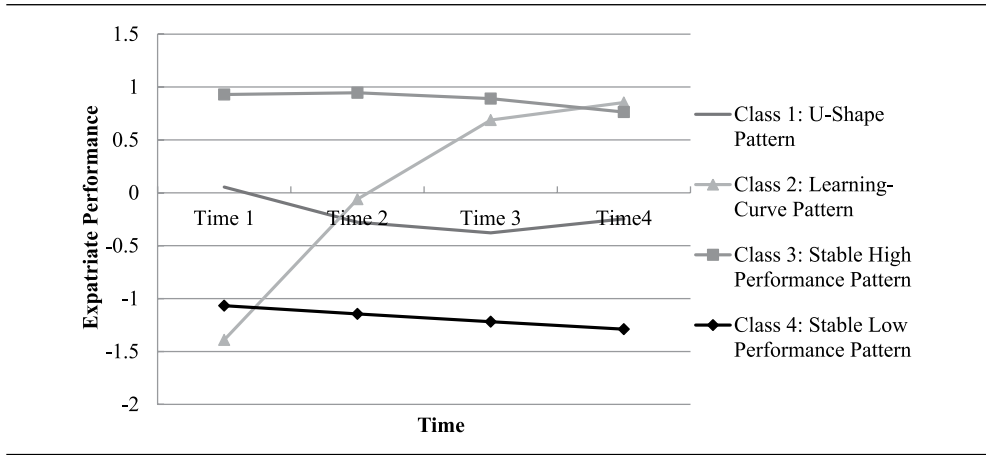


Table 4
Equality Tests of Means Across Latent Expatriate Performance Change Trajectory Classes Using the BCH Procedure

Variable	U-Curve Pattern (A)	Learning-Curve Pattern (B)	Stable High-Performance Pattern (C)	Stable Low-Performance Pattern (D)	Chi-Square
Age	42.18	41.21	41.63	41.55	0.89
Gender	0.98	0.92	0.94	0.94	2.90
Job position	0.55	0.58	0.56	0.55	0.10
International work experience	10.72 ^{B,C,D}	18.83 ^{A,D}	19.06 ^{A,D}	5.76 ^{A,B,C}	194.25**
Job experience	48.60 ^C	51.56 ^C	74.03 ^{A,B,D}	51.92 ^C	48.31**
Organizational experience	50.68 ^B	39.29 ^{A,C}	58.74 ^{B,D}	47.69 ^C	14.81**

N = 428. Superscripts indicate profiles that are significantly different at *p* < .05 when performing paired comparisons.
 **p* < .05.
 ***p* < .01.

Equality Means Tests Across the Identified Four Latent Classes

To more closely inspect the levels of work experiences associated with different expatriate performance change patterns, we conducted equality means tests across the four latent classes using the BCH approach (see Table 4).⁴

Work experiences and u-curve pattern. As shown in Table 4, the estimated mean of international work experience for the u-curve pattern class was 10.72, which was significantly lower than the learning-curve pattern class ($\chi^2 = 30.69, p < .01$) and the stable high-performance pattern class ($\chi^2 = 72.85, p < .01$) but significantly higher than the stable

low-performance pattern class ($\chi^2 = 13.89, p < .01$). Further, the estimated mean of job experience for the u-curve pattern class was 48.60, which was significantly lower than the stable high-performance pattern class ($\chi^2 = 41.17, p < .01$) but not significantly different from the learning-curve pattern class ($\chi^2 = .40, p > .05$) or the stable low-performance pattern class ($\chi^2 = .37, p > .05$). In addition, the estimated mean of organizational experience for the u-curve pattern class was 50.68, which was significantly higher than the learning-curve pattern class ($\chi^2 = 4.78, p < .05$) but not significantly different from the stable high-performance pattern class ($\chi^2 = 3.80, p = .05$) or the stable low-performance pattern class ($\chi^2 = .39, p > .05$). To summarize, we found that expatriates who possessed a moderately low level of international work experience, a relatively low level of job experience, and a moderate level of organizational experience were more likely to exhibit a u-curve pattern of job performance during their international assignment periods.

Work experiences and learning-curve pattern. First, the estimated mean of international work experience for the learning-curve pattern class was 18.83, which was significantly higher than the u-curve pattern class ($\chi^2 = 30.69, p < .01$) and the stable low-performance pattern class ($\chi^2 = 67.84, p < .01$) but not significantly different from the stable high-performance pattern class ($\chi^2 = .03, p > .05$). Second, the estimated mean of job experience for the learning-curve pattern class was 51.56, which was significantly lower than the stable high-performance pattern class ($\chi^2 = 21.19, p < .01$) but not significantly different from the u-curve pattern class ($\chi^2 = .40, p > .05$) or the stable low-performance pattern class ($\chi^2 = .00, p > .05$). Third, the estimated mean of organizational experience for the learning-curve pattern class was 39.29, which was significantly lower than the u-curve pattern class ($\chi^2 = 4.78, p < .05$) and the stable high-performance pattern class ($\chi^2 = 13.28, p < .01$) but not significantly different from the stable low-performance pattern class ($\chi^2 = 2.21, p > .05$). To summarize, we found that expatriates who possessed a high level of prior international work experience, a moderately low level of job experience, and a low level of organizational experience were more likely to exhibit a learning-curve pattern during their international assignment periods.

Work experiences and stable high-performance pattern. First, the estimated mean of international work experience for the stable high-performance pattern class was 19.06, which was significantly higher than the u-curve pattern class ($\chi^2 = 72.85, p < .01$) and the stable low-performance pattern class ($\chi^2 = 140.95, p < .01$) but not significantly different from the learning-curve pattern class ($\chi^2 = .03, p > .05$). Second, the estimated mean of job experience for the stable high-performance pattern class was 74.03, which was significantly higher than the u-curve pattern class ($\chi^2 = 41.17, p < .01$), the learning-curve pattern class ($\chi^2 = 21.19, p < .01$), and the stable low-performance pattern class ($\chi^2 = 17.79, p < .01$). Third, the estimated mean of organizational experience for the stable high-performance pattern class was 58.74, which was significantly higher than the learning-curve pattern class ($\chi^2 = 13.28, p < .01$) and the stable low-performance pattern class ($\chi^2 = 5.96, p < .05$) but not significantly different from the u-curve pattern class ($\chi^2 = 3.80, p = .05$). To summarize, our findings demonstrate that expatriates who possessed high levels of international work, job, and organizational experiences were more likely to exhibit stable high performance during their international assignment periods.

Work experiences and stable low-performance pattern. First, the estimated mean of international work experience for the stable low-performance pattern class was 5.76, which was significantly lower than the u-curve pattern class ($\chi^2 = 13.89, p < .01$), the learning-curve pattern class ($\chi^2 = 67.84, p < .01$), and the stable high-performance pattern class ($\chi^2 = 140.95, p < .01$). Second, the estimated mean of job experience for the stable low-performance pattern class was 51.92, which was significantly lower than the stable high-performance pattern class ($\chi^2 = 17.79, p < .01$) but not significantly different from the u-curve pattern class ($\chi^2 = .37, p > .05$) or the learning-curve pattern class ($\chi^2 = .00, p > .05$). Third, the estimated mean of organizational experience for the stable low-performance pattern class was 47.69, which was significantly lower than the stable high-performance pattern class ($\chi^2 = 5.96, p < .05$) but not significantly different from the u-curve pattern class ($\chi^2 = .39, p > .05$) or the learning-curve pattern class ($\chi^2 = 2.21, p > .05$). To summarize, we conclude that expatriates who had a low level of prior international work experience, a moderate level of job experience, and a moderately low level of organizational experience were more likely to exhibit stable low performance during their international assignment periods.

Discussion

Considering the trend of globalization, managing global forms of work has become increasingly important for multinational enterprises. Our study mainly contributes to the research stream on expatriation by explicating the longitudinal change patterns of expatriate performance and the key competencies (e.g., prior work experiences) associated with effective performance over time (e.g., learning-curve and stable high-performance patterns), shedding light on the importance of considering human capital in staffing and managing global talent. Specifically, we investigate whether different performance-change patterns coexist for expatriates during their international assignments and how work experiences (international work experience, job experience, and organizational experience) relate to the emergence of such patterns. Our latent class growth analysis revealed four distinct job performance-change patterns for expatriates working for a multinational German automobile manufacturing company in China. In addition, the three types of work experiences were demonstrated as important antecedents in predicting the four-class membership.

Theoretical Accounts for the Emergence of Four-Class Patterns: A Learning Perspective

While various theoretical perspectives have been used to explain expatriate performance, the social learning perspective (e.g., Bandura, 1977) is arguably one of the most relevant in explaining the ways expatriates make sense of international assignments. More specifically, social learning theory (e.g., Bandura, 1977) posits that in addition to direct or hands-on experience, individuals can obtain useful information through vicarious learning (Chen & Bliese, 2002), that is, through observation and imitation (Bandura, 1977). Both vicarious and direct learning help to explain how expatriates model and adopt behaviors that may be “foreign” to them in the host country to achieve functional adjustment and perform effectively within the cultural context (e.g., Black & Mendenhall, 1990). For example, both Berry (1997) and Kim (1995) suggest that part of the cross-cultural adjustment process is learning a new behavioral

repertoire that is appropriate for the new cultural context and unlearning such aspects of one's previous repertoire. Similarly, Earley and Peterson (2004: 109) stated, "Adopting the behaviors consistent with a target culture is an important aspect of intercultural adjustment and interaction." Interaction with and observation of host nationals is a critical aspect of this "cultural" learning, as various behaviors may exist that are not familiar to expatriates. Finally, expatriates need to memorize certain facts and knowledge about cultural behaviors and meanings through declarative learning. In other words, in addition to learning culturally appropriate behaviors and expectations (Storti, 1990), expatriates also need to learn about the host culture itself and its normative values, attitudes, and beliefs. As knowledge, skills, and abilities are likely to include tacit/implicit components that cannot be codified, social learning plays an important role in the ability to perform the international assignment effectively.

Work experiences and u-curve pattern. When considering expatriate job performance change patterns, it is necessary to establish a referent point to index change direction. In the expatriation literature, the u-curve theory of adjustment (e.g., Church, 1982; Oberg, 1960), which depicts four stages of adjustment sequence (honeymoon, culture shock, adjustment, and mastery), is probably the most often-cited perspective (Black & Mendenhall, 1991) when conceptualizing the expatriate adjustment process. Black and Mendenhall (1991) explained the u-curve expatriation process by adopting a learning perspective. Following this theoretical perspective, expatriation can be conceptualized as a learning process in which expatriates acquire new knowledge and skills in both work and life domains to facilitate successful accomplishment of the job assignment, as well as the new environment (Takeuchi, Tesluk, et al., 2005; Wang & Takeuchi, 2007). However, learning new knowledge oftentimes requires the unlearning of old knowledge that is obsolete or inappropriate in a new cultural setting. As Kim (2008: 363) explained, "As new learning occurs, deculturation or unlearning of at least some of the old cultural elements has to occur. . . . The act of acquiring something new is . . . losing something old." The combination of unlearning some of the previous repertoire and learning a new behavioral repertoire entails high information-processing demands, especially when the previous repertoire is incompatible with the new one. As such, expatriates may experience a u-curve performance change pattern that first decreases and then increases over time.

Specifically, at the initial stage, individuals encountering a new cultural environment tend to pay more attention to the elements that are similar to those of their home countries and adopt past behaviors that were proven successful (Black & Mendenhall, 1991). Colleagues in a new cultural environment may understand the existence of potential cultural differences and thus be more tolerant of inappropriate behaviors. During the initial stage, there is little time for negative consequences associated with inappropriate behaviors, and thus a "honeymoon" effect may be in place, providing new expatriates with a satisfactory moderate level of job performance. However, eventually, expatriates realize that they are exhibiting inappropriate behaviors and must unlearn some of their previous repertoire, values, and norms that are incompatible with the current assignment. Nevertheless, at an earlier stage, individuals may have insufficient cultural knowledge regarding behaviors that could be used in place of the inappropriate repertoire, leading to symptoms of "culture shock" (e.g., frustration, anxiety, and anger) and decreased job performance to a relatively low level (Oberg, 1960).

As expatriates' international assignment continues, individuals gradually learn appropriate overt role behaviors, rules of social interactions, and the unique ways of thinking and acting in the foreign cultural environment (Takeuchi, Tesluk, et al., 2005). As such, they are more likely to exhibit appropriate behaviors that meet others' expectations. As appropriate behaviors are reinforced with positive consequences, the new repertoire becomes internalized, leading to successful cross-cultural adjustment and increased job performance.

Based on the theoretical explanation of the u-curve pattern, such a performance-change pattern is likely to emerge when there is a combination of unlearning a previous incompatible repertoire and learning a new repertoire. This is consistent with our empirical finding, which demonstrates that expatriates who possessed a low level of international work experience and a moderate level of organizational experience were more likely to exhibit a u-curve pattern of job performance during their international assignments. Our findings can be explained through the human capital accumulation perspective. Specifically, with a moderate level of prior organizational experience, expatriates have developed their firm-specific human capital and formed behavioral patterns, values, and norms appropriate to the parent firm in the home country. Yet, with insufficient international work experience, at the initial stage, such expatriates may adopt past behavioral patterns in their international assignments, holding the illusion that their previous repertoire applies to the new cultural work environment.

Work experiences and learning-curve pattern. Departing from the u-curve pattern, we consider the theoretical plausibility of the coexistence of other performance change patterns. We argue that when expatriates possess sufficient general human capital for cross-cultural adaptation, but are absent of any firm-specific human capital, the unlearning process is unlikely to accompany the learning process, leading to a more typical learning-curve pattern. For this change pattern, expatriates start off low because they are unable to perform effectively due to lack of knowledge, skills, and abilities to perform in the new work environment. However, as their performance level improves over time, they gradually learn how to operate in foreign countries, with a ceiling effect toward the high level of performance—that is, the marginal impact of additional learning on performance becomes smaller—assuming that expatriates are able to learn a substantial amount of knowledge necessary to perform work tasks.

The learning-curve pattern is consistent with Murphy's (1989) two-stage model of job tenure. Specifically, Murphy (1989) proposed that a person's tenure on a job can be characterized in terms of two distinct stages: a transition stage and a maintenance stage. The transition stage occurs when job duties, procedures, and methods of operation are new to employees, who must learn new knowledge and skills to perform their new jobs. The maintenance stage is the period during which major job tasks are well learned and job performance relies on executing well-learned procedures, rather than on learning new knowledge and skills. In the expatriation context, at the beginning of their overseas assignment (i.e., the transition stage), expatriates are likely to invest time and effort to acquire the appropriate knowledge, information, and behaviors that enable them to perform effectively. As their current assignment tenure accumulates, ongoing exposure to the foreign environment may provide expatriates with the opportunity to interact with people (e.g., coworkers or subordinates) from the host country, which may facilitate their learning at work (Takeuchi, Tesluk, et al., 2005). As such, expatriates will gradually become more familiar with work norms, performance expectations, and job roles in the host country and reach the maintenance stage. At this point, their performance will become more stable and the performance trajectories will be flatter than in

the transition stage. Relatedly, this learning-curve job performance–change pattern has received empirical support in non-expatriate settings (e.g., Deadrick, Bennett, & Russell, 1997; Hofmann, Jacobs, & Baratta, 1993; Ployhart & Hakel, 1998). For example, Ployhart and Hakel (1998) examined sales performance for insurance salespersons over 2 years. They found that salespersons' performance growth approximated a learning curve—it improved over time, but with the increase of job tenure, the improvement decreased. Similar learning curves were observed in another study that examined insurance salespersons' performance over time (Hofmann et al., 1993) as well as a study that examined sewing machine operators' performance over time (Deadrick et al., 1997).

Based on the theoretical explanation of the learning-curve pattern, such a performance-change pattern is likely to emerge when expatriates possess sufficient general human capital for cross-cultural adaption but are absent of firm-specific human capital. This is consistent with our empirical finding, which demonstrates that expatriates without significant length of job and organizational experiences, but with longer prior international work experience, were more likely to present a learning-curve pattern. This is because with relatively short length of job and organizational experiences, expatriates have not accumulated sufficient firm-specific human capital to develop an appropriate behavioral repertoire. Thus, their job performance may be low at the beginning due to lack of knowledge and skills necessary to perform work tasks in the international assignment. Yet, with rich international work experience, they accumulate sufficient general human capital, which helps them quickly adapt to the new cultural environment and focus on operating in a new work environment (Carpenter, Sanders, & Gregersen, 2001; Sambharya, 1996). Thus, we expect that such expatriates' job performance is likely to be improving at a high speed at a relatively earlier stage. However, at a later stage, their job performance depends less on learning and more on routinely executing well-learned procedures. Therefore, the improvement speed of individuals' job performance will slow down. This may be applicable to such expatriates who have switched organizations relatively more recently (Feldman & Brett, 1983).

Work experiences and stable high-performance pattern. When expatriates have already accumulated a significant amount of human capital through various work experiences, such as already having to take on prior international assignments (i.e., more general human capital) as well as learning how things work at the parent company or on the job (i.e., more firm- or job-specific human capital), they may be able to utilize both general and specific knowledge in an effective manner to find ways to work effectively in the current international assignment. In such a case, we can expect these expatriates to “hit the ground running” and be able to perform at a high level from the beginning. As such, their performance level is likely to remain high throughout their assignment period (i.e., a stable high-performance pattern).

Based on the theoretical explanation of the stable high-performance pattern, such a performance change pattern is likely to emerge when expatriates have already accumulated necessary knowledge, skills, and abilities to perform effectively in the new cultural environment. This is consistent with our empirical finding, which demonstrates that expatriates who possessed high levels of international work, job, and organizational experiences were more likely to exhibit stable high performance during the international assignment. With rich international work experience, such expatriates are aware of the cultural differences and have accumulated sufficient general human capital to deal with such differences for cross-cultural adaptation (Caligiuri, 1997). In addition, with rich job and organizational experiences, such

expatriates have accumulated sufficient firm-specific human capital and can convey previous knowledge and skills relevant to the job and the organization to the new cultural environment (Quinones et al., 1995). Therefore, a combination of rich international work, job, and organizational experiences provides expatriates the ability to utilize a previously learned repertoire compatible with the new cultural environment. In the meantime, the joint possession of general and firm-specific human capital renders expatriates the ability to more efficiently identify a previously established repertoire that is incompatible with the new work environment, thus enabling them to effectively modify their inappropriate behaviors accordingly.

Work experiences and stable low-performance pattern. When expatriates do not possess a significant amount of general or specific human capital, they may be unable to perform effectively initially as well as be unable (and perhaps become unwilling) to perform at a later period due to difficulties experienced during their first encounter at their international assignment. Specifically, with insufficient knowledge, skills, and abilities to deal with challenges during the international assignment, expatriates are likely to experience failures and stagnation of their work progress. Consequently, they may consider cross-cultural adaptation and successful performance to be unattainable and thus withdraw their effort and commitment from attaining such goals. Thus, we would expect another job performance–change pattern in which the initial level of job performance is low and this level persists throughout their international assignment period (i.e., a stable low-performance pattern).

Based on the theoretical explanation of the stable low-performance pattern, such a performance-change pattern is likely to emerge when expatriates lack both the general and specific human capital to rely upon. This is consistent with our empirical finding, which demonstrates that expatriates with low levels of prior international work experience and organizational experience were more likely to exhibit stable low performance during the international assignment. As expatriation is generally considered to be more challenging than a domestic relocation (Harrison et al., 2004) and/or company (e.g., Feldman & Brett, 1983), expatriates without a significant amount of either general or specific human capital may be unable to successfully adapt to the new work environment within a relatively short time frame (2 to 2.5 years in our study). Specifically, without sufficient international work experience, those expatriates lack general knowledge, skills, and abilities that directly facilitate expatriate adjustment and thus may experience “culture shock” during the international assignment (Black & Mendenhall, 1991). Further, without sufficient job and organizational experiences, such expatriates also lack task-related (e.g., technical expertise) and organization-related (e.g., values, strategies, and policies) knowledge, skills, and abilities (Quinones et al., 1995) essential for performing work tasks in the new cultural environment. Consequently, they may experience work stagnation during the international assignment. Confronting accumulated negative experiences, they may gradually lose confidence and be unwilling to devote persistent effort to accomplishing their international assignment.

Theoretical and Practical Implications

Theoretically, the current study contributes significantly to the expatriate performance literature by demonstrating the coexistence of different performance-change patterns. In the past, research on expatriate performance has primarily focused on how individual factors influence expatriate performance at a certain time point (e.g., Kraimer & Wayne, 2004;

Shaffer et al., 2006; Wang & Takeuchi, 2007). As such, there is a research oversight regarding the process through which job performance unfolds over time during expatriation (Bhaskar-Shrinivas et al., 2005; Ren, Shaffer, Harrison, Fu, & Fodchuk, 2014; Zhu et al., 2016). Consequently, we know very little about how expatriates' job performance changes as a function of their current assignment tenure (i.e., the length of time that has elapsed since an expatriate arrived in the host country; Shaffer, Harrison, & Gilley, 1999). The lack of research that delves into such issues may be due to the difficulty in obtaining longitudinal data from expatriate samples (Harrison et al., 2004). Nevertheless, it is crucially important to identify and understand expatriate job performance change trajectories, because such investigation adds much to our understanding about how such performance evolves over time.

Adopting a person-centered dynamic perspective, our study reveals the theoretical plausibility regarding the coexistence of different expatriate performance change patterns. More specifically, using a latent class growth analysis, we identified the coexistence of four distinct subgroups of expatriates whose performance trajectories differed markedly from each other (i.e., u-curve, learning-curve, stable high-performance, and stable low-performance patterns), shedding light on the central role that time plays in expatriate performance and completing our understanding about the dynamic, evolving process of expatriate performance. The u-curve pattern, while discussed as universal in expatriate adjustment literature (Black & Mendenhall, 1991), accounted for only one third of our sampled expatriates. By contrast, a relatively large proportion of expatriates exhibited stability in their performance trajectories. Importantly, such stability can be explained by the accumulation of general and specific human capital through work experiences. Last but not least, only a small portion of sampled expatriates exhibited a learning-curve pattern. For such expatriates, they generally possessed a high level of international work experience but low levels of job and organizational experiences, implying that they had accumulated international work experience in a different organization and then switched to the current organization more recently.

Further, this study also contributes to the expatriation literature by demonstrating the important roles different types of work experiences (not just international experience: cf. Takeuchi, Tesluk, et al., 2005) play in shaping longitudinal expatriate job performance change patterns. While Bhaskar-Shrinivas et al.'s (2005: 273) call for "longitudinal research is perhaps a shopworn recommendation in management scholarship," this is still quite applicable "in the expatriate area . . . where fewer than 5 percent of the existing studies are longitudinal" (see Ren et al., 2014; Takeuchi et al., 2009; Zhu et al., 2016, for exceptions). Thus, examining and identifying the differential impact of three different types of prior work experiences in predicting longitudinal expatriate job performance profiles provides new avenues for future expatriate research. Such research could further decompose prior international experiences (Takeuchi, Tesluk, et al., 2005) into different measurement modes (including, but not limited to, experiences in work and travel domains and length and number of such experiences) to examine the impact of prior international work, job, and organizational experiences on expatriate job performance from the beginning of the international assignment until the end. In this way, we can further understand the type of prior work experience with most beneficial impact on the longitudinal expatriate job performance change patterns.

More specifically, according to our research findings, among the three types of work experiences, international work experience, as general human capital, acts as the key factor in driving different expatriate job performance-change patterns. With a high level of

international work experience, expatriates are more likely to display a learning-curve pattern and a stable high-performance pattern, both of which result in high performance; with a moderately low level of international work experience, expatriates are more likely to display a u-curve pattern that results in a middle-level performance; and with the lowest level of international work experience, expatriates are more likely to display a stable low-performance pattern. This impact of job and organizational experiences can be viewed as a double-edged sword. On the one hand, rich job and organizational experiences help expatriates accumulate firm-specific human capital and how things work in general by conveying compatible knowledge and skills relevant to the new cultural environment (Quinones et al., 1995). On the other hand, job and organizational experiences may entail the formation of behavioral patterns, values, and norms that are incompatible with the current international assignment, implying the necessity of an unlearning process (Black & Mendenhall, 1991). International work experience may hold the key to reinforcing the positive consequences and mitigating the negative consequences associated with job and organizational experiences. This is because with sufficient international work experience, expatriates are more realistic about the transferability of their repertoires and can identify and adjust such features that are incompatible with the new cultural work environment in a timely and effective manner.

In addition, our study has important theoretical implications for career management literature in terms of boundaryless and protean career paths (Wang & Wanberg, 2017). In particular, the boundaryless career model suggests that individuals' careers can transcend cultural, occupational, and organizational boundaries (Arthur & Rousseau, 1996). Our research demonstrates that international work experience serves as important human capital that enables expatriates to achieve success in a boundaryless career. In particular, for expatriates who have switched to the current organization more recently, possessing rich international work experiences allows them to quickly learn and adapt to the new cultural environment, resulting in significant performance improvements during expatriation. In addition, the protean career model suggests that career should be driven by personal values (vs. organizational rewards) and individuals should take charge of their own career through self-directed learning and active adaptation (Hall, 1986). Adopting the human capital accumulation perspective, our study sheds light on how expatriates can accomplish career success by actively engaging in learning and accumulating relevant knowledge, skills, and abilities through work experiences to enhance job performance.

In terms of practical implications, applying our findings to the expatriate selection and intervention practices may greatly benefit multinational companies. In particular, incorporating predictors that have stronger relationships with both a stable high-performance pattern and a learning-curve pattern may significantly improve the expatriate selection process and results. For example, consistent with previous research that has emphasized the important role of international work experience in developing the talent pipeline of multinational enterprises (e.g., Zhu et al., 2016), our study also corroborates the importance of international work experience in enhancing expatriate performance on international assignments. Such experience may be useful later in developing leader competencies (Dragoni, Oh, Tesluk, Moore, VanKatwyk, & Hazucha, 2014) that will help propel these individual to executive suites (Daily, Certo, & Dalton, 2000) and improve multinational company performance (Carpenter et al., 2001). Given the significant amount of resources being expended on the enhancement of international exchange programs for students (Chao, Takeuchi, & Farh,

2017), study-abroad experience may become a more common and important type of prior international experience for expatriates to improve their overseas performance. In addition, rather than simply focusing on individuals who have longer international work experiences, the selection criteria can be more fine-grained by taking both job and organizational experiences into consideration, because it is the combination of the three types of work experiences that eventually shapes expatriate performance-change patterns. With regard to devising intervention practices for those without prior international work experiences, current findings suggest that additional support may be necessary to facilitate low performers to successfully adapt to the new cultural environment. Given that different types of support (Kraimer et al., 2001; Takeuchi et al., 2009) can facilitate expatriate job performance, such support may need to be targeted more toward those who lack prior international work experience, such that more effective utilization of resources can be accomplished. Such support would also help to ensure that valuable human resources are not lost in the future (Carpenter et al., 2001; Daily et al., 2000).

Limitations

The major limitation of the current study is directly related to the archival nature of the data sets; our scope was limited to variables that were available in the company records. Therefore, it is impossible to examine other potential predictors of expatriate job performance change patterns. As such, we cannot exclude the possibility that the set of previous work experience predictors is only part of many important variables that influence the inter-individual differences in expatriate performance change trajectories. These other potential predictors may include cognitive ability (e.g., Murphy, 1989), personality variables (e.g., Shaffer et al., 2006; Wang & Takeuchi, 2007), work stressors and work strain (e.g., Takeuchi, Yun, & Tesluk, 2002; Takeuchi, Wang, & Marinova, 2005), and organizational support (e.g., Kraimer & Wayne, 2004), which have been shown to be related to expatriate adjustment and performance.

Second, while the average length of international assignments may vary across different organizations, the typical length that we used in this study was between 2 and 2.5 years. Thus, our four-wave data sets measuring performance every 6 months captured a significant portion of the international assignment period for our sampled expatriates. Nevertheless, our findings may not be generalizable to those expatriates who experience longer time spans (3 to 5 years, for instance). For example, although we identified a stable low-performance pattern in our sample, we suspect that some of those expatriates might be able to adjust to the new work environment and improve their performance given a longer time span. Yet, due to the limitation of our research scope, we were unable to detect such potential improvements in our study. In addition, our 2-year scope also restricted us from differentiating the u-curve pattern from the s-shape pattern, which was derived from the meta-analysis of multiple studies over a time span of 80 months (Bhaskar-Shrinivas et al., 2005). Of course, it would have been desirable if we were able to collect more fine-grained data, such as the 10-wave data used by Zhu et al. (2016) with a span of 9 months (one data collection every month) for the current sample (e.g., 12-wave data every other month), but such data accessibility was not feasible because expatriate job performance was evaluated only every 6 months. Related, the current expatriate sample was somewhat unique, as it included mostly German males

assigned to China. Further, it should be noted that the sample we used here could be viewed as very successful expatriates (maintaining their overseas assignment for at least 2 years). Therefore, the generalizability of the results to expatriates from other cultures and to females is still unknown. Future research may focus on examining these generalizability issues by using more gender-balanced samples from different cultures and industries.

Conclusion

Given that the global workforce is composed of employees and managers with different human capital endowment (in terms of their prior work experiences), the current study builds and extends theory for expatriation literature by differentiating expatriate performance-change patterns based on prior work experiences. Integrating learning and human capital accumulation perspectives, we revealed the potential for different types of human capital to influence expatriates' job performance-change patterns using four waves of data measured across 24 months. By identifying how work-related experiences led to job performance change patterns, our findings provide avenues for multinational companies to best select and manage their global talent so that expatriates are able to perform better and return to the parent company (rather than turning over). We encourage additional studies to examine the dynamics of expatriation performance.

Notes

1. The results of these two studies are based on the same data set. Thus, it may not be surprising that all three facets of adjustment were correlated with job performance (general, $r = .20, p < .05$; work, $r = .37, p < .01$; and interactional, $r = .18, p < .05$) in Wang and Takeuchi (2007), and both general ($r = .23, p < .05$) and work ($r = .40, p < .01$) correlated significantly with job performance in Takeuchi et al. (2009), even though the specific relationships examined in these two studies differ to some extent.

2. This approach is based on the paper by Bolck, Croon, and Hagenaars (2004); therefore, it is called BCH approach.

3. This approach is based on the paper by Lanza, Tan, and Bray (2013); therefore, it is called LTB approach.

4. We conducted a supplemental analysis by directly estimating multinomial logistic regression coefficients of the covariates in predicting the latent class membership during the latent class growth analysis. Our result pattern was similar to the one reported here.

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