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The influence of exchange hazards and power on opportunism in outsourcing relationships

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ABSTRACT

Service provider opportunism is widely noted as a principal risk with outsourcing. Indeed, economic theory regarding the factors which influence the outsourcing decision, treats opportunism as a core behavioral assumption. It is assumed that if given the opportunity, outsourcing providers will act in a self-serving manner despite the potentially negative impact it may have on their customer. Other researchers have suggested that opportunism is not an unwavering human behavior, but rather can be substantively influenced by the management practices which define the relationship. Building on these arguments, this study investigates the validity of these divergent positions. Hierarchical linear regression is used to examine dyadic data on 102 information technology, logistics, and other business process outsourcing relationships. We test a model which hypothesizes that the buying firm's reliance on different bases of inter-firm power will have differing effects on the risk of opportunism (shirking and poaching). These hypotheses are evaluated while concurrently examining the influence of exchange hazards (relationship-specific investments and technological uncertainty) on provider shirking and poaching. The results offer strong evidence that buyer reliance on mediated forms of power (i.e. rewards, coercive, legal legitimate) enhance the risk of both provider shirking and poaching, while non-mediated power (i.e. expert, referent) is associated with a diminished level of opportunistic behavior. Interestingly, relationship-specific investments have a significant effect on some forms of opportunistic behavior but not on other forms of opportunistic behavior. Technological uncertainty did not have a significant impact on provider opportunism.

1. Introduction

In 2006, the Texas Department of Information Resources (DIR) entered into an $863 million, 7½ year outsourcing contract with IBM to consolidate and manage the state's data center operations. The initiative was projected to save the state $178 million by 2014 (Garrett, 2010). However, according to a consultant hired by the state, savings had accumulated to a mere $10 million in the first two years (Garrett, 2010). Moreover, the contract called for server consolidation to be complete by the end of 2010. As of July 2010, only 10% of the consolidation had been completed (Thibodeau, 2010). As a result, the Executive Director of the Texas DIR presented IBM with a "Notice to Cure" alleging 15 contractual breaches (Garrett, 2010; Thibodeau, 2010). According to the notice "The accumulated effect of under-investment by IBM, poor performance, and continual disregard for the protective obligations of the MSA [Master Service Agreement], has resulted in harm to State agencies, exposure to unnecessary risks, and failure to achieve the objectives set and agreed by IBM" (Robinson, 2010). Among the allegations cited are "IBM failed to provide sufficient and suitably qualified personnel" and "IBM fails to perform all obligations for technology refresh. . . has not developed or provided plans to migrate systems for which IBM has financial and operational responsibility to newer platforms" (Robinson, 2010).

While these *alleged* IBM actions appear remarkable, opportunistic provider behavior has broadly been noted as a central concern with outsourcing (Holcomb and Hitt, 2007; McIvor, 2009). The IBM–Texas DIR example, illustrates the concern that providers may be inclined to withhold resources or "under-invest" in the relationship if they believe the outsourcing firm is unable to detect such action (i.e. shirking). An equally serious risk faced by outsourcing organizations involves intellectual property protection and confidentiality. A Deloitte Consulting study of business process outsourcing found that 26% of participants identified "intellectual property and confidentiality issues as the leading risks of

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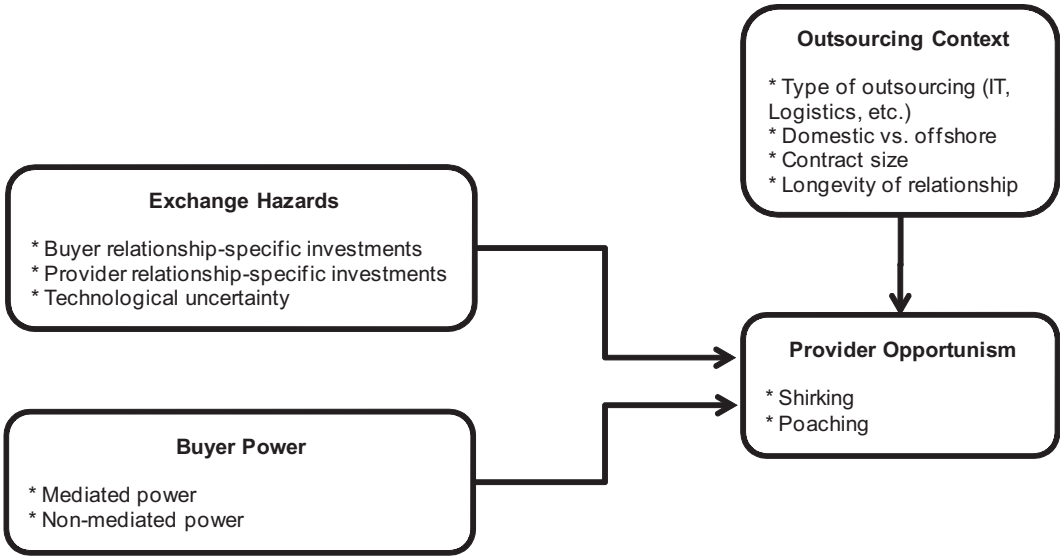

Fig. 1. Conceptual model.

outsourcing" and 10% of respondents had explicitly experienced "confidentiality and intellectual property rights violations" (Landis et al., 2005, p. 10). For instance, one outsourcing firm reported that its vendor was caught selling proprietary software to other clients. These concerns for confidentiality and intellectual property protection highlight the second form of outsourcing provider opportunism that will be explicitly evaluated in this study, poaching.

Surprisingly, a review of the extant literature reveals that empirical research on the drivers of opportunistic behavior is rather limited. In this study, we test a model (see Fig. 1) which hypothesizes that the buying firm's reliance on different bases of inter-firm power will have differing effects on the risk of provider opportunism. These hypotheses are evaluated while examining and controlling for the influence that relevant exchange hazards have on opportunism. This concurrent consideration of power and exchange hazards is critical, and has not been studied previously. Additionally, this study contributes valid and reliable scales for shirking and poaching; two forms of opportunism. This facilitates the execution of the current study, and also contributes new scales for meaningful outsourcing risks. By incorporating shirking and poaching as two distinct forms of opportunism, more exact insights and guidance can be developed concerning the effect of exchange hazards and relationship management practices on the total cost of outsourcing.

This paper is structured as follows. In Section 2, the literature related to exchange hazards, inter-firm power, and opportunism is discussed. Section 3 provides the theoretical underpinnings for the research hypotheses. Subsequently, details of the research methods and analysis are covered in Sections 4 and 5. Section 6 discusses the research findings and managerial implications. Concluding comments and future research directions are presented in Section 7.

2. Related literature

One of the most heavily relied upon perspectives utilized to explain the demarcation of firm boundaries is transaction cost theory (TCT) (Macher and Richman, 2008; Rindfleisch et al., 2010). According to TCT, the most efficient form of governance for a particular business activity is conditional on salient characteristics of the exchange or transaction (Coase, 1937; Holmström and Roberts, 1998; Williamson, 1975). One of the key behavioral assumptions underlying TCT is *opportunism* (Grover and Malhotra, 2003; Holcomb and Hitt, 2007). Opportunism is defined as "self-interest seeking with guile" (Williamson, 1975, p. 6). The behavioral assumption of opportunism in TCT presupposes that if given the opportunity, individuals will naturally act in a deceitful, self-serving manner (Ghoshal and Moran, 1996; John, 1984). Critics of TCT often cite the assumption that opportunism is an innate human characteristic as a fundamental limitation of the theory (Wathne and Heide, 2000). Maitland et al. (1985, p. 64) remark that "opportunism neither is ubiquitous nor is it very unusual". If one can accept that opportunism is not an unwavering human characteristic, but rather is substantively dependent upon the exchange context and management practices employed, then seeking to understand the factors which exacerbate or attenuate the proclivity for opportunistic behavior is a worthy research endeavor.

The contributions of the current study lie at the nexus of three profound bodies of literature: inter-organizational exchange hazards, power, and opportunism. Table 1[1] provides a representative sample of the core empirical literature surveyed for this study, and also conveys the positioning of the current study relative to this prior research. The primary contribution is that this is the first study to simultaneously consider how exchange hazards and differing power bases influence the risk of opportunism. This study is also the first to investigate these relationships in the context of business process outsourcing. Table 1 additionally illustrates that ours is one of the few studies conducted in a dyadic way. That is, paired data is collected from both buyer and provider organizations. Finally, whereas prior studies of opportunistic behavior relied on broad measures of opportunism, the current study explicitly considers two salient forms of opportunism. The following sections serve to review the prior contributions and develop the conceptual domains for inter-organizational exchange hazards, power, and opportunism.

[1] The focus here is on empirical TCT studies that explicitly include opportunism as the dependent variable of interest and this table is not intended to exhaustively cover all empirical research testing propositions of TCT as this would necessitate an entire paper unto itself. The interested reader is referred to David and Han (2004) for an excellent review.

Table 1
Representative empirical literature.

Study	Source of data	Used as independent variable		Dependent variable						
		Exchange hazard	Basis of power	Power source satisfaction	Relationship/ quality commitment	Exchange performance	Decision control	Conflict/ interfirm agreement	Other	Opportunism
Current study	Outsourcing dyads	X	X							Provider
Anderson (1988)	Supervisors of salespeople	X								Salespeople's
Benton and Maloni (2005)	Automotive suppliers		X	X	X	X				
Boyle and Dwyer (1995)	Industrial distributors		X			X				
Boyle et al. (1992)	Automotive tire dealers		X		X					
Brown et al. (1983)	Retailers – multiple channels		X				X	X		
Brown et al. (1995)	Farm equipment dealers		X		X					
Brown and Dev (2000)	Hotel managers	X								Hotel's
Carter and Stevens (2007)	Suppliers in E-reverse auctions									Buyer's
Dahlstrom and Nygaard (1999)	Norwegian oil franchisees									Franchisor's
Etgar (1976)	Insurance agents		X				X			
Etgar (1978)	Retailers – multiple channels		X				X			
Frazier and Rody (1991)	Industrial distributors		X					X		
Frazier and Summers (1984)	Automotive dealers		X					X		
Frazier and Summers (1986)	Automotive dealers		X	X					X	
Hunt and Nevin (1974)	Fast food franchisees		X	X						
John (1984)	Oil dealers		X							Dealer's
Keith et al. (1990)	Food broker firms		X						X	
Lusch and Brown (1982)	Automotive dealers		X				X			
Maloni and Benton (2000)	Automotive suppliers		X		X	X				
Morgan et al. (2007)	Supermarket retailers	X								Supplier's
Parkhe (1993)	Sr Executives in alliances									Other party's
Provan and Skinner (1989)	Farm and power equipment deale	X								Dealer's
Wilkinson (1979)	Durable product channel dyads		X	X						

2.1. Exchange hazards

According to TCT, inter-organizational transaction difficulties hinge on three principal characteristics: transaction-specific investments, uncertainty, and frequency (Williamson, 1979). Our focus is only on "recurring" outsourcing relationships, and thus the two pertinent exchange attributes are relationship-specific investments and uncertainty. These are easily the most commonly included variables in empirical studies of the core propositions of TCT (David and Han, 2004). Relationship-specific investments are such that their "value is appreciably lower (perhaps zero) in any other use other than supporting the transaction between the parties" (Holmström and Roberts, 1998, p. 74). Uncertainty reflects the rate and unpredictability with which the inter-organizational exchange environment is changing. In an extensive review of empirical research on TCT, David and Han (2004) conclude that technological uncertainty is the most commonly used measure of uncertainty. We follow these precedents and utilize measures of relationship-specific investments (both buyer and supplier) and technological uncertainty to represent the extensiveness of exchange hazards in outsourcing relationships.

2.2. Bases of inter-firm power

Power "refers to the ability of one individual or group to control or influence the behavior of another" (Hunt and Nevin, 1974, p. 186). French and Raven (1959) offer five key types of power: reward, coercive, legitimate, referent, and expert. Raven and Kruglanski (1970) contend that the individual bases of power are not used separately, but rather jointly. Empirical evidence suggests that reward, coercive (also called penalties) and legitimate power sources are employed collectively (Busch, 1980; Frazier and Summers, 1984; Marwell and Schmitt, 1967) as are referent and expert (Kasulis and Spekman, 1980). Legitimate power has been segmented into traditional and legal components (Brown et al., 1983; Kasulis and Spekman, 1980) with legal legitimate power, predicated on formal contracts, most typically associated with reward and coercive power. Reward, coercive, and legal legitimate power are classified as *mediated* power (Brown et al., 1995; Maloni and Benton, 2000). The term mediated refers to explicit attempts to "bring about some direct action" (Benton and Maloni, 2005). *Non-mediated* power bases are not explicit actions (Frazier and Summers, 1984; Maloni and Benton, 2000). Rather, power in these instances is rooted in the target's perception that the power source is an expert and the target's pride in association with the power source. Expert and referent power bases are classified as non-mediated. The mediated bases of power share two characteristics distinguishing them from the non-mediated bases of power. First, all three mediated power bases rely on extrinsic forms of pressure to gain compliance from the power target, whereas non-mediated power relies on the internal processes of *internalization* and *identification* and the target's willingness to comply (Boyle and Dwyer, 1995; Brown et al., 1995; Frazier and Summers, 1984; Kelman, 1961). Secondly, the use of each mediated power base represents an explicit attempt by the power source to bring about some direct action (Benton and Maloni, 2005; Brown et al., 1995; Frazier and Summers, 1984; John, 1984). This is not true of expert and referent power. Further, coercive and reward power are very difficult to distinguish conceptually. For instance, if a buying firm promises additional business opportunities to a provider for going along with its wishes, this may be considered promising a reward. However, if the buyer threatens to withhold these same opportunities from an incompliant provider, it may be interpreted as coercion. Grouping reward and coercive power together have endured significant empirical scrutiny (e.g. Boyle and Dwyer, 1995; Etgar, 1978; Frazier and Rody, 1991; Frazier and Summers, 1984; Keith et al., 1990; Wilkinson, 1979).

2.3. Opportunism

Williamson (1975, p. 9) defined opportunism as "a lack of candor or honesty in transactions, to include self-interest seeking with guile". The term "guile" has been explicated to connote "lying, stealing, cheating, and calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse" (Williamson, 1985, p. 47). This conceptualization has been reiterated by other researchers (e.g. Jap and Anderson, 2003; Liu et al., 2009; Wathne and Heide, 2000). According to TCT, inter-organizational exchanges characterized by a high risk of opportunism necessitate pronounced resource expenditures to control and monitor the other party. Hence, the relative efficiency of a market mode of governance (e.g. outsourcing) would be eroded (Hill, 1990; Parkhe, 1993). Our focus is on two germane forms of opportunism with outsourcing: shirking and poaching (Aron et al., 2005). *Shirking* represents the extent to which the service provider is inclined to deliberately underperform or withhold resources should the customer be unable to detect such action. Shirking, often associated with the problem of moral hazard in the principal-agent literature (Alchian and Demsetz, 1972; Eisenhardt, 1989; Masten, 1988), is a form of passive, yet intentional opportunism (e.g. Hadfield, 1990; Jap and Anderson, 2003; Wathne and Heide, 2000). The aforementioned situation playing out between IBM and the Texas DIR is a clear example of alleged provider shirking. *Poaching* is the extent to which the service provider is inclined to utilize information gained through its relationship with the customer for its own, perhaps unauthorized, benefit should the customer be unable to detect such action. Walker (1988) refers to this concern as diffusion risk, while Clemons et al. (1993) use the phrase "loss of resource control". Further, a Deloitte Consulting study (Landis et al., 2005) highlights the extent to which organizations have experienced confidentiality violations and are concerned about risks to intellectual property when outsourcing. The constructs of shirking and poaching are clearly "self-interest seeking" behavior, which fall within the accepted domain of opportunism (Williamson, 1975, 1985). They have also been explicitly identified as salient forms of opportunism with outsourcing (e.g. Aron et al., 2005; Barney, 1990; Clemons and Row, 1992; Donaldson, 1990; Jap and Anderson, 2003; Landis et al., 2005; Wathne and Heide, 2000).

Remarkably, empirical research explicitly aiming to explain the managerial actions and relationship attributes which drive inter-organizational opportunism is relatively modest. Prior studies have explored how asset specificity, uncertainty, and information asymmetry are related to opportunism (Anderson, 1988; Brown and Dev, 2000). Provan and Skinner (1989) consider how farm equipment dealer's dependence on the supplier and supplier control over decisions impacts dealer opportunism. Parkhe (1993) reports evidence that a history of cooperation is negatively related to perceptions of opportunism. Exchange formalization and cooperation are considered as antecedents to opportunism by Dahlstrom and Nygaard (1999). Carter and Stevens (2007) explore how e-reverse auction configurations impact the supplier's perception of buyer opportunism. Morgan et al. (2007) consider the impact of supplier influence, retailer dependency, supplier dependency, retailer's ability to monitor supplier, and retailer's punitive capacity on supplier opportunism in the grocery industry. John (1984) represents the only prior study which evaluates how different sources of inter-firm power influence the threat of opportunism. Our study can be distinguished from John (1984) in that we control for the influence of exchange hazards, explicitly explore the effects of power on shirking and poaching, study these relationships in a variety of business functions and industries, and collect data from both customers and their service providers.

3. Research hypotheses

3.1. Relationship-specific investments and provider opportunism

Unilateral investments in specialized physical and human assets are generally thought to exacerbate opportunistic behavior. As discussed by Williamson (1979), upon one firm to an exchange making relationship-specific investments, the relationship is "transformed" to have monopoly-like properties. Klein et al. (1978, pp. 298–299) assert "even if there were free and open competition for entry to the market, the specialization of the installed asset to a particular user (or more accurately the high costs of making it available to others) creates a quasi rent". If the party making the relationship-specific investment is the buying firm, a small numbers bargaining situation is created. Although the supply market for a particular service may be adequately competitive in general, the installment of unique assets makes switching providers more costly. This creates a "lock-in" in situation whereby the outsourcing firm becomes increasingly hostage to the provider. Accordingly, TCT would suggest that the outsourcing provider is more rationally motivated to exploit the situation to their advantage (Das and Teng, 1996). Supporting these arguments, Morgan et al. (2007) offer empirical evidence from the grocery industry regarding the positive relationship between inter-organizational dependence and opportunism by the other party. Service providers may seek to appropriate a greater portion of the economic rent generated from the exchange by overt actions such as opportunistic contract renegotiations (Wathne and Heide, 2000). However, the provider may also take covert actions which are opportunistic in nature. Shirking is a prime example of the hidden opportunistic actions available to providers. By not deploying the necessary resources or making agreed to investments, providers can potentially achieve greater value from the relationship, at least in the short-term (Wathne and Heide, 2000). Specifically, it is posited:

Hypothesis 1a. More extensive buyer relationship-specific investments are associated with an increased risk of *shirking* by the service provider.

Another form of concealed opportunism potentially enacted by the provider is poaching. The lock-in situation created by the buying firm making relationship-specific investments presents an opportunity for potential provider opportunism and potentially poaching. Effective management of outsourcing arrangements often necessitates the codification and transfer of knowledge (Kogut and Zander, 1992), along with specialized investments which facilitate inter-organizational coordination (Clemons et al., 1993). Combined, the transfer of knowledge and investment in specialized resources enhance the opportunity for the provider to utilize the transferred knowledge in an unauthorized, self-serving manner. Clemons et al. (1993, p. 18) concisely articulate this risk "Increased explicit coordination historically required investment in transaction-specific capital. Physical and human resources had to be customized to the relationship. Moreover, increased integration of operations made it more difficult to control access to proprietary information and expertise, increasing the risk that these resources would be misappropriated". Consequently, it is hypothesized:

Hypothesis 1b. More extensive buyer relationship-specific investments are associated with an increased risk of *poaching* by the service provider.

The previous theoretical arguments related to the outsourcing firm's relationship-specific investments. It is also plausible that the service provider is required to make investments that are unique to the outsourcing relationship. It is argued that provider asset specificity is negatively related to their opportunistic behavior. As opportunism will generally be viewed as counter to acceptable relational norms by the outsourcing firm, it can be expected that discovery of opportunistic behavior will be accompanied by some form of buyer retaliation (Provan and Skinner, 1989). This retribution may be in the form of legal actions or even relationship termination (Brown and Dev, 2000). If the outsourcing provider has made significant investments in idiosyncratic, non-transferrable resources, they stand to incur much greater financial harm should the relationship end. This enhanced risk should naturally deter the provider from acting opportunistically (Rokkan et al., 2003). It is expected that these arguments will hold for both provider shirking and poaching. Formally:

Hypothesis 2a. More extensive provider relationship-specific investments are associated with a decreased risk of *shirking* by the service provider.

Hypothesis 2b. More extensive provider relationship-specific investments are associated with a decreased risk of *poaching* by the service provider.

3.2. Technological uncertainty and provider opportunism

As the predominant technology underlying a transaction evolves more rapidly, it becomes increasingly difficult to craft a complete and precise outsourcing contract (Crocker and Reynolds, 1993; Williamson, 1979). This difficulty is problematic for outsourcing organizations as the development of contractual safeguards is "the primary alternative to vertical integration as a solution to the general problem of opportunistic behavior" (Klein et al., 1978, p. 302). Firms which eschew vertical integration in favor of outsourcing, typically rely on formal contractual provisions as a key mechanism for controlling provider behavior (Handley and Benton, 2009; Poppo and Zenger, 2002). However, high levels of technological uncertainty make developing enforceable contractual provisions more challenging, thus mitigating the effectiveness of this prominent managerial control lever. Not only does technological uncertainty attenuate the effectiveness of formal contracts, but it also instigates the small numbers bargaining concerns described in the prior section. With the outsourcing of business processes traditionally performed within the firm, the internal operating unit which had historically performed the activity represents a viable source of supply. Indeed, a Deloitte Consulting investigation found that 64% of study participants had brought at least one outsourced business process back in-house (Landis et al., 2005). Due to capability erosion, a high rate of technological volatility renders this option less practical over time. Anderson and Parker (2002) assert that an increased rate of technological change expedites the process of "knowledge obsolescence". A reduction in the available sources limits the competitiveness of the supply market, which in turn increases the risk of a buyer lock-in situation. For these reasons, technological uncertainty is expected to intensify concerns of provider shirking and poaching.

Hypothesis 3a. Higher technological uncertainty is associated with an increased risk of *shirking* by the service provider.

Hypothesis 3b. Higher technological uncertainty is associated with an increased risk of poaching by the service provider.

3.3. Buyer power and provider opportunism

Several empirical studies have explored how the degree of dependence on the relationship and/or the reliance on different bases of power effect the level of control over key marketing or operational decisions (Brown et al., 1983; El-Ansary, 1975; El-Ansary and Stern, 1972; Etgar, 1976, 1978; Lusch and Brown, 1982). It has also become recognized that the use of different power bases has differing effects on inter-organizational relationships. Benton

and Maloni (2005) have suggested that mediated power is associated with both negative and competitive uses of power while non-mediated power is more positive, relational in nature. Firms that use mediated approaches to force compliance from providers are attempting to extrinsically motivate providers to go along with their wishes (Brown et al., 1995). This focus on extrinsic motivations has been associated with a decrease in intrinsic motivation and less favorable view of the relationship (John, 1984). Boyle et al. (1992) also found that threats and legalistic pleas have a strong negative effect on relationalism. Frazier and Summers (1984) find that threats, promises, and legalistic pleas are negatively related to inter-firm agreement in automotive OEM–dealer relationships. Similarly, Brown et al. (1995) determine that the use of mediated power has a positive effect on the power target's instrumental commitment (i.e. compliance), but a negative effect on normative commitment (i.e. internalization and identification). These findings suggest that mediated power can gain short-term compliance at the expense of damaging longer-term intrinsic commitment to the relationship. Finally, Maloni and Benton (2000) offer evidence that mediated power has a generally negative impact on buyer–supplier relationships. These consistent empirical findings support the notion that extensive use of mediated power damages the social fabric of the relationship and leads to a deterioration of the power target's commitment and cooperation (Frazier and Summers, 1986; Skinner et al., 1992). Moreover, it is suggested that a power source's use of coercion and punitive action will likely be reciprocated in some form (Kumar et al., 1998). Building on these arguments, we posit that more extensive use of mediated power by the outsourcing firm undermines the provider's commitment and willingness to cooperate. Opportunism has been described as the opposite of cooperation (Das and Teng, 1998). Therefore, it can be expected that the use of mediated power will enhance the risk of shirking and poaching by the outsourcing provider.

Hypothesis 4a. More extensive buyer reliance on *mediated* power sources is associated with an increased risk of *shirking* by the service provider.

Hypothesis 4b. More extensive buyer reliance on *mediated* power sources is associated with an increased risk of *poaching* by the service provider.

With mediated power influence, compliance occurs without an attendant change in the power target's opinions or beliefs regarding the requested action (Kelman, 1958; Lusch and Brown, 1982). However, with non-mediated power compliance is achieved by means of a more "durable" intrinsic effect on the power target's beliefs and opinions (Frazier and Summers, 1984; Kelman, 1961). Important contributions in the marketing channel literature (Brown et al., 1995) and social psychology literature (Kelman, 1958, 1961) suggest that non-mediated power influence is achieved via two social processes: identification and internalization. Identification refers to the power target's desire to maintain a satisfying and self-defining relationship with the other party (Brown et al., 1995). In other words, they genuinely wish to maintain the relationship with which they are proud to be engaged in. With internalization, the influence is accepted because it is "congruent" with the power target's own "value system" (Kelman, 1961). This is consistent with theoretical assertions and empirical evidence supporting the positive relationship between shared beliefs or norms and inter-organizational trust and commitment (Dwyer et al., 1987; Heide and John, 1992; Morgan and Hunt, 1994). Influence derived through the identification and internalization processes associated with non-mediated sources of inter-firm power is said to "enhance the saliency of certain social norms (e.g. equity and reciprocity) in the relationship" (John, 1984, p. 281). This relationship has received substantive empirical support. Hunt and Nevin (1974) determined that non-coercive practices were associated with greater franchisee satisfaction in the fast food industry. Similarly, Frazier and Rody (1991) found that non-coercive influence strategies were associated with more productive conflict resolution. Evidence has also been produced regarding the positive affect of non-mediated power on normative relationship commitment (Brown et al., 1995; Maloni and Benton, 2000). Finally, Benton and Maloni (2005) offer support for a positive relationship between non-mediated power bases and buyer–supplier relationships in the automotive industry. This collection of empirical results provides robust support for the positive association between the use of non-mediated power and the development of committed and cooperative inter-firm relationships. Moreover, several scholars have noted the role of committed, collaborative relationships in diminishing concerns of opportunism (e.g. Helper et al., 2000; Nahapiet and Ghoshal, 1998). Some have gone so far as to describe opportunism as the antithesis of trust and cooperation (Bradach and Eccles, 1989; Das and Teng, 1998; Gulati, 1995; Gulati and Nickerson, 2008). Therefore, if the use of non-mediated power by outsourcing organizations bolsters cooperative, trusting relationships, it should mitigate concerns of provider opportunistic behavior including shirking and poaching.

Hypothesis 5a. More extensive buyer reliance on *non-mediated* power sources is associated with a decreased risk of *shirking* by the service provider.

Hypothesis 5b. More extensive buyer reliance on *non-mediated* power sources is associated with a decreased risk of *poaching* by the service provider.

4. Research methods

4.1. Sample

The target buyer population for this research was large US-based companies with domestic and/or offshore business process (e.g. information technology, logistics, accounting, and human resources) outsourcing engagements. We started with firms listed in the Russell 3000 equity index,[2] and utilized multiple fee-based online databases to identify the names, titles, and e-mail addresses of senior professionals at these organizations (Lead411; Spoke.com; ZoomInfo.com). Qualified informants were identified by reviewing job titles, and job descriptions were available, to ascertain the likelihood of involvement with outsourcing. Contact information was obtained for members of management at 2356 of the targeted 3000 firms. Contacted outsourcing firm representatives were asked to complete an online survey, and also provide the research team with an introduction to the key contact at their service provider. The participants were asked to include assessments of each relationship in the study. Specifically, potential participants were asked not to "cherry pick" certain relationships, but rather to include all relevant relationships in the category for which they were responsible. These conditions substantially increased the time commitment being asked of the participants. Communications had with the contacts at 176 organizations that elected not to participate did not indicate an observable bias. Approximately 75% cited a policy against sharing such sensitive information or a lack of familiarity with the firm's outsourcing efforts (i.e. due to retirement, changing positions, too new in the position, or simply not involved with outsourcing). It is anticipated that non-respondents

[2] This index reflects the largest 3000 publicly held US companies (as of October 2009) and represents approximately 98% of the US equity market (Russell Investments, 2010). It is noted that this group does not include large private firms. As such, the target sampling frame is representative of large, public US-based companies.

Table 2
Sample descriptive data.

Sector		**Title of respondent (buyer)**		**Function of outsourced activity**	
Financial services	5%	CXO	5%	Information technology	31%
Consumer discretionary	22%	Sr. or Executive Vice President	5%	Logistics/supply chain	49%
Technology	22%	Vice President	9%	Other business process	20%
Health care	15%	Sr. Director	11%	**Domestic vs. Offshore Outsourcing**	
Producer durables	17%	Director	37%	Domestic only	49%
Materials and processing	5%	Sr. Manager	9%	Offshore	51%
Energy	7%	Manager	24%	**Annual contract size**	
Utilities	2%	**Title of respondent (provider)**		Less than $1 million	20%
Consumer staples	7%	CXO	5%	Between $1.0 and $24.9 million	59%
Firm size (2009 annual revenues)		Sr. or Executive Vice President	11%	Between $25.0 and $49.9 million	14%
Less than $500.00M	23%	Vice President	22%	Between $50.0 and $99.9 million	4%
$500.00M–1.00B	18%	Sr. Director	8%	$100.0 million or more	3%
$1.01B–5.00B	22%	Director	24%		
$5.01B–10.00B	8%	Sr. Manager	8%		
Over $10.00B	28%	Manager	15%		
		Other	8%		

who we did not communicate with share a profile with those who did provide justification for why they were not valid participants. Ultimately, an agreement to participate was obtained from 78 of the contacted firms. Buyer-side data was collected on 134 outsourcing relationships. Subsequently, the service providers were contacted to complete a different online survey to reflect their view of the relationship. Service providers were explicitly told that their responses would never be shared with their customers. In total, 105 completed questionnaires were returned from the service providers, resulting in the research team obtaining a rich set of both buyer and service provider (i.e. dyadic) data on 102 outsourcing relationships. Potential non-response bias was assessed by comparing early and late respondents (Armstrong and Overton, 1977) on various demographic variables. Moreover, a buying firm comparison was made between respondents and all firms in the Russell 3000 in terms of sector representation. These analyses did not raise significant concerns about a response bias. It is thus concluded that the obtained sample (see Table 2) adequately represents the target population.

4.2. Measurement instrument

In this study, the exchange hazards present in outsourcing relationships are reflected by three constructs. *Buyer relationship-specific investment* is measured as a composite of two items, one representing human asset specificity and the other representing physical asset specificity. These items were adapted from two items used in a prior scale of idiosyncratic investments (Anderson and Weitz, 1992), and are measured from the standpoint of the buying firm. *Provider relationship-specific investment* is also measured as a composite of two items for human and physical asset specificity; except this time measured from the provider's perspective. A multi-item scale reflecting *technological uncertainty* is included to represent the rate and predictability with which the primary process technologies are changing (Bourgeois and Eisenhardt, 1988; Miller and Friesen, 1983). The three items used in this scale reflect this rate and predictability of technological change. This scale is adapted from the prior work of Dröge et al. (2003) and is measured from the service provider's vantage point.

The power bases included in this study are: reward, coercive, legal legitimate, referent, and expert (French and Raven, 1959). In keeping with established empirical precedent, the bases of reward, coercive, and legal legitimate are classified as *mediated power*. Likewise, *non-mediated* power comprises the referent and expert power bases. The composite measures of mediated and non-mediated power, rather than the individual components for each of these power bases, are utilized to test the research hypotheses. In the case of each power base, adapted versions of the multi-item scales developed by Maloni and Benton (2000) are used for this study. Each power base is measured from the service provider survey, and thus reflects the provider's perspective of the means by which their customer gains their compliance.

To the best of our knowledge, no scales currently exist for our two opportunism constructs of *shirking* and *poaching*. Therefore, new multi-item scales were developed to measure each from the perspective of the potentially opportunistic party; the service provider. A three-round q-sorting exercise was used to refine the items prior to the main data collection. q-Sorting involves asking participants to match randomly ordered survey items with the most appropriate construct definition provided. Shirking and poaching were included among a set of seven constructs and twenty-six items.[3] The first two rounds were conducted with academic colleagues, and the final round engaged six practitioners each with vast experience in managing outsourcing relationships. The results after each round were used to identify poorly worded items or construct definitions, and guide needed adjustments. By the final round, the individual items were correctly matched with their intended constructs at an acceptable rate (overall placement rate exceeded 90%) (Moore and Benbasat, 1991; Perreault and Leigh, 1989), offering evidence of content validity. Moreover, the psychometric results (mean proportion of substantive validity = 0.90; mean coefficient of substantive validity = 0.81) reflected sufficient levels of face or substantive validity (Menor and Roth, 2007).

Contextual control variables were captured via the buying firm's survey. Two dummy variables distinguish between three functional types of outsourcing: information technology, logistics, and general business process (e.g. finance and accounting and human resources) outsourcing. Another dummy variable reflects outsourcing engagements that are purely domestic (domestic = 1) as opposed to those serviced by offshore providers. A measure of contract size in terms of annual contract value (1 = <$1 million; 2 = $1.0–24.9 million; 3 = $25.0–49.9 million; 4 = $50.0–99.9 million; 5 = >$100.0 million) is also included. Finally, we include the existing longevity of the outsourcing relationship (in years). This control variable has been incorporated in prior studies of inter-firm power (Brown et al., 1995; Frazier and Rody, 1991).

4.3. Measurement validity and reliability

The measurement items and their respective scales are included in Appendix A (excluding control variables). The multi-item scales

[3] The other five constructs are not included in the current study.

Table 3
Item descriptive statistics.

Constructs and items	Mean	Std. dev.	Constructs and items	Mean	Std. dev.
Buyer relationship-specific investments ($\alpha = 0.75$)			*Non-mediated power*		
BRSI1	4.32	1.65	Referent power ($\alpha = 0.74$)		
BRSI2	3.64	1.83	RFP1	5.90	1.05
Provider relationship-specific investments ($\alpha = 0.63$)			RFP3	6.08	1.05
PRSI1	5.98	1.05	Expert power ($\alpha = 0.63$)		
PRSI2	4.88	1.76	EP1	6.24	0.78
Technological uncertainty ($\alpha = 0.65$)			EP2	6.05	0.77
TU1	3.70	1.32	EP3	5.43	1.05
TU2	2.77	1.18	Provider shirking ($\alpha = 0.80$)		
TU3	2.79	1.33	PS1	1.43	0.68
Mediated power			PS2	1.40	0.85
Reward power ($\alpha = 0.73$)			PS3	1.33	0.60
RP1	2.57	1.28	PS4	1.75	1.12
RP2	3.70	1.55	PS5	1.51	0.89
RP3	2.56	1.48	PS6	1.50	0.73
Coercive power ($\alpha = 0.71$)			Provider poaching ($\alpha = 0.85$)		
CP1	3.36	1.61	PP1	1.29	0.75
CP2	3.73	1.58	PP2	1.26	0.72
CP3	3.65	1.79	PP3	1.43	0.92
Legal legitimate power ($\alpha = 0.85$)					
LLP1	3.01	1.67			
LLP2	2.73	1.65			
LLP3	3.14	1.61			

Table 4
Bi-variate correlations.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1: Buyer relationship-specific investments	1.00													
2: Provider relationship-specific investments	0.22**	1.00												
3: Technological uncertainty	0.00	0.18*	1.00											
4: Mediated power	0.06	0.32***	0.08	1.00										
5: Non-mediated power	0.02	0.10	0.09	−0.37***	1.00									
6: Provider shirking	0.11	−0.21**	0.04	0.27***	−0.35***	1.00								
7: Provider poaching	−0.04	−0.12	−0.02	0.16	−0.19**	0.69***	1.00							
8: IT outsourcing	0.17*	0.12	0.02	0.14	−0.06	−0.11	−0.23**	1.00						
9: Logistics outsourcing	0.02	0.13	0.01	0.179*	−0.01	0.21**	0.27***	−0.66***	1.00					
10: Domestic outsourcing	−0.11	−0.17*	−0.04	−0.15	−0.07	0.06	0.12	−0.33***	0.26***	1.00				
11: Contract size	0.22**	0.37***	0.11	0.38***	−0.03	0.05	0.05	−0.06	0.38***	−0.17*	1.00			
12: Longevity of relationship	−0.03	0.13	0.06	0.14	−0.09	0.11	0.13	−0.19*	0.30***	0.08	0.23**	1.00		
13: Shirking desirability	−0.15	0.03	−0.12	0.13	−0.15	−0.02	−0.17*	−0.01	0.04	−0.04	0.21**	0.09	1.00	
14: Poaching desirability	−0.19*	−0.05	−0.08	0.09	−0.14	−0.02	−0.10	0.01	−0.03	−0.06	0.17*	0.05	0.92***	1.00

* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.

were subjected to a confirmatory factor analysis (CFA) using LISREL 8.80.[4] Preliminary analysis indicated that one of the items in the *referent* power scale had an unacceptably low correlation with other items in the scale and was therefore removed from the analysis. Missing data was accommodated using full-information likelihood (FIML). The results from the CFA demonstrate acceptable measurement model validity. Acceptable overall model fit is reflected by the RMSEA = 0.07 and $\chi^2/df = 1.51$. The loading of each item on its intended construct is highly significant ($p < 0.01$), exhibiting strong convergent validity. To evaluate discriminant validity, a series of matched constrained and unconstrained models were tested for a significant difference using a χ^2 test (Bagozzi et al., 1991). In each constrained model, a pair of latent constructs is specified to have a correlation of 1.0 while the unconstrained models allow all inter-factor correlations to be free parameters. Each χ^2 test for differences in the models were significant at $p < 0.01$ offering evidence of discriminant validity (O'Leary-Kelly and Vokurka, 1998). To validate grouping reward, coercive, and legal legitimate power bases as a composite measure of mediated power, and expert and referent bases as a composite measure of non-mediated power; an exploratory factor analysis (EFA) was performed using the five individual power bases as the indicators. This EFA resulted in two distinct factors clearly reflecting the intended mediated and non-mediated bases of power. The Cronbach's α values for each factor show sufficient construct reliabilities (Carmines and Zeller, 1979; Nunnally, 1978). Table 3 provides the descriptive statistics for each item (excluding the control variables previously explained) and the Cronbach's α figures for each multi-item scale. Correlations among the constructs used in the analyses are presented in Table 4.

4.4. Common methods and social desirability

Hypotheses 1a and 1b are not exposed to concerns of a common methods bias as the dependent and independent variables are collected from different sources. This is not the case for the remaining hypotheses. Common methods bias is partially con-

[4] As the sole multi-item scale measured from the outsourcing organizations, the buyer relationship-specific investment construct was not included in this CFA. It should be noted however that this construct individually demonstrated sufficient validity and reliability.

trolled for by the design of the survey instrument (e.g. reverse coded questions, spatial separation of the dependent and independent variables, and question-order randomization). As recommended by Podsakoff et al. (2003, p. 898), we also examined the data for empirical evidence of common methods bias by conducting a CFA which included a construct representing an unmeasured methods factor. Each manifest variable was specified to load onto this factor in addition to its theoretical construct. This assessment did not offer evidence that a severe common methods bias exists.[5]

One may posit that asking providers about their firm's tendency to shirk or poach presents the possibility of a social desirability bias (SDB). As such, great efforts were made in all communications to emphasize the *confidential* and *voluntary* nature of the research. Moreover, for all items related to shirking and poaching, an indirect questioning technique was used.[6] Respondents were instructed to answer with regard to how "members of your organization" would behave rather than how they personally would behave. In studying how both personality characteristics and measurement item traits are related to socially desirable responses, Randall and Fernandes (1991, p. 814) conclude "an assessment of perceived item desirability of the dependent variable appears to be preferable in future research".[7] Hence, we measured the extent to which the respondents perceive that each of the shirking and poaching items "would make most people feel uneasy". These variables of shirking and poaching desirability are included in the regression analysis to partial-out the effect of the potential SDB that exists.

5. Analysis

Our primary analytic objective is to isolate the unique explanatory power of exchange hazards and the differing bases of power on provider opportunism, while controlling for potentially confounding characteristics of the outsourcing context. This requires a method which can cleanly partition the variance in a controlled manner. Additional consideration needs to be given to attributes of our data. The data representing the independent variables contains a mixture of single- and multiple-item Likert scale variables, along with nominal variables. Thus, the chosen statistical technique must be able to efficiently accommodate multiple scales of measurement. Also, our dyadic data has multiple observations from some outsourcing organizations. This relationship needs to be accounted for in the analysis. Hierarchical linear regression (HLR) is an appropriate variance partitioning technique (Cohen et al., 2003), which allows the researcher to enter blocks of variables in a deliberate sequence. This leads to an unambiguous picture of how a set of variables uniquely contributes to the explanation of the variance in the dependent variable by isolating the explanatory power contributed by other variables in the model. HLR is also able to handle a mixture of different scales of measurement (Cohen et al., 2003, p. 8). Finally, performing the regression analysis in Stata 11.0, one can specify that robust standard errors be used to account of the intra-group correlation among the multiple observations from the same customer (Stata, 2009). Therefore, HLR is an appropriate statistical method for this study.

Two separate HLR models will be analyzed, with shirking and poaching as the dependent variables, respectively. In both models, blocks of related independent variables will be entered sequentially in order to clearly identify the incremental predictive power of each group of variables. First, the set of contextual control variables will be entered into the HLR model. After controlling for these effects, the factors related to exchange hazards will be entered, followed by the variables for mediated and non-mediated power. Finally, the fourth stage of each HLR model will add the item desirability variables for the respective opportunism constructs. The statistical results of these analyses are displayed in Table 5. Multi-collinearity was assessed by examining the variance inflation factors (VIFs) of each independent variable. No VIF exceeded 2.39 in either model; easily within the desired range (Cohen et al., 2003; Marquardt, 1970).

6. Results and discussion

Table 6 summarizes the results of the statistical examination of our research hypotheses. Each of the following sub-sections presents the statistical results for each hypothesis, discusses the results, and concludes with a consideration of the managerial implications of the findings.

6.1. Influence of exchange hazards on provider opportunism

As hypothesized, the regression coefficient associated with the effect of buyer relationship-specific investments on provider shirking is positive and significant in the fourth stage of the shirking model ($\beta = 0.171$; $p < 0.05$) (see Table 5). However, the fourth stage results of the poaching regression model illustrate that the regression coefficient of buyer relationship-specific investments on provider poaching is insignificant and negative ($\beta = -0.014$; $p > 0.10$). Thus, H1a is supported while H1b is not. The results of the full shirking model in Table 5 offer strong support for the hypothesized negative effect of provider relationship-specific investments on provider shirking ($\beta = -0.333$; $p < 0.01$). Meanwhile, the hypothesized negative effect of provider relationship-specific investments on provider poaching is not supported at conventional levels of significance ($\beta = -0.170$). These results hold up H2a but not H2b. Finally, technological uncertainty did not demonstrate a significant positive effect on the risk of provider shirking ($\beta = 0.103$; $p > 0.10$) or on the risk of provider poaching ($\beta = 0.002$; $p > 0.10$) Therefore, neither Hypothesis 3a nor Hypothesis 3b is supported.

The exchange hazards studied appear to have a significant effect on the threat of provider shirking, but not poaching. None of the hypothesized effects of relationship-specific investments and technological uncertainty on provider poaching were found to be significant. While exchange hazards, such as relationship specific investments, may foster an environment conducive to classic concerns of opportunism, the specificity may be reflective of a unique outsourcing service. This uniqueness may diminish the external value of the portion of the buyer's intellectual property to which the provider is exposed. Thus, the risk-reward tradeoff of poaching is unattractive to the provider. Of these exchange hazards, provider relationship-specific investments had the most significant effect on provider shirking. Buyer relationship-specific investments had a more modest significant effect on shirking. The more modest findings regarding the positive effect of buyer relationship-specific investments on the risk of provider opportunism (relative to the extremely strong effects of provider relationship-specific investments) may at first seem surprising given the heralded role of asset specificity in TCT. Yet, it is important to note that the data for this study includes only business activities that have been outsourced. TCT would suggest that if buyer relationship-specific investments are too high, then outsourcing should not occur. Thus, one would expect somewhat of a ceiling on the level of buyer asset specificity observed in our data. This may explain the slightly dampened pos-

[5] The analysis did not result in substantive changes to the factor loadings. Each item continued to load significantly on its intended theoretical construct. In every case, the item loadings were substantially higher on their intended construct than on the unmeasured methods factor.

[6] In the consumer behavior literature, Fisher (1993) presents strong evidence that indirect questioning significantly mitigates SDB.

[7] This conclusion is similar to the recommendations offered by Bradburn et al. (1978).

Table 5
Shirking and poaching regression results.

Variable	Provider shirking (P)								Provider poaching (P)							
	1		2		3		4		1		2		3		4	
	Coeff	Std error	Coeff	Std error	Coeff	Std error	Coeff	Std error	Coeff	Std error	Coeff	Std error	Coeff	Std error	Coeff	Std error
Constant	−0.320	0.336	−0.552*	0.323	−0.123	0.254	−0.146	0.261	−0.216	0.362	−0.379	0.356	−0.120	0.313	−0.197	0.332
IT outsourcing (B)	0.160	0.212	0.252	0.237	−0.027	0.222	−0.027	0.221	−0.166	0.214	−0.083	0.207	−0.252	0.258	−0.256	0.257
Logistics outsourcing (B)	**0.509****	**0.248**	**0.605****	**0.273**	0.409	0.268	0.405	0.267	0.386	0.267	0.451	0.279	0.329	0.289	0.300	0.292
Domestic outsourcing (B)	0.008	0.218	−0.047	0.227	−0.059	0.188	0.061	0.189	0.078	0.221	0.048	0.220	0.046	0.204	0.035	0.210
Contract size (B)	−0.039	0.123	0.027	0.127	−0.062	0.117	−0.049	0.121	−0.028	0.123	0.022	0.121	−0.033	0.102	0.012	0.118
Longevity of relationship (B)	0.017	0.030	0.025	0.030	0.016	0.028	0.016	0.028	0.017	0.029	0.020	0.030	0.015	0.027	0.015	0.027
Buyer relationship-specific investments (B)			**0.149****	**0.088**	**0.179****	**0.093**	**0.171****	**0.090**			0.000	0.087	0.019	0.103	−0.014	0.101
Provider relationship-specific investments (P)			**−0.333*****	**0.121**	**−0.340*****	**0.130**	**−0.339*****	**0.130**			−0.153	0.131	−0.162	0.138	−0.170	0.137
Technological uncertainty (P)			0.091	0.102	0.109	0.107	0.103	0.105			0.005	0.103	0.014	0.107	0.002	0.111
Mediated power (P)					**0.247*****	**0.095**	**0.247*****	**0.094**					**0.160****	**0.092**	**0.159****	**0.087**
Non-mediated power (P)					**−0.236*****	**0.081**	**−0.241*****	**0.083**					**−0.120***	**0.088**	**−0.137***	**0.088**
Shirking desirability (P)							−0.042	0.084								
Poaching desirability (P)															**−0.143****	**0.071**
F	1.46		1.67		3.40		3.19		3.65		2.88		2.71		2.66	
Prob > *F*	0.217		0.126		0.0015		0.0019		0.0062		0.0091		0.009		0.008	
R^2	0.052		0.152		0.291		0.292		0.080		0.099		0.146		0.164	

1. Standard errors are calculated using robust clustering on the customer variable.
2. One-tail *t*-test used for the effects associated with the hypotheses, two-tail tests used otherwise.
3. (B) indicates that the variable was measured from the buying firm's perspective (i.e. the buyer's survey).
4. (P) indicates that the variable was measured from the provider's perspective (i.e. the provider survey).
The numbers in bold indicate statistically significant regression coefficients.

* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.

Table 6
Hypothesis testing summary.

Hypothesis	Result
H1a: Buyer RSI → (+) provider shirking	Supported
H1b: Buyer RSI → (+) provider poaching	Not supported
H2a: Provider RSI → (−) provider shirking	Supported
H2b: Provider RSI → (−) provider poaching	Not supported
H3a: Technological uncertainty → (+) provider shirking	Not supported
H3b: Technological uncertainty → (+) provider poaching	Not supported
H4a: Buyer mediated power → (+) provider shirking	Supported
H4b: Buyer mediated power → (+) provider poaching	Supported
H5a: Buyer non-mediated power → (−) provider shirking	Supported
H5b: Buyer → (−) provider poaching	Supported

RSI, relationship-specific investment.

itive effect of buyer relationship-specific investments on shirking. Provider relationship-specific investments in essence increase the cost associated with the provider getting caught acting opportunistically. Since these assets are more difficult to redeploy or have diminished secondary value, termination of the relationship would be very unattractive. Thus, they are less motivated to act opportunistically. Contrary to our hypotheses, technological uncertainty was not found to significantly influence the risk of opportunism. The impact of technological uncertainty has received mixed support in prior firm boundary studies as well (McIvor, 2009). These results again highlight the primacy of asset specificity in driving some of the key risks of outsourcing.

The managerial implications of these findings are significant for organizations considering outsourcing, as well as for teams tasked with managing existing outsourcing relationships. For outsourcing engagements which necessitate the buyer investing in specialized assets, the risk of provider shirking is more pronounced. One practical takeaway is that firms should be cautious about outsourcing processes that require specialized investments on their part. However, in many cases the decision to outsource has already been made. In such situations, outsourcing organizations could consider a few different courses of action in an attempt to reduce the risk of opportunism. First, if practical the outsourcing firm should strive to incorporate incentive mechanisms in their formal contract with the provider. This is targeted toward aligning the interests of the two parties, which attenuates the motivation of the provider to act in a manner that is contrary to the interests of the outsourcing firm. Secondly, the outsourcing organization should evaluate options to increase their ability to monitor the provider's actions. This focus on improved monitoring directly aims to reduce information asymmetry and thereby diminish the opportunity for shirking. Indeed, incentive contracting and implementation of monitoring mechanisms are often cited as the primary means of dealing with agency concerns such as shirking (Beatty and Zajac, 1994; Eisenhardt, 1989; Tosi et al., 1997). While potentially effective at reducing shirking risk, these safeguards are typically costly to implement. This study's finding regarding the negative relationship between provider relationship-specific investments and shirking points to an alternative, and perhaps less costly, way of reducing the risk of provider shirking. Outsourcing managers can seek to enhance the provider's investment in resources specialized to the relationship. This could include idiosyncratic investments in information technology, employee training, inter-organizational process integration, etc. which increase the cost to the provider should the relationship terminate.

6.2. Influence of buyer power on provider opportunism

As with the assessment of the exchange hazard hypotheses, the full (fourth stage) models in Table 5 will be used to evaluate the shirking and poaching hypotheses. As hypothesized, the regression coefficient of the impact of mediated power on provider shirking is positive and significant ($\beta = 0.247$; $p < 0.01$), as is the effect of mediated power on poaching ($\beta = 0.159$; $p < 0.05$). These results offer evidence in support of H4a and H4b. The two coefficients related to the influence of non-mediated power on shirking ($\beta = -0.241$; $p < 0.01$) and poaching ($\beta = -0.137$; $p < 0.10$) are also both statistically significant in the intended direction. This bolsters H5a and H5b.

Gaining provider compliance through intrinsic forms of motivation associated with non-mediated power not only positively effects the provider's normative commitment and satisfaction with the relationship (Brown et al., 1995; Maloni and Benton, 2000; Benton and Maloni, 2005), but also has a more tangible impact. Influence achieved through non-mediated forms of power diminishes the concern of opportunistic behaviors which have been identified as being detrimental to the value of outsourcing engagements. Over time, this allows the outsourcing firm to effectively manage the relationship with less need for costly control and monitoring mechanisms (Ring and Van De Ven, 1994). Conversely, firms that rely on the use mediated forms of power may be doing irreparable harm to relationship quality and inadvertently raising the risk of shirking and poaching. At a minimum, this burdens the outsourcing firm with difficult to observe agency costs and it potentially results in excessive expenditures on formal control and monitoring devices (Wathne and Heide, 2000).

These findings are notable from a managerial perspective. Extant literature has observed that the use of mediated power "represents the competitive and negative uses of power" (Benton and Maloni, 2005). The use of mediated power establishes a zero-sum, adversarial environment in the relationship. It sets the stage for the provider seeking to wring value from the relationship at the expense of their customer, as their interests have become more divergent. Before utilizing mediated forms of power, outsourcing managers need to fully consider the potential risks and long-term costs associated. Once the adversarial environment has been established, buying organizations will need to deal with unintended provider actions and face the costs associated with the increased need for formal safeguards against opportunism. While mediated power appears to exacerbate the provider's "rational" motivation for opportunistic behavior, reliance on non-mediated power reduces the risk of opportunism. With non-mediated power, the provider acts in a manner consistent with the interests of the buyer not because they are forced to, but rather because they willingly choose to. Although the opportunity for opportunism may exist, they elect to not take advantage of the situation. As such, it is clear that outsourcing managers should strive to gain provider compliance through non-mediated means. Similar to the establishment of provider relationship-specific investments, buyer reliance on non-mediated power can serve as an alternative to formal control mechanisms (e.g. incentive contracting and monitoring mechanisms) in the fight against provider shirking and poaching. Non-mediated power is based on the provider being proud to be associated with the customer, or viewing the outsourcing firm as an expert from whom they can learn and improve. The buying organization being willing to serve as positive business reference for the provider, or being willing to devote resources to helping the provider improve their products and services are examples of means by which the outsourcing firm could enhance their power in the relationship through non-mediated avenues. These actions can result in the provider wanting to go to great lengths to preserve the relationship and avoid any behavior which may threaten its continuation. Over the long-term, reliance on non-mediated power favorably alters the risk–reward relationship with outsourcing. The opposite is true for reliance on mediated power.

7. Conclusions and future research

As outsourcing continues to be a prevalent business practice and many firms are left disappointed with the results, it is imperative that a better understanding of the drivers of the total cost of outsourcing is developed. Shirking and poaching are specific forms of provider opportunism which can play a value-destroying role in outsourcing. The principal goal of this study was to examine the effects that exchange hazards and outsourcing firm power have on service provider shirking and poaching. Prior studies of inter-organizational opportunism have not concurrently examined the effects of exchange hazards and power in a common model. Pursuit of this research objective resulted in a substantive contribution to the outsourcing literature. Our statistical results offer evidence that outsourcing engagements characterized by higher levels of buyer relationship-specific investments and influence derived from mediated power bases face a higher risk of provider opportunism. Conversely, higher levels of provider relationship-specific investments and buyer reliance on non-mediated power bases are associated with a diminished risk of provider opportunism. These conditions not only reduce the risks of outsourcing, but also demand lower investments in monitoring and formal control mechanisms. This results in a more favorable risk–reward relationship for the outsourcing organization. Additionally, this study contributes reliable, validated scales for shirking and poaching. The analysis demonstrated the value of looking at specific forms of opportunism. Relationship-specific investments have a significant association with provider shirking, but not with poaching. Only by distinguishing between shirking and poaching were we able to flesh out these insights. The results of this study represent a valuable start to developing a deeper and more nuanced understanding of how relationship management practices, in addition to commonly noted exchange hazards, can exacerbate or attenuate the risk of opportunism with outsourcing.

The contributions of this study can be extended by future research efforts. Exchange hazards and the basis of outsourcing firm power were found to have a meaningful impact on service provider opportunism. It is tenable that other environmental conditions and firm practices can instigate or mitigate provider opportunism. Subsequent studies could explore how contingency effects between outsourcing context and management practices can more fully explain provider opportunism. In addition, our measure of relationship-specific investments included two general items representing the two most germane forms of specificity identified in the literature: physical and human asset specificity (Grover and Malhotra, 2003; Williamson, 1979). Future studies focusing on specific types of outsourcing may benefit from more detailed measures of specificity leading to additional insights. Moreover, consideration could be given as to what factors appear to influence buying firm opportunism. Finally, future efforts should be directed toward evaluating the drivers of other forms of opportunism and outsourcing transaction costs such as monitoring and coordinating. A better understanding of factors influencing these costs can result in improved, more realistic outsourcing business case development and more effective relationship management practices.

Appendix A.

Buyer relationship-specific investments (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(BRSI1) We have made substantial investments in personnel dedicated to this provider.
(BRSI2) We have made substantial investments in capital equipment and technology dedicated to this provider.

Provider relationship-specific investments (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(PRSI1) We have made substantial investments in personnel dedicated to «Customer».
(PRSI2) We have made substantial investments in capital equipment and technology dedicated to «Customer».

Technological uncertainty

(TU1) For the services we provide to «Customer», our core process technologies change: (1 = very slowly; 7 = very quickly).
(TU2) For the services we provide to «Customer», our core process technologies become obsolete: (1 = very slowly; 7 = very quickly).
(TU3) For the services we provide to «Customer», the trends in our core process technologies are: (1 = very easy to monitor; 7 = very difficult to monitor).

Reward power (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(RP1) «Customer» offers incentives to our firm when we are initially reluctant to cooperate with a new program.
(RP2) «Customer» will favor us on other occasions if we go along with their requests.
(RP3) «Customer» offers us rewards so we will go along with their wishes.

Coercive power (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(CP1) If we do not do as they ask, we will not receive very good treatment from «Customer».
(CP2) If we do not agree with «Customer»'s suggestions, they could make things difficult for us.
(CP3) «Customer» makes it clear that failing to comply with their requests will result in penalties against us.

Legal legitimate power (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(LLP1) «Customer» often refers to the terms of our contract to gain our compliance on particular requests.
(LLP2) «Customer» makes a point to refer to our legal agreement when attempting to influence us.
(LLP3) «Customer» uses sections of our formal agreement as a "tool" to get us to agree to their demands.

Referent power (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(RFP1) We admire the way that «Customer» runs their business.
(RFP 2) We often do what «Customer» asks because we are proud to be affiliated with them. (Removed from final analysis)
(RFP 3) We talk up «Customer» to our colleagues as a great business with which to be associated.

Expert power (1 = strongly disagree; 4 = neutral; 7 = strongly agree)

(EP1) We see «Customer» as an expert in their industry.
(EP 2) We respect the judgment of «Customer»'s representatives.
(EP 3) Our firm believes that «Customer» retains business expertise that makes them likely to suggest the proper thing to do.

Provider shirking (1 = very unlikely; 7 = very likely)

(PS1) If «Customer» were not able to detect it, how likely are members your organization to... Not assign your best people to your business or account with «Customer».
(PS2) If «Customer» were not able to detect it, how likely are members your organization to... Provide a lower than agreed to level of resources.
(PS3) If «Customer» were not able to detect it, how likely are members your organization to... Withhold information that may be beneficial to «Customer».
(PS4) If «Customer» were not able to detect it, how likely are members your organization to... Not share in the benefits of process improvements.
(PS5) If «Customer» were not able to detect it, how likely are members your organization to... Delay making agreed to investments in employee training.
(PS6) If «Customer» were not able to detect it, how likely are members your organization to... Delay making agreed to investments in new technology.

Provider poaching (1 = very unlikely; 7 = very likely)

(PP1) If «Customer» were not able to detect it, how likely are members your organization to... Use potentially proprietary information obtained through your relationship with «Customer» to gain favor with other clients.
(PP2) If «Customer» were not able to detect it, how likely are members your organization to... Use potentially proprietary information obtained through your relationship with «Customer» to help win new business with other customers.
(PP3) If «Customer» were not able to detect it, how likely are members your organization to... Use potentially proprietary information obtained through your relationship with «Customer» to develop new services that you can offer in the marketplace.

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