

# Professional Employer Organizations and Their Impact on Client Satisfaction With Human Resource Outcomes: A Field Study of Human Resource Outsourcing in Small and Medium Enterprises<sup>†</sup>

Brian S. Klaas\*

*The Darla Moore School of Business, University of South Carolina, Columbia, SC 29208*

Thomas W. Gainey

*Richards College of Business, State University of West Georgia, Carrollton, GA 30118*

John A. McClendon

*Fox School of Business and Management, Speakman Hall, Temple University, Philadelphia, PA 19122*

Hyuckseung Yang

*Yonsei University, Sudaemun-Gu Shinchin-Dong 134, Seoul, Korea*

---

*Increasingly, small and medium enterprises are outsourcing human resource (HR) activities to professional employer organizations (PEOs). The authors draw on social network theory, transaction cost economics, and social exchange theory to examine how PEO and client characteristics moderate the impact associated with outsourcing human capital-enhancing HR services. Results from a study suggest that using a PEO for human capital-enhancing services was positively related to HR outcomes and that this relationship was stronger when a weak-ties service delivery model was used, client receptivity was high, and the PEO contract was more detailed.*

<sup>†</sup> This research was funded by the Society of Human Resource Management Foundation and by the Riegel & Emory HR Center at the University of South Carolina.

\* Corresponding author. Tel.: 803 777-4901.

E-mail address: klaasb@moore.sc.edu

Journal of Management, Vol. 31 No. 2, April 2005 234-254

DOI: 10.1177/0149206304271761

© 2005 Southern Management Association. All rights reserved.

**Keywords:** *HR outsourcing; professional employer organizations; enterprises*

---

Although all firms attempting to develop effective human resources (HR) practices face significant challenges (Huselid, Jackson, & Schuler, 1997), small and medium enterprises face particularly difficult challenges in this regard (Baron, Burton, & Hannon, 1996). Typically defined as firms having 500 or fewer employees, small and medium enterprises often lack the economies of scale required to build an effective HR system using internal resources (Heneman, Tansky, & Camp, 2000). As a result, an increasing number of small and medium enterprises have established a coemployment relationship with a professional employer organization (PEO). A PEO serves as the employer of record for their client's employees and assumes responsibility for the delivery of HR programs and services as well as many of the legal liabilities associated with being an employer (Cook, 1999).

Advocates claim that small and medium enterprises that outsource to a PEO achieve savings in terms of costs and managerial time (Angione, 2001). Cost and time savings are achieved largely through the outsourcing of routine, transactional HR activities (e.g., payroll, benefits administration, and regulatory compliance), and such tasks can be easily specified in contractual terms. Furthermore, because such tasks can be standardized across clients, market competition is a viable tool for ensuring effective task performance. The standardized nature of the tasks also allows for economies of scale within the PEO to generate substantial efficiencies (Greer, Youngblood, & Gray, 1999). Further savings may result from the PEO's ability to obtain favorable insurance and benefit rates (Hirschman, 1997).

Many PEOs also provide human capital-enhancing services. For example, some PEOs emphasize services in such areas as organizational development, training, employee relations, staffing, performance management, and rewards (Klaas, McClendon, & Gainey, 2000). These services are thought to have the potential to affect employee behavior in ways that may support broader strategic objectives as well as efforts to gain competitive advantage (Youndt, Snell, Dean, & Lepak, 1996). However, these human capital-enhancing HR services are conventionally seen as less well suited to outsourcing and market governance (Ulrich, 1996). Such HR services are more difficult to specify contractually and may be more difficult to standardize across clients. Furthermore, they affect core managerial activities and require substantial amounts of vendor-client cooperation as services are being delivered (LePak & Snell, 1999; Klaas, McClendon, & Gainey, 1999). As such, ambiguity exists regarding the effects of using a PEO and the outsourcing model to obtain human capital-enhancing services.

This article contributes to the literature in two distinct ways. First, across many contexts, outsourcing is increasingly being used in ways that present challenges to traditional market governance mechanisms (Takeishi, 2001). Theorists have drawn on transaction cost economics, social exchange theory, and social network theory to highlight processes likely to be critical to addressing these challenges. However, these theoretical perspectives suggest different—and sometimes competing—processes.

This has prompted researchers to suggest that the explanatory value of these alternative theoretical perspectives will depend largely on the institutional context surrounding the outsourcing relationship (Takeishi, 2001). In this article, we examine how—given the unique

institutional context of the PEO-client relationship—factors suggested by these different theoretical perspectives moderate the impact of using outsourcing to obtain HR services.

Second, although the impact of HR practices has been studied widely within the context of larger organizations, little effort has been made to assess the effects of HR practices delivered to small and medium enterprises through a PEO. This omission within the literature is significant given the utilization rate of PEOs and the importance of HR issues to the viability of small and medium enterprises (Heneman et al., 2000).

## Theory and Hypotheses

We argue that use of human capital-enhancing services through a PEO will positively affect client satisfaction with HR outcomes. Although questions exist about whether such HR services can be effectively delivered through outsourcing, we draw on the strategic HR literature to suggest why such an effect is expected given what is known about HR practices within small and medium enterprises. However, as we explain below, the strength of this hypothesized relationship is likely to be affected by factors suggested by social network theory, transaction cost economics, and social exchange theory. We propose that the hypothesized relationship between the use of human capital-enhancing HR services and client satisfaction with HR outcomes will be moderated by three client-level variables (contract specificity, communication behavior, and client receptivity) and one PEO-level variable (service delivery model).

### *Use of Human Capital-Enhancing HR Services*

Substantial variation exists in whether firms use a PEO simply for transactional HR services (e.g., payroll and benefits) or whether they make use of both transactional and human capital-enhancing services. Many small and medium enterprises work with PEOs that employ a cost leadership strategy and, therefore, only offer transactional services. For these small and medium enterprises, the focus of PEO use is cost and time savings (Klaas et al., 2000). Although opting for both transactional and human capital-enhancing services has cost implications for the client, it also creates opportunities for the PEO to affect a broader range of outcomes.

Most typically, a PEO offers a bundle or package of human capital-enhancing services that includes access to advice and counsel regarding employee relations and organizational development issues, assistance with recruiting and selection, access to training programs produced by the PEO, and programs designed to facilitate performance management and the management of rewards (Cook, 1999). These different services are all designed to have broad-based effects on employee attitudes and behavior. For example, recruitment and selection programs are often designed to affect a firm's ability to attract candidates (through recruitment processes) and retain employees (through efforts to identify person-organization and person-job fit). Skill levels should be affected through the selection process, which in turn would be expected to affect performance and productivity. Similarly, employee attitudes and motivation are likely to be affected through efforts to identify person-organization and person-job fit (Ulrich, 1996).

If the vehicle offered by PEOs is effective, we would expect that use of human capital-enhancing HR services would affect client satisfaction with such key HR outcomes as attraction and retention, employee performance and skill level, and employee motivation and morale. However, as noted above, traditional market mechanisms might be less useful in ensuring the effective delivery of human capital-enhancing services by a PEO. Questions might be raised about whether an external vendor serving multiple small clients would have sufficient knowledge about the needs of each individual client. And if the client paid for the PEO to obtain such knowledge, this would represent an asset-specific investment—one that could make the client vulnerable to opportunistic behavior by the PEO. Moreover, the very nature of human capital-enhancing services makes them difficult to specify contractually and difficult to evaluate in a timely fashion. As such, some might suggest that human capital-enhancing services would be effective only if the PEO and the client have mechanisms that allow them to overcome deficiencies associated with traditional market governance.

We argue that although such mechanisms may well strengthen the effect associated with using human capital-enhancing HR services from a PEO, they are not a necessary condition for effects to be observed. Surveys regarding HR practices within the small business community suggest that efforts in managing human resources are typically ad hoc and frequently are not informed by professional expertise (Cook, 1999). As such, it is likely that even programs that are highly standardized offer the potential to improve HR management within client organizations. For example, making validated cognitive ability tests available to client organizations along with assistance in their use can be done without high levels of firm-specific knowledge. But such tests may still offer significant benefits for the client organization. Furthermore, some of the standardized services that are offered are likely to function as decision aids that assist managers in client organizations develop firm-specific HR solutions for their firm—solutions that would be an improvement over what would have been done in the absence of PEO use.

As such, we argue that using human capital-enhancing HR services from a PEO will be associated with higher levels of client satisfaction with HR outcomes. Although PEO clients that do not make use of human capital-enhancing HR services are still using services in transactional areas (e.g., payroll and benefits), these services are more administrative in nature with only an indirect link to critical employee behaviors.

*Hypothesis 1:* Among small and medium enterprises using a PEO, satisfaction with HR outcomes will be positively related to the use of human capital-enhancing HR services.

### *Service Delivery Model: Weak Ties Versus Strong Ties*

The effect of using human capital-enhancing services is likely to depend on how effectively knowledge flows from the PEO to managers within client firms. Many of the most critical human capital-enhancing services are unlikely to have a significant impact on employee behavior unless managerial knowledge and behavior is modified first. Drawing on the social network literature, we argue that the structure of the PEO service delivery model will affect the

diffusion of knowledge from the PEO to the client (Granovetter, 1982; Podolny & Baron, 1997).

As a practical matter, PEOs must choose between service delivery models that encourage multiple, weak ties between a client and service providers and models that emphasize one or two strong ties (Klaas et al., 2000). Encouraging clients to use a call center to obtain services (a weak-ties approach) is incompatible with channeling all service delivery through a designated HR generalist (a strong-ties approach). Furthermore, clients typically lack the resources to develop both a strong tie and multiple weak ties with a vendor such as a PEO (Granovetter, 1973).

Where a strong-ties approach to service delivery is emphasized by a PEO, each client organization is assigned a service representative that is responsible for all services provided to that client. Questions and requests for additional assistance are directed to the assigned service representative. Instead of interacting with many PEO representatives from different departments within the PEO, each client repeatedly interacts with the designated service representative—thus creating the potential for strong ties to emerge (Angione, 2001; Granovetter, 1973).

Where strong ties exist, communication patterns are likely to be well developed, making it easier for information to be exchanged and, thus, for the PEO to offer firm-specific solutions. In addition, strong ties are thought to result in an increased commitment to ensuring the effective use of information (Hansen, 1999). And social network theorists suggest that this is particularly important when the knowledge being transmitted is complex and not easily codified (Nelson, 1989). This is consistent with social exchange theory, which emphasizes the importance of interpersonal trust within interfirm alliances (Gulati, 1995; Ring & Van de Ven, 1992).

We argue, however, that there are likely to be limits on the degree to which PEO clients would actually benefit from strong ties. Although we would not dispute the importance of fit between HR programs and firm culture and strategy, there are likely to be limits on the degree to which PEOs can design HR programs that reflect the unique needs of each client. Large organizations have sufficient economies of scale to design HR practices and programs that fit their strategy and culture (Becker & Huselid, 1999). Such efforts may well be cost prohibitive within the context of the relationship between small and medium enterprises and a PEO. It should also be noted that although strong ties are typically thought to be critical to ensuring the follow-up necessary for the effective communication of noncodified knowledge (Hansen, 1999), such strong ties may be less necessary within this context. Because clients are the customers of the PEO, PEO service providers may be willing to provide continuing advice and counsel regarding an issue regardless of whether there are weak or strong ties (Klaas et al., 2000).

By contrast, other PEOs use service delivery models that make it likely that multiple weak ties will emerge. These PEOs use the call center model—often organized around functional areas of expertise. When issues arise within the client, managers contact the PEO and interact with whichever staff member with the required expertise is available (Angione, 2001). As such, over time, client leaders are likely to interact with a number of different service providers from throughout the PEO. And because clients have a need for service within a given area of expertise only on an irregular basis, it is likely that multiple weak ties will emerge rather than a limited number of strong ties.

Within the context of the PEO-client relationship, weak ties might well facilitate the search for HR information and solutions. When issues arise within the client, the weak-ties service delivery model will result in the client gaining access to a broader set of perspectives and different types of expertise (Hansen, 1999; Provan & Milward, 1995). Where the weak-ties service delivery model is used, it is likely that a client will have interacted in the past with several different service providers in the PEO, drawn perhaps from different social networks within the PEO. Past contacts within the PEO may allow clients to identify service providers with different kinds of expertise. Moreover, the very nature of weak ties makes it acceptable for clients to consult with multiple parties within the PEO regarding the same HR issue. By contrast, where strong ties exist, information seeking often is constrained (Provan & Milward, 1995). It should also be noted that a weak-ties service delivery model may make it easier for functional expertise to emerge within the PEO. When clients can contact different service providers as different needs arise, it becomes possible to organize the delivery system around areas of functional expertise.

We argue, then, that the benefits associated with the weak-ties service delivery model are likely to outweigh the benefits associated with the strong-ties model in terms of the diffusion of knowledge from the PEO to the client. Thus, service delivery models that emphasize weak ties are likely to facilitate the effective use of human capital-enhancing services.

*Hypothesis 2:* The relationship between human capital-enhancing services and client satisfaction with HR outcomes will be moderated by the PEO's service delivery model, with a weak-ties delivery model strengthening the relationship.

### *Contract Specificity*

According to transaction cost economics, when firms outsource an activity, they must rely on market governance to ensure effective task performance. And when relying on market governance, firms risk exposure to opportunistic behavior by the vendor (Williamson, 1993, 1996). Although it might be assumed that competitive pressures constrain opportunistic behavior, this constraint is often limited. Frequently, firms must make an asset-specific investment in order for the vendor to provide needed services (Masten & Crocker, 1985; Walker & Weber, 1984). Because an asset-specific investment has value only if the relationship with the vendor continues, such an investment introduces switching costs and, often, a reluctance to change vendors.

For a small or medium enterprise, changing PEOs is likely to result in significant switching costs. For example, substantial employee and managerial time is required at the outset of a PEO-client relationship with regard to enrollment in benefit programs, the establishment of payroll systems, and education as to the policies and procedures of the PEO. More important, managers within the client organization may well need to invest in establishing relationships with PEO service providers. Moving to a different PEO would require that the client forgo any such investment. Within this context, then, market competition is unlikely to be completely effective in constraining vendor opportunism, thus raising the importance of contract specificity (Mulherin, 1986).

It should be noted that controversy exists in the make or buy literature regarding the utility of contract specificity. Within the social exchange literature, cooperative relationships are seen as preferable to legalistic, contract-driven relationships (Coleman, 1990; Ghoshal & Moran, 1996). However, concerns about legalistic, contract-driven relationships are most relevant when negotiations are driven by third-parties intent on demonstrating their value through aggressive negotiating behavior. Aggressive legalistic maneuvers may escalate to the point where it is more difficult for the parties themselves to develop a cooperative relationship (Cook, 1999). However, within the context of PEOs and small and medium enterprises, it is unlikely that efforts to achieve specificity would interfere with the development of a cooperative relationship. Third parties are rarely used in negotiating PEO contracts (Aaron, 2000). As such, efforts to achieve specificity are less likely to result in legalistic maneuvers and more likely to result in extensive communication at the outset of a relationship between a client and a PEO about the available services and how those services can be most effectively used. This communication is also likely to lead to contractual language that will constrain opportunism and encourage higher levels of service quality. Thus, contract specificity is likely to enhance the effects associated with using human capital-enhancing services.

*Hypothesis 3:* The relationship between client satisfaction with HR outcomes and the use of human capital-enhancing services will be moderated by contract specificity, with contract specificity strengthening the relationship.

### *Communication Behavior*

Different theoretical perspectives suggest that PEO-client communication patterns are likely to moderate the impact associated with using human capital-enhancing services. First, social network theory has emphasized the role of communication patterns in knowledge transfer (Granovetter, 1982; Hansen, 1999). As noted above, a PEO's ability to affect change within a client is heavily dependent on knowledge transfer, thus highlighting the importance of communication frequency and openness.

The social exchange literature also suggests that communication behavior may play a role in enhancing the effect associated with human capital-enhancing services. The social exchange literature argues that arm's-length relationships evolve through a reciprocal process that is highly dependent on frequent and open communication (Blau, 1964). For example, within the PEO-client relationship, when the client engages in frequent and open communication regarding sensitive HR issues, the client is demonstrating confidence in the service provider and is taking risks in revealing such information. Social exchange theory suggests that the relationship between two parties evolves through the taking of such risks (Ring & Van de Ven, 1992). Norms of reciprocity are likely to encourage the service provider to respond through behavior that also demonstrates commitment to the relationship (Nooteboom, Berger, & Noorderhaven, 1997). Within the context of a service relationship, that commitment is likely to come in the form of ensuring that the services provided meet the needs of the client. In sum, both social network theory and social exchange theory suggest that frequent and open communication between the PEO and the client is likely to facilitate the effective delivery of human capital-enhancing services.

*Hypothesis 4:* The relationship between the use of human capital-enhancing services and client satisfaction with HR outcomes will be moderated by communication patterns between the PEO and the client, with the relationship being stronger where there is frequent and open communication.

### *Client Receptivity*

Although the PEO is the employer of record for many HR activities, managers with client organizations are directly involved in hiring decisions, disciplinary decisions, and other decisions about how to manage and motivate their staff (Hirschman, 2000). Thus, efforts by a PEO to affect HR outcomes typically require the cooperation of the client. However, because it is difficult to incorporate contractual specifications regarding managerial processes or supervisory behavior (Connor & Prahalad, 1996), PEOs are limited in their ability to ensure compliance with their advice on a wide range of HR matters (Baron & Kreps, 1999). Thus, there are limits on a PEO's ability to affect key processes unless managers with the client are receptive to PEO recommendations. Although it might be assumed that a PEO would not be used for human capital-enhancing services unless there was receptivity, some clients subscribe to PEO services on the assumption that employee behavior could be affected without the direct involvement of managers (Angione, 2001).

Social exchange theory also highlights the importance of client receptivity within service relationships. Within a service relationship, the client demonstrates commitment to the provider by giving consideration to advice and counsel and behaving in a cooperative fashion (Takeishi, 2001). Where such commitment is provided within a social exchange process, reciprocity may follow in the form of increased commitment to ensuring the effective delivery of services (Nooteboom et al., 1997). Thus, client receptivity to advise and counsel is likely to be a key step in a social exchange process that might ultimately encourage responsiveness to client needs and discourage opportunistic behavior. It is important to note that we are not suggesting that PEO advice is necessarily correct and, thus, always is to be followed if positive results are to occur. Receptivity only implies a desire to receive and consider advice, and it is this desire that is likely to be critical in light of (a) the social exchange process and (b) limits on the capacity for contractual mechanisms to facilitate change in managerial processes.

*Hypothesis 5:* The relationship between the use of human capital-enhancing services and client satisfaction with HR outcomes will be moderated by client receptivity to PEO advice and counsel. Where receptivity is high, the relationship between human capital-enhancing services and satisfaction with HR outcomes will be stronger.

## **Method**

### *Sample*

The sample for this study consists of 49 PEOs and 516 clients working with these participating PEOs. In cooperation with the National Association of Professional Employer Organizations, more than 250 PEO leaders were contacted with regard to their willingness to partici-



pate in a study investigating the impact of PEO services on HR outcomes. PEO leaders were informed that participation would require that questionnaires be distributed to a random sample of their clients and that they provide information on their PEO's strategy, services, and resources. Forty-nine PEOs ultimately agreed to participate. The mean number of clients served by these 49 PEOs was 229.92, and the mean number of employees served was 4,599.34. The largest PEO served more than 4,000 clients and more than 68,000 employees. The smallest PEO represented 5 clients and 100 employees.

We recommended that at least 50 clients be sampled (randomly) per client. However, because some PEOs had fewer than 50 clients (7 among our respondents) and because we wanted to encourage participation, we gave PEO leaders the option of specifying a smaller number of clients to be surveyed. The number of clients surveyed by participating PEOs ranged from 5 to 50. The mean number of surveys distributed to client organizations was 32. In total, surveys were sent to 1,568 client organizations. To encourage participation, PEOs were informed that they could themselves randomly sample from their client list and then distribute questionnaires to clients, or they could provide us with a client mailing list. We indicated that we would randomly sample the number of clients specified by the PEO and distribute surveys accordingly. We provided this option because we did not want to lose the participation of those PEOs who would have been unwilling to share their client list due to concerns about that list being obtained by a competing PEO. No significant difference was observed in relationship tenure or on a single item client satisfaction measure between clients surveyed using these different distribution methods.

Surveys were sent to the PEO's primary contact person at each client (typically the owner or CEO). Surveys were returned directly to the authors, and all participants were guaranteed confidentiality. To encourage survey participation, client leaders were informed that a small financial contribution would be made to the charity of their choosing if they participated in the study. Five hundred sixteen clients returned questionnaires, resulting in a response rate of 32%. The mean number of full-time equivalent (FTE) employees among the participating clients was 24 (with FTEs ranging from 1 to 611). Given the small size of these organizations, the owner/manager is likely to be well positioned to serve as a key informant regarding client characteristics as well as characteristics of the PEO-client relationship. Furthermore, the size of the clients raises questions about whether any other employee would have been in a position to provide the required information.

### *Measures*

*Dependent measure. Satisfaction with HR Outcomes* within the client organization was measured by a five-item scale designed to capture the degree to which the client leader was satisfied with the level of employee motivation, performance, and skill level in his or her firm, as well as the firm's ability to attract and retain employees. All items were measured using a 5-point response format ranging from *very dissatisfied* to *very satisfied*. The coefficient alpha for the dependent measure was .85. Items for this and other independent and dependent variables are displayed in the appendix. This approach to measurement was used because of the

difficulty of getting small business owners to provide quantitative measures for a wide range of variables relating to workforce quality. It should be noted, however, that for a subset of the sample, we were able to obtain data on the turnover rate within the client organization. The correlation between the turnover rate and satisfaction with retention item was .69 ( $p < .001$ ). Similarly, in a regression model predicting sales revenue per employee (a measure of employee productivity), the coefficient for the satisfaction with employee performance item was significant ( $p < .001$ ) after controlling for industry, size, and age of the firm. Items for this and the other measures were developed in consultation with eight different PEO managers drawn from four different PEOs, three PEO clients, and the executive director for the industry association. Where possible, we also adapted items from past research in the outsourcing area more generally (Gainey & Klaas, 2003).

*Client-level independent variables.* *Human Capital–Enhancing Services* ( $\alpha = .92$ ) was measured by six items designed to assess the extent to which the client used PEO services in such areas as recruiting and selection, training, performance management, employee relations, reward systems, and motivation and morale. HR activities in these areas have been classified as human capital enhancing within the literature and are thought to directly affect employee skill level, motivation, and workforce quality (Youndt et al., 1996). Extent of usage was measured by the following response scale: *no usage, a little usage, some usage, a great deal of usage, or PEO entirely responsible for activity*. *Contract Specificity* ( $\alpha = .86$ ) was measured by three items with a 5-point Likert-type scale. The items were designed to assess the degree to which the client's contract with the PEO was detailed, specific, and complete. *Communication Behavior* ( $\alpha = .86$ ) was measured by three items with a 5-point Likert-type scale. The items were designed to assess the degree to which communication between the client and PEO was both frequent and open. *Client Receptivity* ( $\alpha = .83$ ) was measured by three items with a 5-point Likert-type scale. The items were designed to measure the degree to which the client was interested in receiving advice and counsel about how best to manage and motivate people.

*Client-level control variables.* Three control variables were also included in the client-level models estimated here. Each client's *Industrial Classification* was captured through dummy variables (based on one-digit Standard Industrial Classification [SIC] codes) that were created using information provided by the client. The most frequently reported classifications in the sample were durable goods manufacturing, business services, and personal services (between 15% and 20% each). Wholesale/retail trade and financial services, insurance, and real estate were the next most common (between 10% and 15% each), followed by mining and construction, nondurable goods manufacturing, transportation, communications, and utility services (between 5% and 10% each). Less than 5% of the sample was composed of organizations in agriculture or public administration. *Size* was measured by the log of the number of FTE employees. *Transactional Services* ( $\alpha = .73$ ) was measured by five items designed to measure the extent to which the client used PEO services or assistance relating to such areas as payroll administration, employee benefits, worker's compensation, and regulatory compliance.

Extent of usage was measured by the following response scale: *no usage, a little usage, some usage, a great deal of usage, or PEO entirely responsible for activity.*

*PEO-level independent variable. Service Delivery Model* ( $\alpha = .78$ ) was measured by four items (completed by the PEO leader) that were designed to measure the extent to which the PEO service delivery model encouraged repeated interaction between the client and the same service provider or whether the delivery model encouraged interactions with multiple individuals from throughout the PEO.

*PEO-level control variables. PEO Size* was measured by the log of the total number of employees served by the PEO. *Client Employees per Staff* was measured by dividing work-site employees served by the PEO by the number of PEO staff members.

### *Analysis*

Hierarchical regression and hierarchical linear modeling (HLM) were used to test hypotheses about the effect of client-level and PEO-level variables on satisfaction with HR outcomes. We first estimated two linear regression models. In the first model, we regressed client-level control variables and client-level independent variables on the dependent measure. This model allows us to examine the hypothesized main effect associated with *Human Capital-Enhancing Services*. To examine the hypothesized interactions between client-level variables, we then estimated a second model that also included interactions between *Human Capital-Enhancing Services* and *Contract Specificity*, *Communication Behavior*, and *Client Receptivity*. In both models, dummy variables were included for PEO affiliation.

HLM was then used to examine the effects associated with PEO-level variables in combination with the client-level variables. We first assessed whether HLM was appropriate for the data being examined. To do this, we used a random coefficients model to determine whether the regression coefficient for *Human Capital-Enhancing Services* and the conditional mean for the dependent variable varies across clients grouped according to PEO affiliation (Kreft & de Leeuw, 1998). Following this, we used the two-level intercepts-as-outcomes and slopes-as-outcomes HLM procedure. This procedure assumes that the regression coefficient of a client-level variable and/or the conditional mean for the dependent variable varies across different groups of clients (groupings based on PEO affiliation). Two regression models are set up simultaneously across two different levels of analysis (client and PEO). In the Level-1 model (where group-means centering is used), a client-level outcome variable is regressed on a set of client-level predictors. In the Level-2 model (where grand-mean centering is used), Level-1 intercept and slope terms for the human capital-enhancing services variable were regressed on the Level-2 PEO variables. It was hypothesized here that the PEO service delivery model will moderate the effect of human capital-enhancing services. Given this, we will focus on how PEO-level variables affect the marginal effects (i.e., the within-group regression coefficients) for the client-level human capital-enhancing services variable (Bryk & Raudenbush, 1992).

**Table 1**  
**Means, Standard Deviations, and Correlations**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
Client-level variables									
1. Satisfaction with HR outcomes	3.80	0.74	1.00						
2. Human capital–enhancing services	1.84	0.82	.33***	1.00					
3. Contract specificity	3.67	0.75	.34***	.31***	1.00				
4. Communication behavior	3.77	0.86	.25***	.44***	.46***	1.00			
5. Client receptivity	3.85	0.71	.10*	.47***	.33***	.50***	1.00		
6. Size	2.47	1.20	-.04	.32***	-.02	.21***	.22***	1.00	
7. Transactional services	3.22	0.62	.16**	.31***	.21***	.38***	.37***	.31***	1.00
Variable	<i>M</i>	<i>SD</i>	1	2	3				
PEO-Level Variables									
1. Service delivery model	3.67	1.00	1.00						
2. PEO size	7.46	1.40	-.07	1.00					
3. Client employees per staff	331.08	309.52	.15	.39**	1.00				

Note: PEO = professional employer organization; HR = human resource.

\* $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

## Results

Table 1 contains the means and standard deviations, as well as the correlation matrix. The correlation matrix for the client-level variables is presented separately from the matrix for PEO-level variables. Table 2 shows the results of linear regression models in which satisfaction with HR outcomes is regressed on client-level variables. In Model 1, the main effects for the control and independent variables are estimated. Consistent with Hypothesis 1, use of human capital–enhancing services was found to positively affect client satisfaction with HR outcomes ( $p < .001$ ). Although no hypotheses were offered regarding the main effect for contract specificity and communication behavior, both variables were positively related to satisfaction with HR outcomes ( $p < .001$  and  $p < .05$ , respectively). Client receptivity was negatively related to satisfaction with HR outcomes ( $p < .05$ ). This negative relationship might well be expected given that clients with deficiencies in terms of employee behavior would be more likely to want assistance from the PEO, regardless of whether such services are actually provided. With regard to control variables, size of the client organization was negatively related to satisfaction with HR outcomes ( $p < .05$ ) as was the dummy variable for firms in construction and mining (SIC code 1).

Table 2 also shows the results of the moderated regression model (Model 2). Here, interaction terms between use of human capital–enhancing services and contract specificity, commu-

**Table 2**  
**Marginal and Moderating Effects of Client-Level Variables**  
**on Satisfaction With Human Resource Outcomes**

	Model 1	Model 2
Intercept	4.07***	3.06***
Control variables		
SIC industry code 1	-0.62*	-0.54**
SIC industry code 2	-0.16	-0.08
SIC industry code 3	-0.17	-0.12
SIC industry code 4	-0.21	-0.15
SIC industry code 5	-0.24	-0.18
SIC industry code 6	-0.04	-0.00
SIC industry code 7	-0.02	0.01
SIC industry code 8	-0.23	-0.18
SIC industry code 9	-0.12	-0.03
Size	-0.06*	-0.08**
Transactional services	0.01	0.05
Independent variables		
Human capital-enhancing services	0.23***	0.11*
Contract specificity	0.26***	0.23***
Communication behavior	0.09*	0.09
Client receptivity	-0.13*	-0.10
Moderating effects		
1 × 2		0.13*
1 × 3		-0.03
1 × 4		0.23**
$R^2$	.21	.26
Adjusted $R^2$	.18	.23
$R^2$ change		.04***

Note: Models 1 and 2 also included dummy variables for professional employer organization affiliation. SIC = Standard Industrial Classification.

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

nication behavior, and client receptivity are added to Model 1. When comparing Model 1 with Model 2, the increase in variance explained is statistically significant ( $p < .001$ ). Consistent with Hypotheses 3 and 5, the effect of using human capital-enhancing services is moderated by contract specificity and client receptivity ( $p < .05$  and  $p < .01$ , respectively). The effect of using human capital-enhancing HR services was greater when contracts were more specific and complete and when clients indicated a higher level of receptivity to advice and assistance. Contrary to Hypothesis 4, communication behavior was not found to moderate the impact of using human capital-enhancing services.

The results reported above examine the relationship among variables measured at the client level. To examine how PEO-level variables moderate the impact of client-level variables, it is necessary to use HLM. The first task within HLM is to examine whether there is statistical justification for the adoption of a two-level hierarchical linear model to examine the moderating

effect of PEO-level variables. To do so, we first estimated a random-coefficients model in which intercepts and regression coefficients of select independent variables are assumed to vary across clients grouped by PEO affiliation. The random-coefficients model allows for a chi-square test for the between-group variance of a regression coefficient ( $\tau_{pp}$ ). If the chi-square statistic is significant, it indicates the presence of a nonzero between-group variance in a regression coefficient, which justifies the use of a two-level hierarchical linear model. The chi-square for  $\tau_{11}$  is 46.71 ( $p < .05$ ), indicating there is nonzero between-group variance in the regression coefficient for human capital-enhancing services. Although not the subject of any hypotheses, the chi-squares for  $\tau_{22}$  (contract specificity),  $\tau_{33}$  (communication behavior), and  $\tau_{44}$  (client receptivity) were not significant. As such, there is no evidence to suggest that there is between-group variance in the regression coefficients for these client-level variables. It should also be noted that the chi-square for  $\tau_{00}$  is 114.6 ( $p < .001$ ), indicating there is nonzero between-group variance in the intercept. This indicates that the conditional mean of the dependent variable is affected by PEO characteristics.

The results of the random-coefficients model provides statistical justification for proceeding with the intercepts-as-outcome and the slopes-as-outcome hierarchical linear model. The results of these models are shown in Table 3. At Level 1, within-group regression slope terms for human capital-enhancing services are estimated as are within-group intercepts. Reported in Table 3 for Level-1 results are the overall means of within-group regression coefficients and intercepts. For Level 2, within-group intercept and slope terms are regressed on the PEO-level variables. The column "Intercept ( $B_{0j}$ )" reports the results of the intercepts as outcome model and shows the effect of the PEO variables on the within-group intercepts (the main effect associated with PEO characteristics). No hypotheses were offered regarding the main effect associated with the PEO's service delivery model, and no significant effects were observed. The column "Slope for Human Capital-Enhancing Services ( $B_{1j}$ )" reports the results of the slopes-as-outcome model. The Level-2 coefficients show the effect of PEO characteristics on within-group slopes and allow us to examine whether PEO-level variables moderate the impact of client-level variables. Consistent with Hypothesis 2, the results suggest that the within-group coefficient for human capital-enhancing services was significantly larger ( $p < .05$ ) when greater emphasis was placed by the PEO on a weak-ties service delivery model. No significant moderating effects were observed for PEO-level control variables.

## Discussion

### *Theoretical and Empirical Findings*

Using PEOs to obtain human capital-enhancing services is an example of the trend toward using outsourcing in ways that challenge traditional market governance. Drawing on social network theory, social exchange theory, and transaction cost economics, this study examines what factors affect whether a small or medium enterprise is likely to benefit from using a PEO to provide human capital-enhancing services.

Although it might be argued that clients making greater use of these human capital-enhancing services would naturally be more satisfied with their HR outcomes, there is justifi-

**Table 3**  
**Intercepts- and Slopes-as-Outcome HLM Model:**  
**The Effect of PEO-Level and Client-Level Characteristics on**  
**Client Satisfaction With Human Resource Outcomes**

Level-1 Model: $Y_{ij} = \beta_{0j} + \beta_{1j}X_1 + \beta_{2j}X_2 + \beta_{3j}X_3 + \beta_{4j}X_4 + \beta_{kj}(\text{controls}) + r^{ij}$	Client Satisfaction With Human Resource Outcomes	
Intercept		3.82***
Control variables: Fixed effects		
SIC industry code 1		-0.41*
SIC industry code 2		0.03
SIC industry code 3		-0.00
SIC industry code 4		-0.08
SIC industry code 5		0.00
SIC Industry code 6		0.11
SIC industry code 7		0.07
SIC industry code 8		0.06
SIC industry code 9		0.04
Size		-0.11**
Transactional services		0.05
Independent variable: Random effects		
Human capital-enhancing services		0.17**
Independent variables: Fixed effects		
Contract specificity		0.14**
Communication behavior		0.11**
Client receptivity		-0.22***
Level-2 Model: $\beta_{kj} = r_{k0} + r_{k1}Z_1 + r_{k2}Z_2 + r_{k3}Z_3 + u_{kj}$	Intercept ( $\beta_{0j}$ )	Slope for Human Capital-Enhancing Services ( $\beta_{ij}$ )
PEO-level independent variable		
Service delivery model	0.03	-0.11*
PEO-level control variables		
PEO size	0.08	0.02
Client employees per staff	-0.28	0.01

*Note:* HLM = hierarchical linear modeling; SIC = standard industrial classification; PEO = professional employer organization.

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

cation for controversy regarding this argument. It may be difficult to contractually specify the exact nature of such services, making it less clear if market governance would be effective. Moreover, given the importance of “fit” for many human capital-enhancing services (Delery & Doty, 1996; Wright, Smart, & McMahan, 1995), it is unclear if service providers would develop sufficient firm-specific knowledge. And if they do, an asset-specific investment by the client is likely to be required, thus increasing vulnerability to opportunistic behavior.

Although these arguments may well have some validity, we found (consistent with Hypothesis 1) that satisfaction with HR outcomes was higher in clients that made heavier use of

human capital-enhancing services. This relationship may well be a function of the unique institutional context surrounding PEO use. For many PEO clients, the choice is not between (a) providing such services using internal resources or (b) obtaining them from a PEO. Instead, the choice is between (a) forgoing such services or (b) obtaining them from a PEO. As such, our findings suggest that even if the human capital-enhancing services provided by a PEO are in some sense standardized and subject to the limitations of market governance, they still—given the available alternatives for small and medium enterprises—affect satisfaction with HR outcomes.

The relationship between human capital-enhancing services and satisfaction with HR outcomes was moderated by both client-level and PEO-level variables. These moderator effects highlight the challenges associated using a PEO to obtain human capital-enhancing services and suggest that there may be substantial variation in satisfaction with HR outcomes across PEO clients.

Consistent with transaction cost economics (Williamson, 1996), contract specificity was found to moderate the relationship between using a PEO for human capital-enhancing services and satisfaction with HR outcomes (Hypothesis 3). Although incomplete contracting may be inevitable given the nature of the services provided, our results suggest that efforts to achieve higher levels of specificity within PEO contracts may still yield benefits. However, it remains unclear whether these benefits are the result of increased communication about needs and expectations during the formation of the contract or more effective constraints on opportunism.

Consistent with social exchange theory, our findings suggest that client receptivity moderates the effect associated with human capital-enhancing services (Hypothesis 5). Within a single firm, hierarchical mechanisms are used to ensure that managers in one part of the firm cooperate with those from other parts of the firm. But within vendor-client relationships, hierarchical mechanisms do not exist (Connor & Prahalad, 1996). Thus, in vendor-client relationships, when a client gives consideration to vendor advice and behaves cooperatively, they are showing commitment to the vendor. And within a social exchange process, reciprocity norms will motivate the vendor to respond by showing increased commitment to the effective delivery of HR services.

We found that the service delivery model employed by the PEO moderated the impact associated with the use of human capital-enhancing services (Hypothesis 5). Using social network theory (Granovetter, 1982; Hansen, 1999), we argued that service delivery models that encourage the development of multiple weak ties between the client and the PEO will enhance the impact associated with human capital-enhancing services. Our findings support this argument, suggesting that multiple weak ties may allow for a greater transfer of knowledge from the PEO to the client. A weak-ties service delivery model may result in client leaders interacting with multiple service providers from the PEO—providers who may well be part of different social networks within the PEO itself. As such, it is likely that client managers—over time—will gain exposure to a broader set of perspectives and expertise. Furthermore, when the need for assistance arises, the client will be able to draw on the multiple weak ties to quickly obtain information from different networks within the PEO. This ability may allow the client manager to develop innovative solutions and obtain diverse perspectives. A weak-ties service delivery model also allows for service providers to be organized by functional



expertise, which may allow for the development of a broader range of expertise within the PEO.

Although strong ties have advantages where interpersonal relationships facilitate the transfer of noncodified knowledge, in the context studied here, access to a broader range of ideas and expertise may be more critical. Although strong ties would likely be associated with service providers being able to develop firm-specific knowledge, economies of scale would likely prohibit programs being developed specifically for each client.

Although communication behavior was related to satisfaction with HR outcomes, no moderating effect was observed (Hypothesis 4). Communication behavior is often thought to be important because of its role in developing the interpersonal relationship between individuals. However, that relationship may be less critical in this context if indeed weak ties best facilitate knowledge transfer. It should also be noted that our ability to find a significant effect for communication behavior may be limited by the level of intercorrelation among client-level variables.

### *Limitations*

Several limitations associated with this study deserve attention. First, the dependent measure and the client-level variables were obtained from the same key informant. As such, some of the relationships observed may be affected by common method variance. Although it would have been desirable to obtain two key informants from each organization, given the size of many of the clients, this frequently would not have been feasible. In considering this limitation, attention should also be given to the client-level and cross-level interaction effects that were observed. In comparison to main effects, interaction effects are less susceptible to percept-percept bias. Common method variance is thought to be a constant and, thus, primarily affects the direct relationship between variables. Second, because cross-sectional data were collected, our ability to draw causal inferences is limited. For example, satisfaction with HR outcomes prior to PEO selection may affect both our dependent measure and the type of PEO selected. Similarly, it may well be that clients high on satisfaction with HR outcomes gravitate toward using more human capital-enhancing services, suggesting the possibility of reverse causation. Third, the client surveys were all from PEOs that volunteered to participate. PEOs that participated may have been more confident about obtaining favorable reactions from clients than those PEOs that chose not to participate. Fourth, we examined whether using human capital-enhancing services improved satisfaction with HR outcomes. We did not examine whether the benefits of using human capital-enhancing HR services are offset by the additional cost likely to be associated with using a PEO for both transactional and human capital-enhancing services.

### *Implications for Practice*

For PEOs, the results of this study suggest that it may be possible to generate benefits for clients through offering human capital-enhancing as well as transactional HR services. How-

ever, doing so raises additional complications. Our findings suggest that the organization of service delivery may well affect a PEO's ability to affect client satisfaction with HR outcomes. Furthermore, in order for human capital-enhancing services to have the desired effect, the attitude and behavior of the client is likely to be critical as well. As such, selecting clients and managing the relationship with them may be more critical for those PEOs attempting to provide human capital-enhancing HR services.

For small and medium enterprises, our findings suggest that although many business owners use a PEO primarily to save money or time (Klaas et al., 2000), PEO use may also yield broader benefits. However, our findings regarding the impact of the service delivery model highlight the importance of PEO selection to obtaining those benefits. Our findings also suggest that affecting HR outcomes via PEO use may require significant efforts by the client in managing its relationship with the PEO. Client receptivity and the thorough specification of the PEO-client contract may be critical to efforts to improve HR outcomes through use of a PEO. As such, our results do not necessarily suggest that small and medium enterprises should select a PEO that provides both transactional and human capital-enhancing services. Where receptivity is lacking or where insufficient effort is likely to be made to develop a complete contract, the benefits of using a PEO for human capital-enhancing services may be more marginal.

---

## APPENDIX

---

### *Satisfaction With Human Resource Outcomes<sup>a</sup>*

1. Your firm's ability to attract new employees.
2. The level of employee turnover in your firm.
3. Skill levels among your employees.
4. The motivation and morale among your employees.
5. Overall employee performance in your firm.

### *Contract Specificity<sup>b</sup>*

1. We did not leave anything out of the contract with our PEO.
2. The contract with our PEO indicates exactly what they will do.
3. The contract with our PEO is as complete as possible.

### *Communication Behavior<sup>b</sup>*

1. We talk to our PEO even when there is no immediate problem.
2. We have frank and open discussions with our PEO.
3. We frequently talk to the people at our PEO.

### *Client Receptivity<sup>b</sup>*

1. We want our PEO to give us advice on how to better manage employees.
2. We are interested in the advice our PEO gives us about managing human resources.
3. We value the opportunity to learn from our PEO.

*Human Capital–Enhancing Services<sup>c</sup>*

1. Determining how to evaluate and manage employee performance.
2. Determining how to pay and reward employees.
3. Managing problem employees and other employee relations issues.
4. Recruiting and hiring employees.
5. Training employees.
6. Determining how to improve employee motivation and morale.

*Transactional Services<sup>c</sup>*

1. Administering employee payroll.
2. Administering and delivering employee benefits.
3. Complying with employment laws and regulations.
4. Managing workers' compensation issues.
5. Developing employee handbooks.

*Service Delivery Model<sup>b</sup>*

1. Because of the way we deliver our services, a firm that uses our PEO will deal primarily with only a few of our corporate PEO staff members.
2. Because of the way we deliver our services, a firm that uses our PEO will interact with many different members of our staff during the year. (R)
3. Because of the way we deliver our services, a firm that uses our PEO will deal mostly with a small set of PEO staff members who have been assigned to them.
4. Because of the way we deliver our services, a firm that uses our PEO will have a person or team assigned to them who coordinates all of our services.

---

*Note:* PEO = professional employer organization.

a. Degree of satisfaction with outcomes listed (5-point scale, *very dissatisfied* to *very satisfied*).

b. Degree of agreement with statements listed (5-point Likert-type scale).

c. Extent of usage of PEO service (5-point scale, *no usage* to *PEO entirely responsible*).

## References

- Aaron, C. 2000. PEO census 2000. *The ProEmp Journal*, 4: 40-46.
- Angione, J. 2001. The visionaries. *The ProEmp Journal*, 5: 28-39.
- Baron, J. N., Burton, D. M., & Hannon, M. T. 1996. The road taken: Origins and evolution of employment systems in emerging companies. *Industrial and Corporate Change*, 5: 239-275.
- Baron, J. N., & Kreps, D. M. 1999. *Strategic human resources*. New York: John Wiley.
- Becker, B. E., & Huselid, M. A. 1999. Overview: Strategic human resource management in five leading firms. *Human Resource Management*, 38: 287-302.
- Blau, P. M. 1964. *Exchange and power in social life*. New York: John Wiley.
- Bryk, A. S., & Raudenbush, S. W. 1992. *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Coleman, J. S. 1990. *Foundations of social theory*. Cambridge, MA: Belknap.
- Connor, K. R., & Prahalad, C. K. 1996. A resource-based theory of the firm: Knowledge versus opportunism. *Organizational Science*, 7: 477-501.

- Cook, M. F. 1999. *Outsourcing human resource functions*. New York: American Management Association.
- Delery, J. E., & Doty, D. H. 1996. Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39: 803-835.
- Gainey, T., & Klaas, B. S. 2003. The outsourcing of training and development: Factors impacting client satisfaction. *Journal of Management*, 29: 207-229.
- Ghoshal, S., & Moran, P. 1996. Bad for practice: A critique of the transaction cost theory. *Academy of Management Review*, 21: 7-12.
- Granovetter, M. S. 1973. The strength of weak ties. *American Journal of Sociology*, 78: 1360-1380.
- Granovetter, M. S. 1982. The strength of weak ties revisited. In P. V. Marsden & N. Lin (Eds.), *Social structure and network analysis*: 105-130. Beverly Hills, CA: Sage.
- Greer, C. R., Youngblood, S. A., & Gray, D. A. 1999. Human resource outsourcing: The make or buy decision. *Academy of Management Executive*, 13: 85-96.
- Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38: 85-112.
- Hansen, M. T. 1999. The search-transfer problem: The role of weak ties in sharing knowledge across organizational subunits. *Administrative Science Quarterly*, 44: 88-111.
- Heneman, R. L., Tansky, J. W., & Camp, S. M. 2000. Human resource management in small and medium-sized enterprises: Unanswered questions and future research perspectives. *Entrepreneurship Theory and Practice*, 25: 11-26.
- Hirschman, C. 1997. All aboard: The boom in employee leasing may bring good career opportunities for HR professionals. *HR Magazine*, 42: 80-86.
- Hirschman, C. 2000. For PEOs, business is still booming. *HR Magazine*, 45: 42-48.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. 1997. Technical and strategic human resource management effectiveness determinants of firm performance. *Academy of Management Journal*, 40: 171-188.
- Klaas, B. S., McClendon, J., & Gainey, T. 1999. HR outsourcing and its impact: The role of transaction costs. *Personnel Psychology*, 52: 113-136.
- Klaas, B. S., McClendon, J., & Gainey, T. 2000. Managing HR in the small and medium enterprise: The impact of professional employer organizations. *Entrepreneurship Theory and Practice*, 25: 107-124.
- Kreft, G. G., & de Leeuw, J. 1998. *Introducing multilevel modeling*. London: Sage.
- Lepak, D. P., & Snell, S. A. 1999. Virtual HR: Strategic human resources in the 21st century. *Human Resource Management Review*, 8: 215-234.
- Masten, S., & Crocker, K. 1985. Efficient adaptation in long-term contracts: Take or pay provisions for natural gas. *American Economic Review*, 75: 1085-1096.
- Mulherin, J. H. 1986. Complexity in long term contracts: An analysis of natural gas contractual provisions. *Journal of Law, Economics, and Organization*, 2: 105-118.
- Nelson, R. E. 1989. The strength of strong ties: Social networks and inter-group conflict in organizations. *Academy of Management Journal*, 32: 377-401.
- Nooteboom, B., Berger, H., & Noorderhaven, N. G. 1997. Effects of trust and governance on relational risk. *Academy of Management Journal*, 40: 308-338.
- Podolny, J. M., & Baron, J. N. 1997. Relationships and resources: Social networks and mobility in the workplace. *American Sociological Review*, 62: 673-693.
- Provan, K. G., & Milward, H. B. 1995. A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, 40: 1-33.
- Ring, P. S., & Van de Ven, A. 1992. Structuring cooperative relations between organizations. *Strategic Management Journal*, 12: 483-498.
- Takeishi, A. 2001. Bridging inter- and intra-firm boundaries: Management of supplier involvement in automobile product development. *Strategic Management Journal*, 22: 405-433.
- Ulrich, D. 1996. *Human resource champions*. Boston: Harvard University Press.
- Walker, G., & Weber, D. 1984. A transaction cost approach to make or buy decisions. *Administrative Science Quarterly*, 29: 373-391.
- Williamson, O. E. 1993. Transaction cost economics and organization theory. *Institutional and Corporate Change*, 2: 107-156.

- Williamson, O. E. 1996. *The mechanisms of governance*. New York: Oxford University Press.
- Wright, P. M., Smart, D. L., & McMahan, G. C. 1995. Matches between human resources and strategy among NCAA basketball teams. *Academy of Management Journal*, 38: 1052-1074.
- Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. 1996. Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39: 836-866.

## Biographical Notes

**Brian S. Klaas** is a professor of management and chair of the Management Department at the Moore School of Business, University of South Carolina. His research interests include human resource (HR) outsourcing, workplace dispute resolution and employee relations, compensation, and HR in the entrepreneurial firm. He received his Ph.D. from the University of Wisconsin–Madison.

**Thomas W. Gainey** is an assistant professor in the Richards College of Business at the State University of West Georgia. He received his Ph.D. from the University of South Carolina. His research interests include HR outsourcing, e-HR, and alternative work systems. His research has appeared in such journals as *Personnel Psychology*, *Industrial Relations*, and the *Human Resource Management Journal*.

**John A. McClendon** is an associate professor of human resource management in the Fox School of Business and Management at Temple University. He is the director of the Master of Science in Human Resources program. He received his Ph.D. from the University of South Carolina. His research interests include collective bargaining, labor union certification, organizational citizenship behavior, and HR outsourcing.

**Hyuckseung Yang** is an assistant professor of management at Yonsei University in Korea. He received his Ph.D. from the Industrial Relations Center at the University of Minnesota in 1998. He also served as an assistant professor at the University of South Carolina. His research has been published in such journals as the *Journal of Applied Psychology* and *Personnel Psychology*.