



Contents lists available at ScienceDirect

Journal of Business Research



## Contextualizing human capital theory in a non-Western setting: Testing the pay-for-performance assumption

Mario Hayek<sup>a,\*</sup>, Christopher H. Thomas<sup>b</sup>, Milorad M. Novicevic<sup>c</sup>, Daniel Montalvo<sup>d</sup>

<sup>a</sup> Texas A&M University – Commerce, Management Department, 2600 S. Neal Street, Commerce, TX 75428, USA

<sup>b</sup> Saint Louis University, Management Department, One North Grand, St. Louis, MO 63103, USA

<sup>c</sup> University of Mississippi, Management Department, University Avenue, University, MS 38677, USA

<sup>d</sup> Great People Consulting, Roca 668 y Amazonas, Quito, Ecuador

### ARTICLE INFO

#### Article history:

Received 4 August 2013

Received in revised form 14 June 2015

Accepted 16 June 2015

Available online xxxx

#### Keywords:

Intra-organizational career success

Human capital

Latin America

Pay-for-performance

### ABSTRACT

Human capital theory is the dominant theoretical framework used to explain objective intra-organizational career success. However, the economic assumption that human capital development results in greater pay due to enhanced performance is challenged in non-Western contexts. Therefore, this study examines how the components of human capital influence pay in a non-Western setting where local companies commonly face salient socio-cultural and institutional pressures. In this vein, a formal model including performance evaluation as a partial mediator between human capital components and pay in a Latin American setting is developed and tested. The findings indicate that human capital development influences pay, but not due to enhanced performance as posited by human capital theory, suggesting that social and institutional pressures seem to influence the relationships. Furthermore, pay-for-performance compensation mechanisms appear to work only at the general employee level but not at the managerial level.

© 2014 Published by Elsevier Inc.

### 1. Introduction

In today's knowledge-rich global environments, individual career success increasingly rests on employability across organizations (Dries, Pepermans, Hofmans, & Rypens, 2009). Despite this growing trend, many individuals continue to develop their human capital and pursue career success within the same organization (Verbruggen, Sels, & Forrier, 2007). Objective intra-organizational career success has traditionally been examined in Western settings using the explanatory frame of human capital theory (Ng & Feldman, 2009). However, there is a paucity of research on the relationship between human capital and objective intra-organizational career success in non-Western settings (Fang, Zikic, & Novicevic, 2009). Researching careers in these novel contexts entails the need for theorizing and conducting empirical research in a manner that accounts for context-specific effects (i.e., contextualizing theory) (Tsui, Nafedakar, & Ou, 2007; Whetten, 2009). In particular, May & Stewart (2013, p. 148) argue that “there is potential for cross-fertilization from international management research not only to ascertain the generalizability of inferences, but also to capitalize on contextual contingencies for insights concerning construct additions that enrich theory's ability to describe and predict phenomena of interest more thoroughly and robustly across boundaries.” An illustrative construct is pay-for-performance which, based on

human capital theory, is influenced by individual education and training. To model and test this influence in the local context, it is necessary to contextualize human capital theory.

Contextualizing theory involves identifying the conditions under which a theory developed in one context holds within another context (McGuire, 1983). Theory contextualization is different from theorizing about context, which involves examining how differences among contexts may influence a change in an established theory. This distinction is particularly important because contemporary research suggests that human resource (HR) notions typically have components of universal validity while also incorporating contextualized cultural particulars that are manifested in specific HR policies and practices (Bonache, Trullen & Sanchez, 2012). Hence, the purpose of this paper is to contextualize human capital theory by examining how institutional (i.e., socio-cultural) factors may influence the relationship between human capital and objective intra-organizational career success in a firm operating within a Latin American context.

Within the examined institutional context, sociocultural norms reflect the “common Roman law heritage, a common Iberian colonial past, and present day patterns of social organization” (Rosenn, 1988, p. 128). As a result, individuals working in this context tend to share a strong awareness of social stratification, paternalism and in-group collectivism (House, Hanges, Javidan, Dorfman, & Gupta, 2004) that may suppress the importance of technical competence in performance evaluations and inflate the importance of symbolic aspects of human capital for objective intra-organizational career success. If empirical results

\* Corresponding author. Tel.: + 1 662 202 2471.

E-mail address: mario.hayek@tamuc.edu (M. Hayek).

indicate this institutional rationale explains level of pay better than the traditional economic model, we could infer that human capital leads to objective intra-organizational career success in the novel context but operates differently than the typically theorized economic mechanism. Thus, by examining human capital theory within a relatively novel context, we may derive novel insights about the existing theory and the phenomenon that it espouses to explain.

## 2. Theoretical grounding

Human capital theory is widely used to explain objective career success in Western settings (Becker, 1962; Forstenlechner, Selim, Baruch, & Madi, 2014; Sullivan & Baruch, 2009). Objective career success reflects observable achievements of an individual, such as pay and promotion (Judge et al., 1995), and has typically been related to human capital and socio-demographic antecedents (Ng, Eby, Sorensen, & Feldman, 2005). Although multiple factors are considered to be indicators of objective career success (e.g., salary and number of promotions), we focus on pay, which has been designated as a global dimension of career success across multiple cultural settings (Demel, Shen, Las Heras, Hall, & Unite, 2012).

The main prediction of human capital theory is that increases in human capital translate into greater pay through increased job performance. However, only in ideal cases do performance evaluations offer an “objective, rational, and systematic way for organizations to manage workforce performance” (Chiang & Birtch, 2010, p. 3) because managers often experience institutional pressures that introduce bias into the relationship between human capital and performance evaluations, as well influencing the combined impact of human capital and performance on objective career success (Parboteeah & Cullen, 2003). In other words, while economic rationality implies that investments in human capital may lead proximally to increased performance and distally to greater pay, this does not take into account the political, socio-cultural, and institutional context in which the investments in human capital are embedded (Peng, 2003).

The socially-embedded nature of intra-organizational career success has recently attracted growing interest from career researchers (Kats, Van Emmerik, Blenkinsopp, & Khapova, 2010; Khapova, Vinkenbunrg, & Arnold, 2009). Societal processes and cultural influences impact career success in non-Western settings through HR policies and practices (Thomas & Inkson, 2007) because HR systems are “often based on customs, imitation of other firms, administrative convenience, and ad hoc programs developed through narrow functional lenses,” (Gomez-Mejia, Berrone, & Franco-Santos, 2010, p. 55).

## 3. Hypothesis development

Human capital theory posits and empirical evidence supports the relationship of education (Fleisher, Hu, Li, & Kim, 2011; Ng et al., 2005; Singh, Ragins, & Tharenou, 2009), tenure (Altonji & Williams, 2005; Ng et al., 2005; Williams, 2009), and training (Singh et al., 2009) with pay. However, relatively little work explicates differential influences and mechanisms via economic, as opposed to socio-cultural and institutional, forces. Our model extends current thought by examining these paths of influence.

Fig. 1 illustrates the mechanisms through which the three human capital components are hypothesized to influence pay. The lower path depicts an indirect influence and stipulates that the impact of human capital on pay is mediated by the degree to which greater human capital translates into improved performance ratings. This represents an economic, or rational, view in that the relationship between pay and human capital is a function of pay-for-performance systems that recognize value added through increased productivity. The upper path depicts a direct influence of human capital on pay implying that greater human capital leads to increased pay regardless of its impact on performance. That is, compensation is based on the symbolic, or potential,

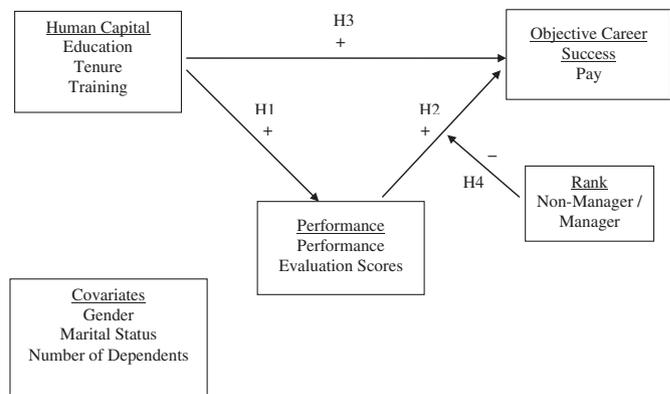


Fig. 1. Hypothesized relationships.

value of human capital, rather than on evaluated performance. The model also incorporates a boundary condition, rank, which is proposed to moderate the relationship between performance evaluations and pay.

### 3.1. Economic perspective of human capital on objective career success

The economic perspective of human capital theory posits that the three human capital components influence performance and thus result in greater pay. In other words, the paths from human capital components to objective intra-organizational career success, are mediated by performance evaluation scores.

#### 3.1.1. Education

A fundamental assumption of the economic perspective is that investment in education leads to greater productivity, which is reflected in improved performance evaluation scores (Mason & van Ark, 1994), and subsequently to increased pay. In a recent meta-analysis conducted by Ng & Feldman (2009), the authors found that education was a significant predictor of core task performance. Therefore, based on human capital theory and previous empirical research, performance evaluation scores are likely to explain how education is mapped onto objective career success in terms of pay. Hence, the following is hypothesized:

*H1a. Education has an indirect, positive relationship with pay via a positive relationship with performance evaluation scores.*

#### 3.1.2. Tenure

Longer tenure results in greater firm-specific knowledge, which subsequently is related to increased productivity. Several empirical studies support the positive tenure-performance relationship (Sturman, 2003; Van Iddekinge, Ferris, Perrewe, Perryman, Blass, & Heetderks, 2009). In effect, it is likely that through a gradual process longer tenure results in performance improvements and ultimately to increases in pay. Therefore, the following is hypothesized:

*H1b. Tenure has an indirect, positive relationship with pay via a positive relationship with performance evaluation scores.*

#### 3.1.3. Training

Training typically develops job- and firm- specific skills that enhance individual employee performance (Salas et al., 1999), thus contributing to greater productivity (Hatch & Dyer, 2004). Longitudinal studies (Van Iddekinge et al., 2009) and studies involving multiple levels of analysis (Bartel, 1994) indicate a significant impact of training on employee performance scores. Furthermore, training and skill development

opportunities significantly and positively influence pay because of improved performance (Ng et al., 2005). Therefore, the following is hypothesized:

*H1c. Training has an indirect, positive relationship with pay via a positive relationship with performance evaluation scores.*

A significant relationship of these three components to pay via performance evaluation scores is particularly relevant to pay-for-performance systems that are designed to leverage the use of human capital by establishing a strong link between individual performance and pay (Jenkins, Mitra, Gupta, & Shaw, 1998; Rynes, Gerhart, & Parks, 2005). The rationale for implementing these systems comes not only from empirical investigations that were designed to examine their effectiveness (Cadsby, Song, & Tapon, 2007; Chiang & Birtch, 2010; Scott, Shaw, & Duffy, 2008), but also from several meta-analyses that indicate a significant positive relationship between pay and performance (e.g., Guzzo, Jette, & Katzell, 1985; Jenkins et al., 1998). Therefore, the following is hypothesized:

*H2. Performance evaluation scores are positively related to pay.*

The above hypotheses reflect a rational (i.e., economic) human capital perspective on a pay-for-performance compensation system. However, this rational, economic view may not fully explain the nature of the relationship between performance evaluation and objective intra-firm career success in terms of pay. Specifically, complementary socio-cultural and institutional influences may function such that the human capital components directly influence pay, thereby attenuating the proposed indirect effect operating through performance evaluations scores.

### 3.2. Socio-cultural and institutional influences of human capital on objective career success

Context-specific institutional pressures and socio-cultural factors may attenuate the mediating role of performance evaluation scores. This instance occurs when managers—influenced by industry-related benchmarks, institutional pressures, or societal norms—allocate pay or other rewards based upon reputational effects of the human capital components, independent of their influence on performance. For instance, compensation systems often reflect seniority-based rewards (Gomez-Mejia et al., 2010) rather than on performance improvement driven by tenure.

In non-Western contexts, such as the Ecuadorian context, managers making pay decisions may experience institutional pressures that suppress the primacy of performance scores at a greater level than managers in Western settings (Serneels, 2008). For example, “Ecuador has arguably the most cumbersome labor legislation in Latin America. There are several mechanisms through which the government interferes with wage setting in the private sector, including the national minimum wage, mandatory wage adjustments to compensate for increases in the cost of living, and a vast number of mandated benefits” (Maclsaac & Rama, 1997, p. 136). Ecuadorian law establishes two important components of salary 1) a minimum salary, and 2) distribution of ten percent of profits before taxes divided among employees; this is computed as a combination of base salary, years of tenure, and number of dependents. Such salient institutional influences might interfere with organizational commitment to implement pay-for-performance policies, and may influence managers to bypass strict adherence to performance evaluations as the linchpin between human capital and pay.

The regional socio-cultural context of Ecuador is unique as the country belongs to the Latin American cluster, which is characterized by a strong sense of dignity, the dominance of in-group over out-group identity, and paternalistic leadership (House et al., 2004). At the national level, Ecuador scores lower than the United States on assertiveness and uncertainty avoidance, and higher on in-group collectivism. These

socio-cultural characteristics are particularly relevant when assessing how performance evaluations influence pay because performance appraisals are likely to be influenced in a biased way by social norms (Chiang & Birtch, 2010). Additionally, wage and salary expectations in Latin America are discussed less frequently during interviews due to the overall cultural de-emphasis on performance relative to other countries (Posthuma, Levashina, Lievens, Schollaert, Tsai, Wagstaff & Campion, 2014). As a result, the value of human capital may be assessed in a socio-culturally normative way directly influencing pay (Gomez-Mejia et al., 2010). Therefore, the following hypothesis is offered:

*H3. Education, tenure, and training are directly, positively related to pay.*

#### 3.2.1. Rank as a contextual boundary condition

A more rigorous test of theory contextualization requires identifying boundary conditions that may delimit the domain within which the theory applies (Whetten, 1989). As managers are likely to be more entitled than non-managers in a non-Western context with high power-distance like Ecuador, and culturally embedded artifacts and expectations have a strong influence on perceptions of managerial competence beyond skills required for job performance (Chong, 2013), employees' rank may act as a boundary condition when contextualizing human capital theory. This allows social forces to supersede performance forces when assigning pay rates for managers. The rank grouping may also be particularly relevant because the nature of managerial pay differs from the nature of non-managerial pay in the following ways: a) managerial performance is more difficult to measure because “high levels of interdependence [that] often make it difficult to isolate individual managers' contributions to outcomes” (Wood, Atkins, & Bright, 1999, p. 703); and b) the pool of managers is typically limited and therefore pay premiums are expected by those who meet the requirements to be hired for managerial positions (Tosi, Werner, Katz & Gomez-Mejia, 2000).

In addition, managers commonly have more years of education and experience, and make more personal sacrifice and investment in their careers than non-managers do “so their higher pay may be seen as a return on this human capital investment” (Gomez-Mejia et al., 2010, p. 135). Research supports the notion that at the managerial level, pay is seldom based on performance (Baker, Jensen, & Murphy, 1988) and that performance explains pay only at the lower levels of the firm (Flabbi & Ichino, 2001). Hence, the following is hypothesized:

*H4. Rank moderates the relationship between performance evaluation scores and pay so that the relationship between performance evaluation scores and pay is stronger for non-managers than for managers.*

## 4. Design and methodology

This study uses a lagged, cross-sectional path analysis to test human capital theory within a single organization, in a developing country with salient institutional and socio-cultural pressures. We use secondary data on 856 employees from a major Ecuadorian financial services company. The firm is nationally owned and not a subsidiary of a foreign multinational organization. The organization primarily focuses on the issuance of credit cards and is not involved in any significant sales-type activity such as investment banking or brokerage services that could potentially create differential pay treatment among employees. Most of the employees work in Quito (Ecuador's capital) or Guayaquil (Ecuador's primary financial hub). The data spans the years 2009 and 2010, and the outcome measure (2010 salary) is lagged one year relative to the predictors which were from the calendar year 2009. Of the population (624 non-managers and 158 managers), 782 (91%) had complete data, and another 58 (7%) were missing only a single value. Expectation maximization algorithms were used in Mplus to replace the missing values. Table 1 provides descriptive statistics and intercorrelations for independent, dependent, and control variables.

#### 4.1. Independent variables

The total number of years of formal education for each employee represents the sum of years of primary and secondary education, together with years of undergraduate and graduate coursework. Approximately 17 percent of the individuals have a high school degree, 74 percent have a four-year undergraduate degree, and the remaining 9 percent of have some form of graduate degree. Values range from twelve to twenty-one with a mean of 15.52 ( $SD = 1.76$ ).

Tenure is the number of years from the time of employment until the time of this study. Tenure ranges from 1 to 36 years with a mean of 6.72 ( $SD = 5.38$ ) years.

Training is operationalized as the total number of independent courses or workshops an employee participated during their employment with the firm. The mean was 1.02 courses ( $SD = 2.65$ ). While all employees receive training related to their specific work duties, the firm also provides additional opportunities to develop firm-specific skills beyond those necessary for completing day-to-day tasks. Given our focus on differentiating aspects of human capital across individuals, we computed the number of developmental courses that each employee participated in beyond requisite job-skills training. Approximately, thirty percent of employees participated in some form of additional firm-specific training and development.

Annual performance evaluation scores are measured on a 5-point Likert-type scale ranging from poor (= 1) to excellent (= 5). The appraisal procedure involves the following steps: 1) Each employee establishes yearly goals and provides self-evaluations against these goals; 2) Each employee is evaluated by his or her supervisor as to the attainment of goals established by the employee and by the organization; 3) Employees meet with their supervisor and are expected to reach a consensus as to the final evaluation score; 4) In the case that an agreement is not reached, a representative from the HR department is assigned to act as a mediator between the employee and the supervisor; 5) If an agreement cannot be reached, the score given by the supervisor remains as the final evaluation score. The mean performance evaluation score is 4.28 ( $SD = .35$ ).

#### 4.2. Moderating variable: rank

The rank of the employees of the financial services firm is broadly divided into managers and non-managers. Non-managers represent 82 percent of the sample and managers represent 18 percent. Computing this moderating effect necessarily requires including a main effect of rank on pay. Therefore, rank also serves as a control variable, in that the relationships between pay and the predictor variables involve variance in pay rates that are not attributable to employees' rank.

#### 4.3. Dependent variable: objective career success (pay)

Salary is used as the proxy indicator of objective career success. In Ecuador pay is typically calculated as a fixed monthly salary and does not include any variable pay components required by Ecuadorian law. An interview with the HR director revealed that salaries for all positions are determined by a fixed component, that is determined by the level of similarity between the required competencies for a given position with those of the individual filling the position, and a variable component that is contingent on employees achieving goals that are set by themselves in conjunction with their supervisors. Salaries range from \$240 per month to almost \$9,000 per month with a mean salary of \$818.62 per month ( $SD = 832.53$ ). A natural logarithmic transformation is used to normalize the data prior to our analyses.

#### 4.4. Control variables

Gender is coded 0 for female and 1 for male. The sample is fairly balanced with 46 percent female and 54 percent male. Marital status is coded 0 for single and 1 for married. The majority of respondents (60%) are married. Employees self-reported the number of financially dependent family members under the age of 18 living in the home. Forty-two percent of the sample does not have children, while 58 percent have between one and six children.

Several additional variables were considered as statistical controls, but preliminary evidence indicated either non-significant differences related to these variables, or in the presence of differences, our current model adequately accounted for those differences. In particular we investigated the location of employees in regard to whether they were at headquarters in Quito ( $n = 661$ ) or elsewhere ( $n = 195$ ). In addition to Quito, there were six other potential locations, with the vast majority of the remaining employees in Guayaquil ( $n = 134$ ). Among the other locations, the number of employees ranged from 5 to 22. An ANOVA investigation comparing mean levels of compensation across these locations indicated no significant differences ( $F = .61, p = .75$ ). We also examined categories based on operating departments or units, and job functions. The majority of employees are at the operational level, and work within the Service Center ( $n = 661$ ) in various departments directly related to providing customer service. While there were significant differences across some departments in terms of average salary ( $F = 9.09, p < .001$ ), a closer examination revealed that the primary distinction was captured by our managerial versus non-managerial rank within each department. Overall, there was a high degree of consistency among the salaries of operational employees regardless of department, and there was a high degree of consistency among the salaries of managers, but there was a significant divide between these two categories of employees.

**Table 1**  
Descriptive statistics and intercorrelations.

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Gender	.53	.50									
2. Marital status	.59	.49	.12*								
3. Number of dependents	1.09	1.17	.18*	.53*							
4. Age	34.01	7.98	.13*	.28*	.55*						
5. Tenure	6.67	5.38	.03	.22*	.38*	.68*					
6. Education	15.48	1.76	.02	-.08	-.22*	-.23*	-.17*				
7. Training	1.02	2.65	-.02	.04	.04	.08 <sup>†</sup>	.01	.16			
8. Performance evaluation	4.28	.35	-.02	.03	-.04	-.05	-.02	.06	.05		
9. Pay (2010)	818.6	832.53	.03	.10*	.17*	.33*	.23*	.21*	.22*	.11*	
10. Rank	1.20	.40	-.04	.06	.08 <sup>†</sup>	.24*	.28*	.08 <sup>†</sup>	.16*	.14*	.56*

Note.  $N = 856$ .

<sup>†</sup>  $p \leq .05$  (two-tailed)

\*  $p \leq .01$  (two-tailed)

5. Results

The data were analyzed using path analysis in Mplus version 6 (Muthén & Muthén, 2010). Path analysis offers the benefit of assessing the fit of the overall proposed model, as well as the specific relationships among the variables (LeBreton, Wu, & Bing, 2008). We used Maximum Likelihood Robust estimation to provide path coefficients and standard errors that are robust to deviations from normality. This procedure provides a way of accounting for potential range restriction in the performance evaluation variable. While scholars have advised against using statistical corrections for range restriction related to performance appraisals (Murphy & Cleveland, 1995), this estimation method accounts deviations from normality in the distribution of values for this variable. Results are depicted in Fig. 2 and detailed in Table 2. Three indices are used to determine model fit: chi-square ( $\chi^2$ ), comparative fit index (CFI), and root mean square error of approximation (RMSEA). The theoretical model results in a  $\chi^2 = 22.14$  ( $df = 5$ ),  $p < .01$ ; CFI = .99, and RMSEA = .07. Values of .95 or higher for CFI and .06 or lower for RMSEA are considered to result in good fit (Hu & Bentler, 1999). Overall, the results suggest good fit of the theoretical model, and explain 47% of the variance in pay.

Hypotheses 1 and 2 relate to paths associated with the economic rationality of human capital theory (i.e., an indirect relationship with pay conveyed via performance evaluation scores). Hypotheses 1a, 1b, and 1c predict that the three human capital components indirectly influence pay through performance evaluation scores. Full support for this set of hypotheses is contingent upon support for H2. These hypotheses are not supported as none of the human capital components significantly relate to the performance evaluation scores (years of formal education:  $\beta = .05, p = .20$ ; tenure:  $\beta = -.01, p = .75$ ; training:  $\beta = .04, p = .20$ ). Hypothesis 2, which predicts a significant relationship between performance evaluation scores and pay, is supported ( $\beta = .34, p = .001$ ). Thus, although the relationship between evaluation scores and pay is supported, H1 is not supported because the human capital components are not significantly related to performance evaluation scores, and, as such, there were no indirect effects to convey. Hypothesis 3 predicts significant direct relationships between the human capital components and pay. This hypothesis is supported for years of formal education ( $\beta = .18, p < .001$ ), tenure ( $\beta = .12, p < .001$ ), and training ( $\beta = .08, p = .02$ ).

Hypothesis 4 predicts a moderating effect of rank on the relationship between performance evaluation scores and pay. The results indicate the presence of a significant interaction effect ( $\beta = -1.02, p = .04$ ; see Joreskog (1999) for explanation of acceptable standardized coefficients greater than 1). The nature of the interaction was explored using a procedure from Hayes & Matthes (2009) and is plotted in Fig. 3. The conditional effect of performance evaluation scores is

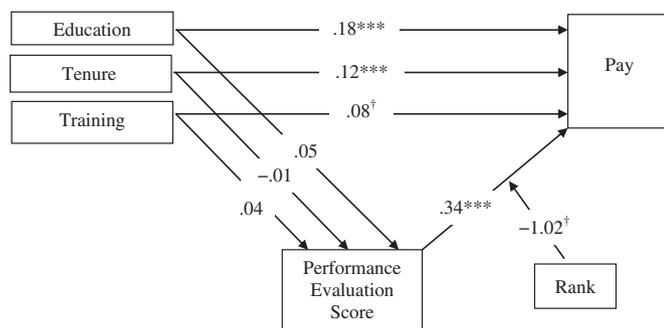


Fig. 2. Formal model. Note. N = 856.  $\chi^2 = 22.14$  ( $df = 5$ ),  $p < .001$ ; RMSEA = .07, CFI = .99, SRMR = .03). Rank was coded such 1 = Non-managers and 2 = Managers. Pay was operationalized as a log-normalized value based upon monthly salaries in dollars. The main effect of rank on pay was significant ( $B = 1.53, p < .001$ ). Due to their non-focal nature within the study, control variables and their associated paths are not depicted in the model. Statistical significance was calculated using robust standard errors. †  $p \leq .05$  (two-tailed). \*  $p \leq .01$  (two-tailed). \*\*  $p \leq .001$  (two-tailed).

Table 2  
Summary of hypotheses and support.

Hypothesis	Path	Result
H1a	Education → Performance Evaluation → Pay	Not supported
H1b	Tenure → Performance Evaluation → Pay	Not supported
H1c	Training → Performance Evaluation → Pay	Not supported
H2	Performance Evaluation → Pay	Supported
H3a	Education → Pay	Supported
H3b	Tenure → Pay	Supported
H3c	Training → Pay	Supported
H4	Performance Evaluation * Rank → Pay	Supported

calculated for each level of rank, and estimated outcome values are derived for various combinative levels of the variables. Simple slope analysis indicates that although the interaction effect is significant for non-managers ( $b = .28, p < .001$ ), for managers it is non-significant ( $b = -.02, p = .32$ ). Therefore, as hypothesized, the link between evaluation scores and pay is stronger for non-managers than for managers.

6. Discussion

Our empirical findings suggest that institutional pressures may bias the rational assumptions of human capital theory regarding the relationship of human capital components and pay. Specifically, the rational prediction positing that greater accumulation of human capital will result in higher performance evaluations and consequently to higher pay (Fang et al., 2009; Williams, 2009) is not supported in the present study. Rather, only the direct influences between human capital and pay are significant. This finding suggests that individuals are more likely to achieve greater pay based on the symbolic value of their formal education and training rather than based on their economic value as predicted by human capital theory. This implies that when making pay decisions, firm managers appear to primarily focus on institutional pressures, such as benchmarked salary data, or by the shared perception of socio-culturally symbolic value of degrees obtained through formal education and training when allocating pay.

Given that our data were from a single firm, we cannot state with a high degree of certainty as to whether this is a function of the Ecuadorian context, or whether this related to policies within this particular organization. However, the sociocultural norms of this culture (i.e., strong awareness of social stratification, paternalism, and in-group collectivism) may suppress the importance of technical competence while inflating symbolic aspects of human capital. Notably, our results follow this line of reasoning, which may indicate preliminary, but tenuous, support for this effect being tied to Ecuadorian context rather than merely being a function of this firm.

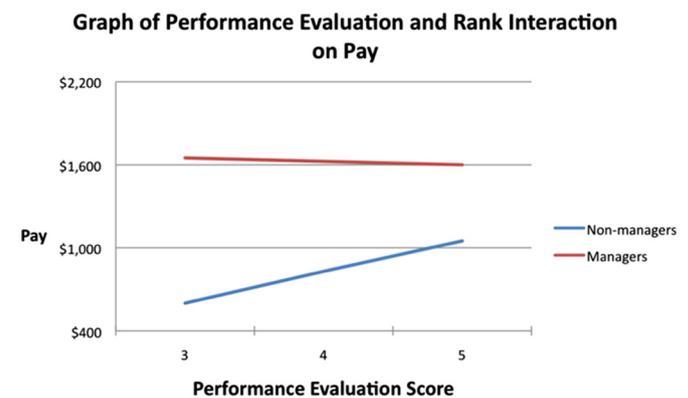


Fig. 3. Graph of Performance Evaluation and Rank Interaction on Pay. Note: Graph depicts individual regression lines for observations within each rank designation, and accounts for the full set of predictor and control variables shown in the Fig. 1. The graph captures the entire range of performance evaluation scores (3 – 5) reported for the 856 employees.

This finding of significant symbolic rather than economic value of education and training for objective intra-organizational career success is important because there is a paucity of research addressing how institutional pressures coming from external labor markets or socio-cultural environment influence objective intra-organizational career success (Dulebohn & Werling, 2007). This is particularly relevant because several authors (i.e., Fernandez-Alees, Cuevas-Rodriguez, & Valle-Cabrera, 2006) suggest that certain human capital components (i.e., education) may signal an individual's knowledge, skills, and abilities and thus influence pay beyond the influence of performance evaluations. Also, research suggests that sheepskin effects of educational credentials (i.e., the symbolic value of a degree while controlling for years of education) may influence pay without consideration for performance (Ferrer & Riddell, 2002; Wald & Fang, 2008). Therefore, the lack of support for performance evaluations as the explanatory mechanism between education and training with pay suggests that non-economic factors may be influencing managerial decisions regarding employee pay within this organization.

However, caution should be taken when interpreting the results because a portion of the indirect effect posited by human capital theory was supported. Specifically, the link between evaluation scores and pay is significant, while the initial portion of the relationship – the hypothesis that accumulated human capital positively influences performance evaluation scores – is not supported. It is possible that the diminution of this expected effect is driven by leniency bias which is common in collectivistic contexts, or could be a unique manifestation of the evaluation system within this particular organization.

Such leniency bias corresponds to information that is available about the use of performance appraisal within Latin American contexts. In particular, Latin American “law and custom emphasize the responsibility of the employer to treat employees as if they were an extended family. This, along with a collectivist culture with an emphasis on harmony” results in a situation in which employees are sensitized to differences in evaluation and pay (Milliman, Nason, Zhu, & De Cieri, 2002, p. 90). In the organization where we conducted this study, employee input is vital to the ultimate score received on the performance appraisal, and this is in line with Latin American contexts where the performance appraisal process is strongly viewed as a process to discuss subordinates' views, and to allow subordinates to express their feelings (Milliman et al., 2002). To that end, no individuals received evaluation scores lower than 3 (the midpoint on the 1 to 5 performance scale). This could suggest that true differences in performance are not being captured by these scores, resulting in relatively little discernible variance in individual performance ratings, and an inability to detect any statistically significant effect.

We note that Rousseau & Fried (2001, p. 4 *emphasis added*) address the issue of range restriction by stating, “Virtually all organizational research is subject to range restriction because research settings select, adapt, suppress, and amplify a host of variables that are of interest to organizational researchers. The point is not that *more variation* is better, but that sustained attention to those factors contributing to *observed variation*” is necessary such that those factors are identified and discussed in meaningful ways. Consequently, it is worth noting that the observed variance, while limited, did significantly predict pay differences within this particular organization. That is, although there were only minor differences in performance evaluation scores, thus preserving the harmony and communal feel mentioned earlier, those differences that did exist were meaningful in a predictive sense.

## 7. Implications and limitations

The research implication of this study is the pruning of the contextualized human capital theory (Gray & Cooper, 2010) to explain how human capital influences objective intra-organizational career success in the Latin American context. Theory pruning involves “limiting, bounding, and perhaps reducing theory, outside a large, multistudy

framework” (Leavitt, Mitchell, & Peterson, 2010, p. 649). Van de Ven & Johnson (2006, p. 814) suggest, “one has a much greater likelihood of making important knowledge advances to theory and practice if the study is designed so that it juxtaposes and compares competing plausible explanations of the phenomena being investigated.” In this study, we pruned the contextualized human capital theory of objective intra-organizational career success in one large financial services firm in a Latin American setting.

In terms of practical implications, objective intra-organizational career success appears to result from the symbolic value of formal education and training rather than on the economic value as predicted by human capital theory. The results from the current study indicate that non-managerial employees are rewarded based on their performance evaluations while managers tend to be rewarded based on their credentials, not their performance. Rewarding managers based on their formal education and not for their performance should draw attention from HR departments to find ways to link performance and pay at higher organizational levels.

The two primary limitations of this study are that the data is based on a single firm situated in the Ecuadorian context and the cross-sectional design. Therefore, future studies should use a broader sample of firms to test the generalizability of our findings and implement longitudinal designs to track career success over time (Ployhart & Vandenberg, 2010). Another potential limitation within our data is range restriction on performance evaluation scores. Range restriction attenuates the correlation between variables and minimizes the ability to accurately detect significant relationships.

Although statistical corrections have been developed (see Sackett & Yang, 2000), such corrections have been cautioned against within the performance appraisal literature because of unfounded assumptions regarding the true mean of performance, knowledge (or lack thereof) regarding the actual distribution of performance scores, and the belief that accurate performance appraisals would necessarily display high variability (Murphy & Cleveland, 1995). In particular, selection systems are designed to limit variability in performance by acquiring and retaining those applicants and incumbents who can maintain suitable levels of performance (LeBreton, Burgess, Kaiser, Atchley & James, 2003). Alternately, lack of variance in performance evaluations can be due to biases (e.g., leniency, central tendency, strictness) on the part of the rater that results in clustered rankings with restricted range. This variance restricting effect has been attributed to causes ranging from organizational norms to managerial intentions when the evaluations are performed for administrative, rather than developmental purposes (Jawahar & Williams, 1997; Spence & Keeping, 2013).

No matter the underlying reason, a high degree of variance in performance evaluations across employees seems to be an unfounded expectation, and may only occur in situations in which managers (i.e., raters) are required to use forced-distributions or stacked ranking systems. Therefore, as noted by Jawahar & Williams (1997), the validity of performance evaluation scores is questionable in the absence of objective measures; however, they remain an organizational reality, and it would behoove scholars and practitioners alike to better understand their functioning as it relates to outcomes of organizational interest.

In our particular case, the range of performance evaluation scores is truncated and ranges from 3 to 5, rather than the potential full range of 1–5. To account for the inherent deviation in normality associated with such truncation, we derived robust standard errors. Robust standard errors tend to be larger than standard errors, thus when calculating statistical significance based on t values (i.e., parameter estimate divided by standard error), larger effect sizes are necessary to obtain statistical significance. Regardless of our use of this approach, which provides greater confidence in the actual significance of our results, it remains that this compression of scores limits the variance in evaluation scores available for prediction by antecedent variables. In fact, the human capital predictors only accounted for 1% of the variance in performance evaluation scores, and we speculate the lack of significant predictive relationships

from human capital to evaluation scores may have been an artifact of this restriction. Given this limitation of our data (range restriction), the significant relationship between evaluation scores and pay is particularly noteworthy. Overall, the model accounted for 47% of the variance in pay. In addition, the presence of an interaction effect of performance evaluation scores and rank was detected. Given that the study had several characteristics detailed by McClelland & Judd (1993) as creating difficulty in detecting statistically significant interactions (e.g., lack of control in field settings, relative statistical power, small samples—in our case the managerial subsample), this effect may be considered relatively strong.

## 8. Conclusion

This study contextualizes human capital theory to explain how human capital influences objective career success within an organization situated in a socially-complex context that is relatively neglected in the career literature. Johns (2001) suggested that context has been downplayed across a broad range of management scholarship, and specifically criticized the performance appraisal literature for being an “acontextual, futile attempt to isolate appraisers from contextual influence” (p. 33). We have attempted to account for context, specifically Ecuadorian and more broadly Latin American norms, when explaining the role of human capital in predicting career success. While our study was limited to a single organization, the findings conform to many of our expectations that were based on accounting for context. To that end, we have offered some speculation as to the wider implications of performance appraisal and career success within this context. However, while some scholars argue that such speculation is not justified, Johns (2001, p. 33) offers this advice; “there is nothing to lose from such speculation and often something to be gained.” Therefore, the contribution of this study resonates well with the argument that “in order to better understand individual’s career needs, we must progress beyond the individualistic and de-contextualized models offered by the majority of studies and develop a more complex interpretation, which acknowledges the interplay between individual careers and the wider institutional and national cultures” (Ituma & Simpson, 2006, p. 992).

## References

- Altonji, J., & Williams, N. (2005). Do wages rise with job seniority? >a reassessment. *Industrial and Labor Relations Review*, 58, 370–397.
- Baker, G., Jensen, M., & Murphy, K. (1988). Compensation and incentives: Practice vs. theory. *The Journal of Finance*, XLIII, 593–616.
- Bartel, A. (1994). Productivity gains from the implementation of employee training programs. *Industrial Relations*, 33, 411–425.
- Becker, G. (1962). Investment in human capital: A theoretical analysis. *The Journal of Political Economy*, 70, 9–49.
- Bonache, J., Trullen, J., & Sanchez, J.I. (2012). Managing cross-cultural differences: Testing human resource models in Latin America. *Journal of Business Research*, 65, 1773–1781.
- Cadsby, C., Song, F., & Tapon, F. (2007). Sorting and incentive effects of pay-for-performance: An experimental investigation. *Academy of Management Journal*, 50, 387–405.
- Chiang, F.F., & Birtch, T.A. (2010). Appraising performance across borders: An empirical examination of the purposes and practices of performance appraisal in a multi country context. *Journal Management Studies*, 47, 1365–1393.
- Chong, E. (2013). Managerial competencies and career advancement: A comparative study of managers in two countries. *Journal of Business Research*, 66, 345–353.
- Demel, B., Shen, Y., Las Heras, M., Hall, D.T., & Unite, J. (2012). Career success around the world: its meaning and perceived influences in 11 countries. In J.P. Briscoe, D.T. Hall, & W. Mayrhofer (Eds.), *Careers around the world: individual and contextual perspectives* (pp. 59–87). New York: Routledge.
- Dries, N., Peppermans, R., Hofmans, J., & Rypens, L. (2009). Development and validation of an objective intra-organizational career success measure for managers. *Journal of Organizational Behavior*, 30, 543–560.
- Dulebohn, J., & Werling, S. (2007). Compensation research past, present, and future. *Human Resource Management Review*, 17, 191–207.
- Fang, T., Zikic, J., & Novicevic, M. (2009). Career success of immigrant professionals: Stock and flow of their career capital. *International Journal Manpower*, 30, 472–488.
- Fernandez-Alees, M., Cuevas-Rodriguez, G., & Valle-Cabrera, R. (2006). How symbolic remuneration contributes to the legitimacy of the company: An institutional explanation. *Human Relations*, 59, 961–992.
- Ferrer, A.M., & Riddell, W.C. (2002). The role of credentials in the Canadian labour market. *Canadian Journal of Economics*, 35, 879–905.
- Flabbi, L., & Ichino, A. (2001). Productivity, seniority and wages: New evidence from personnel data. *Labour Economics*, 8, 359–387.
- Fleisher, B.M., Hu, Y., Li, H., & Kim, S. (2011). Economic transition, higher education and worker productivity in China. *Journal of Development Economics*, 94, 86–94.
- Forstenlechner, I., Selim, H., Baruch, Y., & Madi, M. (2014). Career exploration and perceived employability within an emerging economy context. *Human Resource Management*, 53, 45–66.
- Gomez-Mejia, L., Berrone, P., & Franco-Santos, M. (2010). *Compensation and organizational performance: Theory, research and practice*. New York: M.E. Sharpe.
- Gray, P., & Cooper, W. (2010). Pursuing failure. *Organizational Research Methods*, 13, 620–643.
- Guzzo, R., Jette, R., & Katzell, R. (1985). The effects of esychologically based intervention programs on worker productivity: A Meta-Analysis. *Personnel Psychology*, 38, 275–291.
- Hatch, N., & Dyer, J. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25, 1155–1178.
- Hayes, A.F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*, 41, 924–936.
- House, R., Hanges, P., Javidan, M., Dorfman, P., & Gupta, V. (2004). Culture, leadership, and organizations. *The globe study of 62 societies*. Thousand Oaks, CA: Sage.
- Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Ituma, A., & Simpson, R. (2006). The chameleon career: An exploratory study of the work biography of information technology workers in Nigeria. *Career Development International*, 11, 48–65.
- Jawahar, I., & Williams, C. (1997). Where all the children are above average: The performance appraisal purpose effect. *Personnel Psychology*, 50, 905–925.
- Jenkins, D.J., Mitra, A., Gupta, N., & Shaw, J. (1998). Are financial incentives related to performance. *The Journal of Applied Psychology*, 83, 777–787.
- Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, 22, 31–42.
- Jöreskog, K. (1999). How large can a standardized coefficient be? <http://www.ssicentral.com/lisrel/techdocs/HowLargeCanaStandardizedCoefficientbe.pdf> [May 21, 2014]
- Judge, T., Cable, D., Boudreau, J., & Bretz, J.R. (1995). An empirical investigation of the predictors of executive career success. *Personnel Psychology*, 48, 485–519.
- Kats, M., Van Emmerik, I., Blenkinsop, J., & Khapova, S. (2010). Exploring the associations of culture with careers and the mediating role of HR practices. *Career Development International*, 15, 401–418.
- Khapova, S., Vinckenburg, C., & Arnold, J. (2009). Careers research in Europe: Identity and contribution. *Journal of Occupational and Organizational Psychology*, 82, 709–719.
- Leavitt, K., Mitchell, T., & Peterson, J. (2010). Theory pruning: Strategies to reduce our dense theoretical landscape. *Organizational Research Methods*, 13, 644–667.
- LeBreton, J., Burgess, J., Kaiser, R., Atchley, E., & James, L. (2003). The restriction of variance hypothesis and interrater reliability and agreement: Are ratings from multiple sources really dissimilar? *Organizational Research Methods*, 6, 80–128.
- LeBreton, J., Wu, J., & Bing, M. (2008). The truth(s) on testing for mediation in social and organizational sciences. In C. Lance, & R. Vandenberg (Eds.), *Statistical and methodological myths and urban legends: Received doctrine, verity, and fable in the organizational and social sciences* (pp. 109–143). New York: Routledge.
- MacIsaac, D., & Rama, M. (1997). Determinants of hourly earnings in Ecuador: The role of labor market regulations. *Journal of Labor Economics*, 15, S136–S165.
- Mason, G., & Van Ark, B. (1994). Vocational training and productivity performance: an Anglo-Dutch comparison. *International Journal of Manpower*, 15(5), 55–69.
- May, R., & Stewart, W., Jr. (2013). Building theory with BRICs: Russia’s contribution to knowledge sharing theory. *Critical Perspectives on International Business*, 9, 147–172.
- McClelland, G.H., & Judd, C.M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Quantitative Methods for Psychology*, 114, 376–390.
- McGuire, W.J. (1983). A contextualist theory of knowledge: Its implications for innovation and reform in psychological research. *Advances in Experimental Social Psychology*, 16, 1–47.
- Milliman, J., Nason, S., Zhu, C., & De Cieri, H. (2002). An exploratory assessment of the purposes of performance appraisals in North and Central America and the Pacific Rim. *Human Resource Management*, 41, 87–102.
- Murphy, K., & Cleveland, J. (1995). *Understanding performance appraisal: Social, organizational and goal-oriented perspectives*. Newbury Park, CA: Sage.
- Muthén, B.O., & Muthén, L. (2010). *Mplus (Version 6) [computer software]*. Los Angeles: Muthén & Muthén.
- Ng, T.W.H., Eby, L., Sorensen, K., & Feldman, D. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58, 367–408.
- Ng, T.W.H., & Feldman, D. (2009). How broadly does education contribute to job performance? *Personnel Psychology*, 62, 89–134.
- Parboteeah, K., & Cullen, J. (2003). Social institutions and work centrality: explorations beyond national culture. *Organization Science*, 14, 137–148.
- Peng, M. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, 28, 275–296.
- Ployhart, R., & Vandenberg, R. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal Management*, 36, 94–120.
- Posthuma, R.A., Levashina, J., Lievens, F., Schollaert, E., Tsai, W.C., Wagstaff, M.F., et al. (2014). Comparing employment interviews in Latin America with other countries. *Journal of Business Research*, 67(5), 943–951.
- Rosenn, K. (1988). A comparison of Latin American and North American legal traditions. In L. Tavis (Ed.), *Multinational managers and host government interactions* (pp. 127–152). South Bend: University of Notre Dame Press.
- Rousseau, D.M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, 22, 1–13.

- Rynes, S., Gerhart, B., & Parks, L. (2005). Personnel psychology: Performance evaluation and pay for performance. *Annual Review of Psychology*, 56, 571–600.
- Sackett, P.R., & Yang, H. (2000). Correction for range restriction: An expanded typology. *The Journal of Applied Psychology*, 85, 112–118.
- Salas, E., Prince, C., Bowers, C., Stout, R., Oser, R., & Cannon-Bowers, J. (1999). A Methodology for enhancing crew resource management training. *Human Factors*, 41, 161–172.
- Scott, K., Shaw, J., & Duffy, M. (2008). Merit pay raises and organization-based self-esteem. *Journal of Organizational Behavior*, 29, 967–980.
- Serneels, P. (2008). Human capital revisited: The role of experience and education when controlling for performance and cognitive skills. *Labour Economics*, 15, 1143–1161.
- Singh, R., Ragins, B., & Tharenou, P. (2009). What matters most? The relative role of mentoring and career capital in carer success. *Journal of Vocational Behavior*, 75, 56–67.
- Spence, J., & Keeping, L. (2013). The road to performance ratings is paved with intentions: A framework for understanding manager's intentions when rating employee performance. *Organizational Psychology Review*, 3, 360–383.
- Sturman, M. (2003). Searching for the inverted U-shaped relationship between time and performance: Meta-analysis of the experience/performance, tenure/performance, and age/performance relationships. *Journal Management*, 29, 609–640.
- Sullivan, S., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal Management*, 35, 1542–1571.
- Thomas, D., & Inkson, K. (2007). Careers across cultures. In H. Gunz, & M. Peiperl (Eds.), *Handbook of career studies* (pp. 451–470). Los Angeles, CA: Sage.
- Tosi, H., Werner, S., Katz, J., & Gomez-Mejia, L. (2000). How much does performance matter? A meta-analysis of CEO pay studies. *Journal Management*, 26, 301–339.
- Tsui, A., Nifadkar, S., & Ou, A. (2007). Cross-national cross-cultural organizational behavior research: Advances, gaps and recommendations. *Journal Management*, 33, 426–478.
- Van de Ven, A., & Johnson, P. (2006). Knowledge for theory and practice. *Academy of Management Review*, 31, 802–821.
- Van Iddekinge, C., Ferris, G., Perrewe, P., Perryman, A., Blass, F., & Heetderks, T. (2009). Effects of selection and training on unit-level performance over time: A latent growth modeling approach. *The Journal of Applied Psychology*, 94, 829–843.
- Verbruggen, M., Sels, L., & Forrier, A. (2007). Unraveling the relationship between organizational career management and the need for external career counseling. *Journal of Vocational Behavior*, 71, 69–83.
- Wald, S., & Fang, T. (2008). Overeducated immigrants in the Canadian labour market: Evidence from the workplace and employee survey. *Canadian Public Policy*, 34, 457–479.
- Whetten, D. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14, 490–495.
- Whetten, D. (2009). An examination of the interface between context and theory applied to the study of Chinese organizations. *Management and Organization Review*, 5, 29–35.
- Williams, N. (2009). Seniority, experience, and wages in the UK. *Labour Economics*, 16, 272–283.
- Wood, R., Atkins, P., & Bright, J. (1999). Bonuses, goals, and instrumentality effects. *The Journal of Applied Psychology*, 84, 703–720.