When Subordinates Become IT Contractors: Persistent Managerial Expectations in IT Outsourcing

Violet T. Ho • Soon Ang • Detmar Straub

Nanyang Business School, Nanyang Technological University, Nanyang Avenue 639798, Singapore Nanyang Business School, Nanyang Technological University, Nanyang Avenue 639798, Singapore Computer Information Systems Department, J. Mack Robinson College of Business, Georgia State University, Atlanta, Georgia 30302-4015

atwho@ntu.cdu.sg • asang@ntu.edu.sg • dstraub@gsu.edu

This paper investigates the persistence of managerial expectations in an IT outsourcing context where the traditional relationship between supervisor and subordinate changes to one of client-manager and contractor. A mixed-method approach was used, in which a qualitative methodology preceded a large-scale quantitative survey. Data were collected from 147 survivors of a government IT organization which had undergone IT outsourcing in the previous year. Findings show that role overload, the presence of strong ties between manager and contractor, and the lack of prior outsourcing experience increased the persistence of managerial expectations. In turn, persistence of expectations had a distinct influence on managerial perceptions of contractor performance.

(IT Outsourcing; Persistent Expectations; Role Overload; Strength of Ties; Contractor Performance; Contract Workers; Changing Employment Status)

Introduction

Since the late 1980s, the trend towards outsourcing of information systems has continued unabated. Much research has focused on reasons why companies outsource (Ang and Cummings 1997, Ang and Straub 1998, Lacity and Hirschheim 1993, Lacity and Willcocks 2000, Slaughter and Ang 1996), but, more recently, research has shifted the focus away from the causes of outsourcing to how companies manage outsourcing contracts (Ang and Beath 1993, Ang and Endeshaw 1997, Ang and Slaughter 2001, DiRomualdo and Gurbaxani 1998). The experience of outsourcing has been mixed. While some companies have attained desired results with IT outsourcing, others have faced significant difficulties in managing the change (for example, see Ang and Toh 1998). One challenge, then, is

to understand how organizations successfully manage outsourcing contracts.

One form of outsourcing that is commonly practiced is that of spin-offs, examples of which can be found in organizations such as American Airlines, Baxter Healthcare, and Philips Electronics (Willcocks and Lacity 1998). In this form of outsourcing, an IT department (including the employees, systems, and operations) within an organization gets "spun-off" into a separate external entity, becoming empowered to behave as an external vendor and having to focus on new issues such as marketing, customer service, and offering competitive prices to the clients (Ang and Koh 2000, Willcocks and Lacity 1998). In addition, the IT employees formally leave their organization and are transplanted to the new spin-off company, which employs them and offers their services back to the

original employer for a service fee. Even though these transplants still provide services to the original organization, it no longer directly employs them. Instead, the spin-off company is the new employer and is responsible for the management and supervision of these transplants, including compensating them and assigning them to specific clients (Ang and Slaughter 2002). In other words, the status of the transplants relative to the original employer changes from subordinates to third-party contractors.

The advantages for a client organization of using transplants (as opposed to nontransplants) are numerous. Due to the transplants' prior experience with the client organization, they are familiar with the operations and procedures of the organization and need not invest as much time and effort to understand its fundamental problems and opportunities. Also, because these transplants (or contractors) are former subordinates of the client-managers, the latter should possess a deeper knowledge of contractor competencies and skills and, consequently, be more effective in supervising them.

There is an alternative hypothesis about the efficacy of using transplants. From their prior experience in supervising the contractors (as subordinates), clientmanagers may have developed clear expectations about what the contractors should provide to the organization, such as a requisite level of work, effort, and commitment. Evidence from social psychology suggests that expectations and beliefs are not readily subject to change, even in the face of disconfirming evidence (e.g., Anderson et al. 1980). Hence, if prior expectations persist into the IT outsourcing relationship, client-managers would tend to think of these contractors as subordinates, imposing on them role expectations that are not appropriate under the new contractual relationship. After outsourcing, clientmanagers no longer possess the legitimate power previously accorded them as a function of their position in the formal organizational hierarchy. Consequently, conflicts concerning the responsibilities of contractors can (and do) arise between the two parties, which may prove difficult to resolve and, in the worst case, contribute to failure of the outsourcing arrangement.

The objective of this study is to examine managerial attitudes and expectations toward transplants in IT

spin-off arrangements. Specifically, we focus on the phenomenon of persistent expectations by exploring the conditions under which managerial expectations persist and the effect on managerial evaluation of contractor performance. We first draw on literature in social and cognitive psychology, particularly research in belief perseverance, as well as agency theory, to offer theoretical lenses for the phenomenon of persistent expectations. We then adopt a mixed-method approach to empirically develop and test a model of persistent expectations (Creswell 1994, Tashakkori and Teddlie 1998). Using persistent expectations as the focal a priori construct, this approach adopts a two-phase design, the first of which involves a qualitative (case study) approach (Eisenhardt 1989a). In this approach, we have the construct in mind and use case study techniques (more generally, qualitative techniques) to develop a model of persistent expectations. This leads to an empirical understanding of the phenomenon and results in the development of the persistent expectations model. This model, together with formal hypotheses on the antecedents and consequences of persistent expectations, is further elaborated upon by drawing on extant theories on agency theory, schema formation, and belief perseverance. Using a field/study/survey approach, we empirically test the model and its hypotheses in the second phase of the approach. After discussing the results of the second study, we conclude with implications for future research.

Persistent Expectations in IT Outsourcing

Spin-offs as a form of IT outsourcing arrangement involve the use of transplants and entail a change in the relationship between the two contracting parties. Before outsourcing, the relationship is supervisor-subordinate, in which supervisors have legitimate power arising from their position of formal authority in the organizational hierarchy (Masten 1991). Supervisors can guide and influence subordinates' work-related actions, tasks, and decisions. Moreover, the scope of their authority is fluid and not explicitly circumscribed in the employment contract. This is reflected in the notion that subordinates have a "zone of indifference" in their duties and responsibilities

(Masten 1991, Simon 1951) such that they are amenable to carrying out their duties according to supervisors' instructions, to achieve certain organizational or departmental goals.

After a spin-off, subordinates may find themselves contracted to their former organization by the new spin-off. Several changes result from this type of outsourcing conversion. First, from a principal-agent perspective, the former subordinates are no longer direct agents of the former organization but are, instead, agents of a new principal, namely the new vendor organization. In turn, the new vendor organization contracts its services to the former organization (now the client organization) and, hence, operates as an agent of the client organization. Consequently, the former subordinates now work as external contractors to the client organization and are only indirectly the agents of the client organization and client-managers. At the same time, client-managers are no longer a direct principal of their former subordinates (now external contractors), but instead occupy a principal position to the external contractors only indirectly via the relationship between the client and vendor organizations.

Agency theory (e.g., Eisenhardt 1985, 1989b) holds that the control mechanism under a client-contractor relationship should also change from one that is predominantly behavior based to one that is predominantly outcome based. In the former relationship, supervisors monitor the day-to-day activities of their subordinates and rely primarily on behavior-based controls, given the formal authority prescribed under the employment contract and the relative ease of measuring subordinate behavior. However, when the relationship changes to one between client and contractor, the two parties now work for two different organizations, thereby introducing the potential for goal conflict (Eisenhardt 1989b). Consequently, agency theory stipulates that the contract and the ensuing control mechanism should change to one that is predominantly outcome-based instead in order to be efficient.

Second, in IT outsourcing, the contract between the client organization and the vendor organization plays

¹We are especially grateful to our anonymous reviewer for highlighting the pertinence of control mechanisms as described in agency theory.

a more important role (Lacity and Hirschheim 1993, Lacity and Willcocks 1995), and the terms are typically more specific, explicit, and circumscribed than in an employment contract between an organization and employees. This, in turn, implies that exchanges between the client-managers and the contractors are carried out via a more formal transaction, such that contractors are not bound to perform duties that are not specified in the outsourcing contract.

Despite the overnight change in the legal relationship from supervisor and subordinate to clientmanager and contractor, it is likely that ex-supervisors (now client-managers) will continue to perceive contractors as direct subordinates. Therefore, they will persist in imposing on their former employees (now contractors) a set of expectations that were internalized in their prior employment relationship, expectations which include mostly the use of micromanagement and behavioral controls rather than predominantly outcome-based controls as prescribed by agency theory. We posit that client-managers will expect former subordinates to perform their duties and contribute much as they did in the past, even though these duties and responsibilities may not be included in the new outsourcing contractual arrangement.

We advance the theoretical construct "persistent expectations" to describe and explain this phenomenon. This term is adopted from the "belief perseverance" phenomenon described in the social cognition literature (e.g., Anderson 1995, Lord et al. 1979). Within this literature, belief perseverance theory is particularly germane and tightly linked to the IT issue of how well managers can change their expectations of subordinates who, overnight, become contractors. Belief perseverance describes the tendency for prior beliefs and expectations to persevere, even in the face of new data or when the data that generated those beliefs and expectations are no longer valid (Anderson and Kellam 1992). Research has documented that people tend to cling to beliefs and expectations, particularly if they are well developed or if the people had formulated explanations or naïve theories to account for these perceptions (Anderson et al. 1980, Ross et al. 1975). Also, prior beliefs can affect assimilation of new data, such that people tend to interpret new data as being more congruent with prior beliefs than they actually are (Lewicki et al. 1989).

Research in social cognition offers some explanation for the occurrence of persistent expectations. It has been documented that people are generally unwilling or slow to change established mental schemas because, as cognitive misers, we prefer to engage in automatic information processing and fit experiences into established schemas, rather than change our schemas to reflect changing circumstances (Fiske and Taylor 1991). In fact, prior research has demonstrated that the need to retain established schemas is so strong that people still will not amend their schemas even when they are specifically informed that their prior schemas are inaccurate (Ross et al. 1975).

Applied to the IT outsourcing context, these sociopsychological findings lend weight to the notion that client-managers do not change their old schemas and expectations regarding former subordinates, even though the managers may recognize that these exsubordinates are no longer officially under their jurisdiction but are under the supervision of another organization. Consequently, client-managers may continue to impose on contractors demands and responsibilities that may not have been contracted for in the IT outsourcing arrangement. To develop a framework for the occurrence of persistent expectations and to explore this phenomenon in greater detail, we adopted a mixed-method approach, starting with an exploratory, qualitative case study to develop the theoretical model.

Study 1: Development of Theoretical Model

Since neither belief perseverance nor persistent expectations has been examined in the context of a change in employment relationship, a qualitative case study approach was selected to provide critical information about the phenomenon. Following Eisenhardt (1989a), the purpose of the first qualitative phase was to obtain a richer description and understanding not only about the nature of the phenomenon, but also about factors affecting, and effects arising from, persistent expectations. We used focus groups to elicit the nature of persistent expectations, the organizational context in which it occurs, and the consequences of persistent expectations (Spradley 1979).

Study 1: Method

Participants and Setting. We conducted focus group sessions with employees in a large public-sector organization offering IT services to 20 government bodies. The services included the development of information systems, promotion of IT services in the government bodies, and propagation of IT usage to the general public. The department had spun-off its systems building and maintenance services eight months before to increase organizational efficiency and streamline operations. Before the spin-off, the IT department employed 1,501 personnel providing a full range of IT services. Approximately 67% (1,013) of the employees were development and maintenance personnel. They built and maintained applications software and managed and operated the data centers of the organization. The remaining 488 employees were support staff (e.g., administrative, financial, and human resource personnel) and IT planners and solutions providers who created liaisons with end users in the subsidiaries and managed in-house systems development projects. In effect, the IT planners and solutionsproviders formed the upper and managerial levels of the IT department, with IT developers and maintainers occupying the lower, technical levels.

In the outsourcing changeover, all the IT developers and maintainers were formally separated from the IT department and transplanted to a new spin-off organization. They became employees of the new organization but continued to offer technical services to their former employers (henceforth called the "client" organization) as contractors. The exchange became a client-vendor arrangement governed by a formal service-level agreement (SLA). The IT planners and solutions providers remained with the client organization and continued to provide IT solutions to various government bodies. In addition, they became clientmanagers responsible for managing the outsourcing contracts with the same IT professionals who were now external contractors to the client organization, rather than its subordinates.

Procedure. Three focus-group sessions involving a random selection of 19 client-managers in the client organization were conducted over a two-week period.

When Subordinates Become IT Contractors

Six or seven client-managers participated in each session, each of which lasted an average of two hours.² These 19 participants occupy different positions in the organization, such as project leaders and information services managers, and their tenures range from three to 16 years. Responsibilities include planning and managing the technical infrastructure and architecture, managing projects, vendors, and business partners, and mediating the relationships between multiple users. In each focus-group session, the second author led the discussions. We developed a questioning protocol to guide the participants in describing the repercussions of the outsourcing, specifically pertaining to their relationships with transplants, i.e., former subordinates who were now contractors. The questions required the participants to describe:

- (1) the nature of their jobs before and after outsourcing;
- (2) the changes experienced by them in terms of roles, responsibilities, interactions, and relationships with the contractors; and
- (3) the changing expectations and obligations of the contractors.

One other major issue that was deliberated was the phenomenon of persistent expectations. Participants discussed the implications and repercussions of having the development IT professionals working for them under the auspices of the new vendor organization instead of as subordinates.

Two of the authors and two research assistants independently took notes of the discussions, which were compiled and transcribed for processing and further analysis in NUD·IST, a qualitative data analysis program. To reveal the major themes, we adopted the approach advocated by (Colaizzi 1978), whereby transcribed notes were independently read and coded and broad themes were developed with the aid of NUD·IST. In addition to the theme of persistent expectations, we also examined transcribed notes for themes that were either antecedents (i.e., themes that promoted or dampened the concept of persistent expectations) or consequences (i.e., themes that resulted from persistent expectations). We then discussed, reviewed, and arrived at a set of six major themes.

²The ideal size for effective focus-group discussion ranges from 7 to 11 (Krueger 1994).

To establish an independent assessment of these themes, two "blind" coders (Ph.D. students in MIS and management) read and coded transcripts using the six themes. They conducted initial coding of the first transcript to establish interrater reliability, the calculated Cohen's Kappa for which was 0.865. The raters then discussed the discrepancies and developed explicit coding rules to reconcile the discrepancies. Subsequently, the coders independently coded the rest of the transcripts, with a resulting Cohen's Kappa of 0.92. Given this level of agreement, the coding approach was deemed reliable, satisfying Landis and Koch's (1977) threshold of 0.70 for robustness and validity.

Study 1: Results and Theoretical Model

Six major themes emerged from the focus group discussions:

- (1) persistent expectations, i.e., the client-managers' continued expectations of the contractors to respond as if they were still subordinates;
- (2) client-managers' experiences of *role overload* resulting from IT outsourcing;
 - (3) their strength of ties with former subordinates;
 - (4) their level of *trust* in the contractors;
- (5) their outsourcing *experiences* with other thirdparty vendors and a comparison of these with those relating to the new contractors; and
- (6) client-managers' assessment of contractor *performance*.

Themes (2) to (5) relate to the antecedents of persistent expectations, and Theme (6) to the consequences of persistent expectations. The following section presents sample focus-group responses that illustrate these six themes. Building upon the qualitative study findings, we incorporate extant research in agency theory and social cognition to develop a research model of persistent expectations. Last, we formulate hypotheses about the antecedents and consequences of persistent expectations.

Persistence of Expectations. In terms of client-managers' working relationship with contractors, client-managers found it both difficult and awkward to manage former subordinates as external contractors. Many continued to relate to their former subordinates as if they were still subordinates and continued to expect the same level and quality of support and service.

However, managing contractors requires a different mindset and skill set from that required for managing subordinates.

In general, managers can compel subordinates to perform a broader range of tasks than what they can demand of contractors. From the perspective of agency theory, this translates to the use of predominantly behavior-based controls by the managers. After outsourcing, however, the client-managers' formal authority over the contractors was limited only to tasks that were explicitly stated in the SLA between the client and vendor organizations. Consequently, clientmanagers found that former subordinates had become unwilling to simply "take orders" from them. Instead, these contractors adhered closely to the terms and conditions spelled out in the outsourcing contract. In contrast, the client-managers expected the contractors to provide the same service level as in the past. One manager explained:

The problem with the contractors is mainly the relationship. For other vendors, the expectations are already set in the contract, and we know the limit of their responsibilities. But for these contractors, we assume that they will continue with their prior responsibilities as subordinates, so our present behavior is based on past behavior. . . . There's a lot of assumptions between both sides, and we need to manage the relationship. It's like getting a divorce but still staying in the same house.

Another manager also noted the difficulty in trying to switch their treatment and expectations of the transplants from subordinates to contractors.

In the past, they [the contractors] will do anything under the sun, like moving computers from one site to another, or writing Chinese and Tamil software and other small tasks. Now, if it's not specified under the SLA, they won't do it....

Not surprisingly, the discrepancy between clientmanagers' expectations and contractors' actual service levels does not please the client-managers. One manager described his situation as follows:

Before, we [both client-managers and contractors] worked as a team towards a common goal. Now, they won't go beyond their duties or responsibilities, but only up to specs.... There's a lot of emotions that go with the change of relationship from subordinate to contractor.... The emotional aspects don't pertain to newcomers because they don't have the prior relationship with the contractors as subordinates.

Role Overload (Antecedent to Persistent Expectations). In terms of work concerns resulting from IT outsourcing, client-managers reported having to perform additional duties that were previously not part of their job requirements and, subsequently, feeling overwhelmed in their duties and responsibilities. One manager noted:

I'm managing more things now. In the past, I handled one specific project and it was very specific in the skills that are required. But with outsourcing, my job scope has expanded to contract management, to vendor relationships, to writing proposals, and all other kinds of skills that are needed.... But I've little time to develop technical skills, and it's difficult to read and get enough depth.

Other client-managers agreed. Many described an expansion in job scope and duties, particularly with regard to administrative matters. A manager described her situation:

I had to do administrative work for the past four to five months, and had to do coordination and liaison work. I should join the administration department since I'm largely doing administrative work 90% of the time, like verifying the number of tables and chairs!

While client-managers had to undertake additional roles and responsibilities after outsourcing, they were stripped of subordinates who previously supported them in completing work assignments. This resulted in a lack of resources needed to fulfill job responsibilities. One manager summarized the situation:

We have to pay the contractor a fee to perform the R&D work that was previously absorbed by our subordinates. Now I have to do the exploration myself, whereas in the past the subordinates did it.... In the past, I could delegate administrative work to my subordinates, but not any more. We need clerical officers, administrative officers, or executive officers to help us out.

Overall, these findings indicate that as a result of the massive downsizing requisite in IT outsourcing, job roles and responsibilities of survivors expanded significantly to the extent that they experienced role overload. In turn, this role overload may have amplified client-managers' persistent expectations, such that, to cope with the overload, they continued to perceive the contractors as subordinates and expected them to perform duties that fell within a subordinate's role, even though they were no longer in such a position.

The relationship between role overload and persistent expectations can be explained by examining the cognitive and motivational biases of the clientmanagers. In terms of cognitive constraints, increases in role overload result in survivors having limited time and cognitive resources to assimilate and interpret new information. It has been proposed that, when such constraints exist, people make judgments and evaluations based on salient information or available schemas currently in their possession (Anderson and Lindsay 1998). We predict a similar reaction in the IT outsourcing context. Client-managers who experience role overload will be preoccupied with trying to deal with the urgent, day-to-day issues resulting from outsourcing. Consequently, they will not have sufficient time and cognitive resources remaining to gather and analyze new data to develop a new set of expectations for the contractors.

Also, it is well documented that, in times of cognitive stress, people tend to experience threat rigidity and rely on automatic information processing (Louis and Sutton 1991, Staw et al. 1981). This seems to occur independent of the constraints on time and cognitive resources mentioned before. Specifically, in situations in which individuals are under external threat, as when their organization outsources, they feel uncertain about their future in the organization and restrict their search for additional information. They rely on "automatic information processing" instead, evoking past schemas and familiar scripts when relating to others and making decisions and judgments. This tendency is exacerbated by the increase in cognitive and time constraints to the extent that even when new circumstances warrant active information processing, individuals still rely more on past schemas and automatic information processing (Gollwitzer and Kinney 1989, Koller and Wicklund 1988, Kruglanski 1989). This implies, in the current context, that managers will continue to use old schemas for managing subordinates, which includes the use of mainly micromanagement and behavioral controls, rather than relying primarily on outcome-based controls, which are in fact more appropriate under the new outsourcing relationship.

Other than the cognitive effects described above,

motivational forces may also contribute to the persistence of expectations. Anderson and Lindsay (1998) suggests that "motives or needs of the perceiver can influence what information is brought to bear" (p. 22). In the outsourcing context, client-managers with role overload are already overwhelmed with having to cope with the additional duties and responsibilities resulting from outsourcing. This works against their decreasing their expectations of help from others. Hence, client-managers do not have the motivation or reason to expect that contractors will provide fewer services than they did as subordinates. In fact, for client-managers to cope with the increase in workload, they need contractors to offer even more assistance than they did previously.

This suggests that client-managers continue to evoke old schemas of the transplants as subordinates, and expect contractors to perform certain duties and tasks for which they may no longer be responsible under the new outsourcing agreement. Therefore, we hypothesize that:

Hypothesis 1. Role overload is positively related to persistence of expectations.

Strength of Ties with Contractors (Antecedent to Persistent Expectations). Comments by client-managers in the focus groups suggest that the presence of previous ties with the contractors likewise contributes to the persistence of expectations. Client-managers indicated that close ties with former subordinates posed obstacles to building an external client-vendor relationship with the contractors. Apparently, when the ties were familiar and both parties frequently interacted, client-managers persisted in thinking of transplants as subordinates. This situation is succinctly stated:

I'm too familiar with [the contractors], since we used to work together here. And because of this, it's a tense relationship, since they're not someone from outside. . . . We used to be very close and lunch together in the past, but now we don't do that anymore. And because of the past relationship with them, it's difficult to draw the line. . . . It's difficult to manage the change in role from colleagues to contractors.

It appears that having had strong ties with the contractors not only contributes to persistence of expectations, but also influences client-manager perceptions

of the contractors' current service level. One manager

We were one big happy family then [before outsourcing]. Everybody knew everybody; we were a close department. Most of the contractors used to be part of our officers, but the relationship is different now. We have changed from friends to contractors, and their response time is not there anymore.... They don't provide the previous level of service, and there is a drop in the service level. We are getting much less service than we used to....

Contrasting the comments of client-managers who had past ties with the contractors with those who did not, it is noteworthy that the latter expressed no concerns about treating the transplants as third-party contractors. One such manager described his interactions with the contractors:

I joined [the client organization] after the outsourcing, so I didn't know the contractors previously, and I can interact with them at an objective level, because they are new to me.

These quotations suggest that client-managers' ties with former subordinates diminished their ability to manage the contractors as external vendors. In fact, the closer client-managers were to the transplants, the more difficulty they had in changing perceptions and expectations from subordinate to contractor. This phenomenon has been documented since the 1960s by researchers such as Thibaut and Ross (1969), who found that the more experience people had with certain expectations, the more resistant they were to changing those expectations. Social cognition research has shown that mere thought, or the act of contemplating or recalling a schema, will fortify expectations or schemas and make schematic changes difficult (e.g., Chaiken and Yates 1985, Millar and Tesser 1986, Myers and Lamm 1976). Schema resilience is further reinforced through frequent interactions with the other party, such that the perceiver would be even less inclined to change even though evidence warrants that a schema adjustment is in order (Mayer and Bower 1986). In fact, the more that schemas are used, the more automatic will be the schema recall, to the extent that the mere presence of those stimuli in the environment will trigger schemas into use (Bargh and Pratto 1986).

In the current context, the client-managers' "personin-organization" schemas (DeNisi et al. 1984, Harris 1994) for transplants before outsourcing were shaped for subordinates. After outsourcing, former subordinates played the role of external contractor instead. However, we theorize that client-managers could not easily alter their previous subordinate "person-inorganization" schemas, especially when the schemas were reinforced through the strength of ties and continuing frequent interactions between the parties. Thus, the presence of strong ties impedes adjustment of "person-in-organization" schemas to new circumstances and increases the likelihood of individuals maintaining schema consistency. Accordingly, clientmanagers' expectations of transplants as subordinates should be imposed in the new outsourcing arrangement. Hence, we hypothesize that:

Hypothesis 2. Strength of ties between clientmanagers and IT contractors is positively related to persistence of expectations.

Trust in Contractors (Antecedent to Persistent Expectations). In addition to experiencing varying degrees of closeness with the contractors, managers also reported having different levels of trust. Some managers had a high level of confidence in the competence and quality of work of the contractors, and this appeared to positively influence client-managers' perceptions and attitudes. For example, a manager noted:

I think the staff at [the contractor organization] are quite committed and cooperative, and I really appreciate them.

Some managers, however, revealed that they did not have confidence in the contractors' ability. This adversely affected their degree of reliance on the contractors. In fact, the lack of trust in the contractors led a manager to state that:

I can't delegate the work to [the contractor organization], unless I know that [the contractor organization] can deliver without being monitored. But their track record so far hasn't given me the confidence to let them run on their own, so I'll lose control if work is delegated to them.

Generally, managers who did not trust in the contractors' competence relied less on them and also increased their monitoring and supervision, as indicated by the following observation:

I know that the project manager at [the contractor organization] is not a thorough worker from my past experience working with this person in [the client organization], so I have to

When Subordinates Become IT Contractors

review his work, roles, and responsibilities thoroughly.... There's no value added by [the contractor organization], and I don't see the service level growing.

From managers' comments, an often-mentioned consequence of lack of trust and confidence in the contractors is unwillingness to delegate responsibilities to vendors, occasionally going as far as to supervise the minute, day-to-day, behavioral aspects of the contractors' work. Yet, other managers trusted and relied upon the contractors' abilities and intentions, to the extent of expecting them to deliver more than other third-party vendors.

Such behavior is consistent with existing research on trust. Generally understood to be a set of expectations or beliefs that influence behavior and behavioral intentions (e.g., Deutsch 1958, Morgan and Hunt 1994), trust has been studied in multiple disciplines and defined in multiple ways. However, underlying the various definitions of trust are two common themes that constitute its basic concept: a willingness to be vulnerable and the existence of positive expectations of others (Rousseau et al. 1998). Specifically, from their review of the extant literature these scholars concluded that a widely held definition of trust is "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (p. 395). Prior research has investigated the nature of these positive expectations and, based upon the early works of scholars such as Blau (1964) and Giffin (1967), it is generally accepted that trust consists of three broad sets of expectations or beliefs about the other party, namely the latter's ability, integrity, and intentions (benevolence).

Extending this conceptualization of trust to the context of this study provides a theoretical justification for the pattern of behavior we observed in the focus groups. Specifically, managers who trusted subordinates' abilities and intentions under the old relationship continued to trust in the new relationship. This was so powerful that they were willing to rely on the contractors and persisted in expecting them to act for the good of the client organization and perform their duties as in the past. In fact, this dependence on the contractors is likely to be even more acute subsequent to outsourcing, in which client-managers experience an increase in workload and a concomitant decrease in

lower-level support. One method by which these client-managers could cope with outsourcing was to delegate more work to trusted contractors, who they believed were willing and able to contribute to the client organization. Consequently, client-managers' trust (i.e., positive expectations) in selected contractors should lead them to rely on and expect more from these contractors (Strickland 1958). Specifically, we hypothesize that:

Hypothesis 3. Level of trust in IT contractors is positively related to persistence of expectations.

Outsourcing Experience with Third-Party Vendors (Antecedent to Persistent Expectations). The fifth theme that emerged from the focus-group discussions concerns client-managers' outsourcing experiences with other third-party vendors and how these experiences affected the relationship with transplants. It appears that client-managers who had prior experiences with third-party vendors were better able to treat transplants as external contractors. One such manager said,

I was from [another department] previously, which had a lot of outsourcing projects, so now, there is not much change in dealing with the contractors. Moreover, I was previously in a private consulting firm, and I am used to dealing with vendors and handling new technology.

Another manager concurred, indicating that prior experiences with other third-party vendors allowed client-managers to rely on those experiences to develop new, more realistic expectations of the transplants:

My department has lots of projects outsourced to other vendors, and is not so dependent on the current contractors.... My expectations on the contractors are still the same as those on third-party vendors. I don't see myself demanding more from them.

Our qualitative findings show that client-managers who had prior experiences working with third-party vendors were more likely to deal with ex-subordinates as external contractors and experience less persistence of expectations compared to client-managers who did not have the same experiences. Drawing on similar social cognitive arguments presented earlier, client-managers experienced with third-party vendors

should have developed a separate set of event schemas for interacting with and managing vendors. Consequently, when the formal relationship with the transplants changes from one of supervisor-subordinate to the SLA-oriented relationship of client-manager and contractor, these client-managers could access prior event schemas relating to third-party vendors and use these to subsequently relate to the contractors (Bargh and Pratto 1986). In fact, the ease of accessibility of such schemas forms the basis for the development of a new set of expectations with the contractors, thereby reducing the degree of persistent expectations. Hence, we hypothesize that:

Hypothesis 4. Prior outsourcing experience with third-party vendors is negatively related to persistence of expectations.

Client-Managers' Perceptions of Contractor Performance (Consequence of Persistent Expectations). In the final analysis, client-managers' experiences and persistent expectations subsequent to outsourcing affected their judgments of contractor performance. Because client-managers continued to expect contractors to perform as subordinates, contractors were evaluated against this higher standard and, consequently, were more severely judged. One manager noted:

In the past, the staff will do things without argument, but now, the contractors have other clients and will follow only the SLA, and their manager is very calculative. I still expect the same level of service as was given in the past, but now the same thing involves more costs. . . . And even though they charge like a third-party vendor, they don't act like one. They're not even working towards meeting the SLA, like following the specified procedures and documentation.

However, other client-managers expressed a different viewpoint, noting that contractors were, indeed, performing up to standards:

We [client-managers and contractors] work very closely, and the relationship between myself and their manager is good, because we understand the priorities.

Due to the change in the formal relationship between the two parties, transplants should be evaluated as external contractors rather than as subordinates. However, the qualitative study indicates that some client-managers continued to regard transplants as subordinates and expected them to perform as such. In general, client-managerial expectations of subordinates are higher than those of external vendors, because the exchange between supervisors and subordinates tends to be more relational, open-ended, and broad, while that between client-managers and contractors tends to be more transactional, specific, and narrow (Robinson et al. 1994, Rousseau and Parks 1993). Subordinates are expected to display greater extra-role behavior and show higher commitment to work. Also, they tend to have a larger "zone of indifference" in their duties and responsibilities as good employees or subordinates (Masten 1991, Simon 1951), because the zone of indifference in an employment relationship is greater than that in an external outsourcing contract.

In the IT outsourcing context, some client-managers continued to impose higher prior expectations on the contractors. Consequently, when they evaluated contractor performance in the outsourcing arrangement, they were likely basing their evaluation on a higher set of expectations and standards, to which contractors were less likely to have performed. Such negative rating would occur even if contractors had actually provided the exact types and levels of service that were laid out in the outsourcing contract, which rightfully should be used as the true (but lower) basis for evaluation.

Resulting biases in evaluations are exacerbated by client-managers' negative personal responses from unmet expectations. Hogan (1987) confirms this in the context of supervisors' evaluation of subordinates. In her study, she found that when supervisors' expectations of subordinate performance were unmet, the former rated the latter more negatively. Such biased evaluation could be explained by hedonic relevance theory (Carlsmith and Aronson 1963), which purports that people dislike being wrong. Consequently, in the current context, when client-manager expectations of contractors are not being fulfilled, we predict, consistent with Hogan (1987), that they will "punish" contractors for disconfirming expectations and lower their performance ratings. Hence, we hypothesize that:

Hypothesis 5. Persistence of expectations is negatively related to the evaluation of contractor performance.

Qualitative findings and the derived theoretical model are pictured in Figure 1. In the next section, we describe the second phase of the research, which consists of a quantitative, organization-wide survey designed to validate the proposed model.

Study 2: Validation of Theoretical Model

Following qualitative analysis in the first study of client-managers' reactions to outsourcing and their relations with former subordinates, Study 2 involved a quantitative field study that examined persistent expectations and its empirical and statistical relationships to potential antecedents and consequences. Theoretical linkages as well as research hypotheses are shown in Figure 1. We theorize that four major factors, namely, role overload, strength of ties with contractors, trust in the contractors, and prior outsourcing experience, significantly affect the extent of persistent expectations of client-managers. As for the potential consequence of persistent expectations, we postulate that client-managerial assessment of contractor performance is affected by the degree to which they experience persistent expectations.

Study 2: Method

Participants, Setting, and Procedures. A questionnaire was administered to survivors in the IT department about 10 months after the outsourcing conversion. At that time, there were 289 IT survivors in the

Figure 1 Theoretical and Research Model

Role Overload

H

Strength of Ties

Persistence of Expectations

Trust in Outsourcer

Outsourcer

Outsourcer

H

Trust in Outsourcer

Outsourcer

H

Trust in Outsourcer

Outsourcer

department.³ Nineteen participants in the focus-group discussions were excluded from the second study to eliminate priming effects and hypothesis-guessing (Cook and Campbell 1979). Another 104 employees did not interact with the contractors subsequent to outsourcing because they were responsible for the function of promoting IT usage to the users and interacting with user departments rather than the contractors. This resulted in 166 employees being eligible for the study. Participation was voluntary. We administered the questionnaire to the 166 survivors at the different subsidiaries during half-hour meetings in their workplace during work hours. Questionnaires were collected at that time, and respondent confidentiality was assured. For respondents who were not in their offices at the time of data collection, we either collected the completed questionnaires in person, or they mailed them directly to us.

One hundred and forty-seven completed questionnaires were received, a response rate of 89%. On average, respondents were 30.9 years old (s.d. = 5.0 years) and had 7.3 years of working experience (s.d. = 4.5 years), of which 5.4 years were with the client organization (s.d. = 4.2 years). Sixty-three of them were male (43%) and 84 were female (57%), with 15% heading the IT divisions of each subsidiary and the remaining 85% working under them as project leaders.

Measures and Pretest. Whenever possible, questionnaire items were adapted from validated measures used in prior research. Except for the respondent's prior experience with third-party vendors, all variables measured the perceptions of client-managers. The instrument was pretested on six survivors, two IS managers, and four project managers/leaders, to ensure the clarity and content validity of the items and that the theory-based items tapped issues of concerns for the client-managers. Based on the pretest, minor modifications were made.

Persistent Expectations of Client-Managers. We measured client-manager expectations of the general population of the newly christened contractors. This

³Out of 488 survivors, 289 were IT planners and solutions providers. The remaining 199 were in the support function, made up of corporate communications, administration, human resource, and finance.

Table 1 Means, Standard Deviations, Intercorrelations, and AVEs of Variables¹

Variable	Mean	S.D.	1	2	3	4	5	6
(1) Role overload	4.58	1.09	0.802					
(2) Strength of ties with contractor	4.78	1.05	0.02	0.840				
(3) Trust in contractor	4.00	1.02	-0.11	0.45**	0.798			
(4) Outsourcing experience	2.67	2.95	0.01	0.05	-0.11	_		
(5) Persistent expectations	4.29	1.40	0.35**	0.16*	0.10	−0.14 *	0.818	
(6) Perceived contractor performance	3.39	0.85	-0.09	0.24**	0.63**	0.02	0.18*	0.833

 $^{^{\}star}p <$ 0.05, one-tailed test.

scale is perceptual in nature and taps into different aspects of work values that managers typically expect from employees. We selected only those items that were relevant to the nature of the work of IS professionals and included an additional item to measure contractor contributions to technological issues. The resulting seven items are presented in Appendix A, together with items used for the other five variables. Cronbach's α for this construct was 0.95.

Role Overload. Adapted from Peterson et al. (1995), measures for client-managers' perceptions of role overload consisted of five items, as detailed in Appendix A. Cronbach's α for role overload was 0.86.

Strength of Ties with Contractors. Measures of client-managers' perceptions of the strength of ties with the newly designated contractors were adapted from prior research. These items classified the strength of ties into three dimensions: (1) intensity of relationship, (2) degree of intimacy, and (3) amount of interaction (Granovetter 1973, Marsden and Campbell 1984). Three items, presented in Appendix A, measured this construct, each corresponding to a dimension of the strength of ties. Cronbach's α was 0.79.

Trust in Contractors. Perceptual measures of client-managers' trust in the contractors as a general population were adapted from (Ganesan 1994). Five statements used to measure this variable demonstrated a Cronbach's α of 0.88.

Prior Experience with Other Outsourcing Vendors. Prior

experience with other outsourcing vendors was measured using a single-item measure (see Appendix A). We felt that a single measure was adequate for this construct because this assessment was straightforward and factual.

Client-Manager Perceptions of Contractor Performance. Client-managers were closely involved in monitoring and evaluating contractor performance on all activities covered by the SLA. Hence, respondents were asked to indicate their perceptions of the performance of the new contractors as a population in terms of the five criteria detailed in Appendix A. Cronbach's α for contractor performance was 0.90.

Study 2: Results

Instrument Validity. PLS was selected to analyze both measurement validity and linkages in the theoretical model. The advantage of using PLS is that, first, it estimates a measurement model to ascertain construct validity and reliability of measures. Second, using indicators of latent constructs, it yields estimates of the structural model parameters, which test the strength of hypothesized relationships. Finally, it is not restricted by the distribution requirements and sample size limitations of other structural equation modeling tools (Campbell and Fiske 1959). The approach in the PLS analysis in this part of our study was modeled on exemplars such as that of Staples et al. (1998).

Table 1 presents the means, standard deviations, intercorrelations, and Average Variable Extracted (AVE)

 $^{^{**}}p <$ 0.01, one-tailed test.

¹Diagonal entries are the average variance extracted (AVE), which is the square root of the variance shared between the constructs and their measures. Off diagonals are the correlations between constructs. The diagonals should be larger than any other corresponding row or column entry in order to support discriminant validity.

statistics for the six constructs. To ensure that the instrument had reliable measures and reasonable construct validity (see Campbell and Fiske, 1959, for a conceptual discussion of convergent and discriminant validity), we analyzed, respectively, PLS composite reliability coefficients/Cronbach's alphas and Average Variance Extracted (AVE) statistics. Calculated as $[(\Sigma \lambda_i^2)/((\Sigma \lambda_i^2) + (\Sigma (1 - \lambda_i^2)], \text{AVE}$ measures the percent of variance captured by a construct by showing the ratio of the sum of the variance captured by the construct and measurement variance (Gefen et al. 2000) and is reflected in the diagonals in Table 1.

Table 2 shows the PLS composite reliability statistics and Cronbach's α for the measurement model. Based on commonly accepted standards (Nunnally 1967), these results indicate that the constructs are reliably measured and are adequate for hypothesis testing.

With regard to discriminant and convergent validity, Appendix B shows that the item loadings are all significant at the 0.05 level for each construct. Moreover, Table 1 indicates that all AVE statistics on the diagonal cells are larger than the cross-correlations in the same rows and columns. This provides evidence that measures in the constructs discriminate, i.e., are more closely aligned with themselves than with other constructs (Gefen et al. 2000). The magnitude of the AVEs also indicates that the measures for each construct converge, and, given that they are close to unity, we argue that the instrument demonstrates acceptable convergent validity.

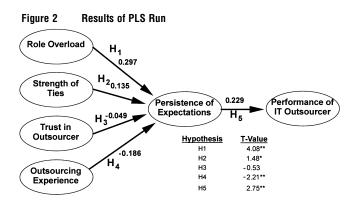
PLS Structural Model Tests. PLS was also used to test the hypotheses. Results are presented in Figure 2 and Appendix B. Findings provide support for Hypothesis 1, relating role overload to persistent expectations (t = 4.08, p < 0.01). With respect to the other

Table 2 Internal Consistency of the Constructs

Construct	Number of Items	PLS Composite Reliability	Cronbach's α
Role Overload	5	0.69	0.86
Strength of Ties	3	0.74	0.73
Trust in Contractor	5	0.69	0.88
Persistence of Expectations	7	0.71	0.71
Perceived Contractor Performance	5	0.73	0.90

hypotheses, Hypothesis 2, i.e., that a positive relationship exists between strength of ties with contractor and persistent expectations, was supported at the 0.10 level, but not at the 0.05 level (t = 1.48, p < 0.10). Hypothesis 3 (or trust in the contractor being positively related to persistence of expectations) was not significant (t - 0.53, p > 0.10). As for Hypothesis 4, we found that, as predicted, prior experience with other outsourcing vendors was negatively associated with persistent expectations (t - 2.21, p < 0.05). Finally, we hypothesized in Hypothesis 5 that persistent expectations would be negatively related to contractor performance. Contrary to this hypothesis, results indicate a significant, positive relationship between these two variables (t = 2.75, p < 0.05). Explained variance for persistent expectations was 17%. A much smaller explained variance was associated with contractor performance.

There are no community standards for what is an acceptable level of explained variance (Gefen et al. 2000). In the basic research of fields like sociology, indeed, levels under 10% are commonly reported. Nevertheless, we acknowledge that the 17.5% explained variance we found was not high. However, it meets Falk and Miller's criterion (1992) and is close to the range of results found in other IS theory-based empirical studies, especially similar exploratory studies. In the Technology Acceptance Model (TAM) research stream, for example, numerous studies published in



SMC for Persistence = 0.175. SMC for Performance = 0.03.

^{**}Significant at the 0.05 level.

^{*}Significant at the 0.10 level.

top-ranked IS journals explain variance in the 20–30% range (see Igbaria et al. 1995, 1996, and 1997; Gefen and Straub 1997 for a sample of such studies).

Study 2: Discussion

We examined the concept of persistent expectations and its antecedents and consequences. Our objective was to understand whether expectations and beliefs formed under a previous relationship would persevere despite a change in the formal relationship. We also investigated conditions under which such persistence would exist, and its resulting impacts.

Findings suggest that, although organizations may radically alter the working relationships between supervisors and subordinates, supervisory expectations of subordinates may persist despite the change in relationship. Such expectations are mental schemas—cognitive structures shaped by prior interactions, relationship building, and ingrained routines—and do not change as readily as formal contracts. In the case of an outsourcing exercise in which employees are "sold over" to the vendor and then "contracted back" to the same organization, managerial expectations that were based on the previous supervisor-subordinate relationship, and operated predominantly on behavioral rather than outcome controls, remain in effect even in the new manager-contractor relationship.

The findings also suggest several antecedents that could increase the strength of persistent expectations. First, role overload contributes to the persistence of expectations: Client-managers experienced greater persistent expectations when they were stressed from role overload and, in order to cope with this overload, they continued to rely on their previous schemas in dealing with the new contractors. Second is the amount of prior outsourcing experience of client-managers. Specifically, client-managers with prior outsourcing experience had a lower degree of persistent expectations, which could be attributed to the fact that they already possessed the relevant schemas for relating to thirdparty vendors and could more easily access these schemas when interacting with their former subordinates. Third, strength of ties to subordinates also played a part in contributing to persistent expectations. Clientmanagers with strong ties to former subordinates

experienced increased persistent expectations, potentially because the strong ties reinforced person-inorganization schemas relating to subordinates. While this relationship was marginally significant at the 0.10 level, the influence is in the predicted direction and therefore should be further examined.

Contrary to our expectations, we did not find that trust in vendors was significantly related to persistent expectations. We speculate that trust did not lead to persistent expectations because although prior theory asserts that trust is akin to having positive expectations of others (Rousseau et al. 1998), such positive expectations may not necessarily translate into higher expectations in the context of this study. Specifically, client-managers may expect trusted contractors to fulfill their contractual obligations better than less-trusted contractors. However, this is not the same as expecting trusted contractors to go beyond the formal contractual requirements and perform duties that are not typically done by contractors but by subordinates. Hence, having positive expectations may not equate to having persistent expectations, thereby accounting for the lack of relationship between trust and persistence. This potential explanation should be explored in future research.

In terms of the consequences of persistent expectations, the results revealed that persistent expectations were significantly and *positively* related to perceptions of contractor performance. This positive linkage was unexpected and contrary to the findings of Study 1 as well as to the suggested hypothesis. A methodological explanation for the difference in findings between Studies 1 and 2 is that participants in the focus-group sessions in Study 1 were subject to group polarization, such that initial comments and opinions amplified the inclinations of group members as a whole (e.g., Moscovici and Zavalloni 1969, Myers and Lamm 1976). Possibly, the earlier discussions were dominated by observations that former subordinates were not delivering as much as was expected under the previous relationship and, hence, were not performing up to standard. This could have anchored the attitudes of other group members, so that subsequent comments inclined toward the opinion that the contractors were not living up to previous expectations.

When Subordinates Become IT Contractors

However, in Study 2 participants completed the questionnaire individually and were not subject to social influences. Consequently, the questionnaire methodology may have revealed the actual relationship between the two variables, which is positive. This explanation should be studied further.

Even with the low explained variance, that the relationship is positive and significant leads us to believe that the effect of persistent expectations on perceptions of performance is a real phenomenon. Nonetheless, there are many factors that would explain client-managers' perceptions of contractor performance beyond persistent expectations, so it is not surprising that the explained variance is low. But the presence of a relationship that goes beyond chance is worth noting and pursuing in other studies.

Supplementing the previous argument, we offer two potential theoretical explanations for this positive relationship, both drawn from the belief perseverance literature. First, research has firmly demonstrated that perceptions are often influenced by prior expectations; people construct their perceptions to be aligned with their prior expectations (e.g., Lewicki et al. 1989, Slusher and Anderson 1987). In the current context, it is likely that client-managers' prior expectations of subordinates influenced their perception of contractor performance subsequent to outsourcing, so that the contractors' performance levels are perceived to be higher in accord with the managers' higher expectations of these former subordinates. The second explanation lies in research on behavioral confirmation (e.g., Snyder and Haugen 1994, Snyder et al. 1977). Here it was found that people's expectations have an effect on their own behavior which in turn elicits expectationcongruent behavior in others. When applied to the current study, this suggests that client-managers who experienced persistent expectations demanded higher performance from the contractors who, in turn, delivered it.

Post Hoc Analyses of Alternative Explanation of Studied Effects. In this study, we referred to research on social cognition and belief perseverance to explain our observations of persistent expectations after IS outsourcing. However, our observations could also be explained by a lack of contract management skills on the part of the client-managers.⁵

Presumably, managers lacking adequate contract management skills may have ex post-outsourcing problems because they are not as competent in managing the contracting relationship. Specifically, the problems experienced by some client-managers, such as role overload and perceptions of poor contractor performance, may be linked to their lack of contract management skills, rather than their persistent expectations as hypothesized in this paper. Client-managers who lack contract management skills may fail to realize that contractors cannot be effectively managed predominantly via behavioral controls, and instead continue to rely primarily on this type of control mechanism. However, the literature on agency and control theory (Henderson and Lee 1992) proposes that under the new relationship, client-managers should rely predominantly on outcome-based controls, given that a core feature of outsourcing is that client-managers outsource the day-to-day administration and management of contractors to vendor-managers (Ang and Slaughter 2001). Hence, client-managers who lack contract management skills and continue to rely primarily on behavioral controls under the new relationship will reduce the benefits of outsourcing and, concomitantly, face other conundrums such as higher role overload. In other words, the alternative explanation would predict that client-managers with high role overload and difficulties in managing contractors experience these problems because of their lack of contract management skills rather than their persistent expectations.

Although we did not measure the client-managers' contract management skills per se, it is possible to rule out this explanation by using the data at hand to test the relationship between contract management skills and role overload. Assuming that number of years in managing third-party outsourcing vendors (i.e., prior outsourcing experience) serves as a first approximation surrogate for this competency, the alternative explanation would predict a significant negative correlation between the variables of prior outsourcing experience and role overload. However, the data do

⁵We thank an anonymous reviewer for offering this alternative perspective.

not support this alternative explanation, as indicated in Table 1 by the 0.01 correlation between these two variables.

In addition, if the alternative explanation were true, we would expect competent managers with prior outsourcing experience to manage contractors better and, consequently, report higher performance levels. To test this, we regressed contractor performance on both outsourcing experience and persistent expectations. If empirical evidence for the alternative explanation exists in this dataset, outsourcing experience would show a significant positive relationship with contractor performance, whereas persistent expectations on performance would not be significant. Instead, regression reveals a nonsignificant relationship between outsourcing experience and contractor performance. Moreover, persistent expectations had a significantly positive relationship to contractor performance (p < 0.05), not a null effect as posited in this alternative line of reasoning. Overall, these post hoc analyses provide empirical evidence that persistent expectations do, indeed, matter, over and above the effect of managerial competence in contract management.

Conclusion

This research makes a number of contributions to IT outsourcing research. First, from a theoretical perspective, we introduce a model of persistent expectations in the IT outsourcing context. Specifically, we examine the phenomenon of persistent expectations from the managerial perspective. Spin-offs as a form of outsourcing offer an excellent domain for examining persistent expectations because they present a context in which the formal contract between the supervisor and subordinate changes overnight to a manager-contractor relationship, with both parties to the contract remaining intact.

Second, this work is among the first to study outsourcing and persistent expectations from the point of view of the manager. We believe that examining managerial expectations is as important as studying external contractor expectations, given that outsourcing organizations can more easily influence their own managers' expectations than those of the former subordinates. Former employees are, after all, *former* employees, no longer under the behavioral control of the client organization. Client-managers, on the other hand, are still employees of the outsourcing organization. Hence, the organization can play an active part in revising their expectations and aiding in the role transition process. For example, literature on attitude change suggests that people's attitudes, including expectations, are changed more effectively when they receive advance notice of the change, when the message promoting attitude change is repeated, when the source of the message has power over the recipients, is credible, and is trusted by them, and when the message comes from multiple sources. In the context of outsourcing, these prescriptions suggest that clientmanagers' expectations can be effectively changed and managed if the outsourcing organization provides the managers with early notice of the outsourcing arrangement, updates them regularly with details of the new arrangement and how their expectations should in turn be changed, and reiterates these messages frequently. In addition, the organization should disseminate such messages via sources with formal power and authority in the organization, such as the CEO and CIO, and through other incumbents who occupy vital positions in the informal organizational networks as well, such as the trust and advice networks (Krackhardt and Hanson 1993).

Third, this research adopts a mixed-method, rigorous approach in its empirical examination of the phenomenon, which is unique in this stream of research. Given that the concept of persistent expectations in outsourcing is relatively new and has scarcely been studied, the qualitative study provides a fuller understanding and development of the concept—its antecedents as well as the consequence. The follow-up quantitative questionnaire was useful in empirically testing the derived theory and verifying generalizability of results.

Limitations and Future Research

Although our study found evidence for the existence of persistent expectations as well as its antecedents and consequence, it is important to note its boundary conditions. First, our results were based on work conducted in the same client organization, thereby opening up the possibility that findings are specific to this organization. In addition, the outsourcing contract

with the new vendor organization appears to have been poorly designed and failed to include certain activities that were previously performed by subordinates, thereby inspiring some managers to allege a decrease in service levels provided by the contractors.

These limitations notwithstanding, we feel that it is unlikely that the phenomenon of persistent expectations would arise solely from poor contract design or that the relationships demonstrated here would not hold true in other situations. This is because the concept of persistent expectations is based on evidence in belief perseverance, which supports the notion that people persist in their beliefs, attitudes, and expectations even when presented with evidence that refutes them (Ross et al. 1975). Consequently, one would still expect the occurrence of persistent expectations under a well-designed contract. Future research should compare the persistence of expectations under a well-designed versus a poorly designed contract.

Although the study was conducted in the nonprofit public-sector organization, these IT employees had responsibilities identical to those in a for-profit private organization. They also received wages and benefits comparable to prevailing market rates. This argues that there is no basis for expecting a difference between the public and private sectors. However, we cannot rule out the possibility that our findings may differ with private-sector organizations as well as organizations with well-designed contracts and different outsourcing purposes. Therefore, we encourage others to explore the persistent expectations phenomenon in other conditions, and we welcome further tests of the validity of the research model itself.

Another constraint on the generalizability of the findings is that the data were cross-sectional in nature and were collected 10 months after the outsourcing exercise. Consequently, we cannot adequately address the issue of causality among the variables. It is also necessary to recognize the possibility that persistent expectations are particularly strong in this study because managers may not have successfully changed their mental schemas in this relatively short period of eight months. We do not claim our results to be definitive or conclusive, but instead we intend to open up a new set of research questions involving individuals' changes in beliefs and expectations subsequent to IT

outsourcing. These issues should be addressed in further research, particularly by adopting longitudinal techniques to establish causality effects in the theoretical model.

Although this work focused on client-managerial persistent expectations, we acknowledge that the outsourcing relationship is dyadic and that persistent expectations may, in fact, be experienced by the contractors as well, who could also impose their expectations from the prior employment relationship on the clientmanagers. If both parties in the relationship experience persistent expectations, it stands to reason that their speed of adaptation will be more aligned with each other and contractors, in particular, will continue to provide services performed in the past. Hence, the problems reported by the client-managers in this study may be alleviated to the extent that both parties continue to perform as they did previously. Notwithstanding, we believe that the persistence of expectations is plausibly experienced more strongly by the client-managers than by the contractors, given that the latter receives stronger and more visible structural and organizational cues on the change in the principalagent relationship, such as receiving new business cards and pay slips with the vendor organization's name, and having to report to a new supervisor at the vendor organization. On the other hand, the clientmanagers may receive less, if any, structural or organizational signals indicating the change in the principal-agent relationship, because they still work for the same organization and interact with the same people (even though these people now work in a different capacity as third-party contractors). Hence, client-managers are more likely to experience persistent expectations than contractors, thereby warranting our examination of the phenomenon on the part of client-managers. Nonetheless, this does not invalidate the possibility that persistent expectations could occur on the part of the contractors as well, and we leave it to future research to examine the impact of outsourcing and persistent expectations on contractors.

The alternative explanation that contract management skills affect persistence of expectations should also be investigated. While our post hoc analyses refute this alternative explanation, these were based on

outsourcing experience as a surrogate measure of contract management skills. Future research should include specific measures to capture the variable precisely to test this alternative explanation. More generally, it is clear that both parties in a spin-off type of outsourcing relationship must learn to negotiate and make sense of the change in both their formal contracts and their expectations. Managers and workers who experience radical changes in their careers inevitably carry baggage of psychological expectations from prior employment or short-term engagements, and it is worthwhile to investigate the implications of such persistent expectations on their attitudes, behaviors, and performance.

Acknowledgments

The authors wish to thank the Associate Editor, the anonymous reviewers, Denise Rousseau, and Linn Van Dyne for their valuable suggestions and comments on earlier drafts of this paper.

Appendix A

Study 2: Survey Items for Variables Used in the PLS Analysis

Variables were measured using a seven-point scale, from "1" indicating "strongly disagree" to "7" indicating "strongly agree," unless otherwise indicated. These measures were intended to be "reflective" measures rather than "formative" (Gefen et al. 2000).

Persistent Expectations

Because the contractors were previously part of [the client organization], I expect the contractors to:

PERSIST1: be more willing to work extra hours than other vendors;

PERSIST2: perform their job more reliably than other vendors;

PERSIST3: volunteer to do more tasks outside the Service Level Agreement (SLA) than other vendors;

PERSIST4: invest more than other vendors in improving current skills to serve us better;

PERSIST5: be better at promoting a positive attitude in [client organization] than other vendors;

PERSIST6: be more willing to put in a full day's work for a full day's pay than other vendors;

PERSIST7: suggest more initiatives on technology issues to [client organization] than other vendors.

Role Overload

RO1: In terms of job roles and responsibilities, there is a need to reduce some parts of my role;

RO2: In terms of job roles and responsibilities, I feel overburdened in my role;

RO3: In terms of job roles and responsibilities, I have been given too much responsibility;

RO4: In terms of job roles and responsibilities, my work load is too heavy;

RO5: In terms of job roles and responsibilities, the amount of work I have to do interferes with the quality I want to maintain.

Strength of Ties with Contractors

STRGTH1: We maintain close relationships with the contractors;

STRGTH2: We understand the contractors well;

STRGTH3: We have frequent contacts with the contractors.

Trust in Contractors

TRUST1: The contractors have been frank in dealing with us;

TRUST2: Promises made by the contractors are reliable;

TRUST3: The contractors are knowledgeable regarding their services;

TRUST4: The contractors do not make false claims;

TRUST5: If problems such as delays arise, the contractors are honest about the problems.

Prior Experience with Other Outsourcing Vendors

Please indicate the number of years of experience you have had in managing third-party outsourcing vendors.

Client-Managers' Perceptions of Contractor Performance

This variable was measured with a seven-point scale, ranging from "1" indicating "delivered very much less than what was promised" to "7" indicating "delivered very much more than what was promised."

Respondents indicated how well the contractors had delivered what they promised in terms of:

PERF1: meeting deadlines specified in the SLA;

PERF2: providing applications development specified in the SLA;

PERF3: providing software maintenance specified in the SLA;

PERF4: providing infrastructure support (e.g., facilities management) specified in the SLA;

PERF5: meeting the overall SLA.

Appendix B Loadings, Jackknife Estimates, and T-Values for PLS Run

	Entire Sample Estimate		ľ	Standard Deviation		<i>T-</i> Statistic
Persistence:		1				<u> </u>
PERSIST1	0.7469	0.7469	0.7542	0.5531	0.0428	17.6199
PERSIST2	0.8245	0.8245	0.8215	0.4374	0.0338	24.2734
PERSIST3	0.8006	0.8006	0.8019	0.4938	0.0382	20.9847
PERSIST4	0.7811	0.7810	0.7925	0.6219	0.0481	16.4694
PERSIST5	0.8274	0.8274	0.8249	0.6414	0.0496	16.6211
PERSIST6	0.8709	0.8708	0.8804	0.3646	0.0282	31.2097
PERSIST7	0.8735	0.8735	0.8715	0.2520	0.0195	44.6967
Role Overload:						
RO1	0.8022	0.8022	0.7969	0.4360	0.0337	23.6196
RO2	0.8903	0.8903	0.8875	0.3136	0.0243	36.5786

RO3	0.8011	0.8011	0.8044	0.4348	0.0336	23.9060		
RO4	0.7970	0.7969	0.8093	0.7489	0.0580	13.9652		
RO5	0.7132	0.7131	0.7235	0.8676	0.0671	10.7776		
Strength of	Γies:							
STRGTH1	0.9323	0.9323	0.9389	0.7600	0.0588	15.9648		
STRGTH2	0.8425	0.8420	0.9221	1.3460	0.1042	8.8535		
STRGTH3	0.7337	0.7336	0.7509	1.7914	0.1386	5.4170		
Trust:								
TRUST1	0.8026	0.8024	0.8428	2.0676	0.1600	5.2675		
TRUST2	0.9244	0.9244	0.9183	1.3021	0.1008	9.1145		
TRUST3	0.7735	0.7719	1.0403	2.7386	0.2119	4.9089		
TRUST4	0.7432	0.7409	1.1273	3.3152	0.2565	4.3942		
TRUST5	0.7681	0.7659	1.1351	2.9783	0.2305	4.9252		
Perceived Contractor Performance:								
PERF1	0.8404	0.8403	0.8528	0.5928	0.0459	18.5900		
PERF2	0.8890	0.8890	0.8922	0.3829	0.0296	30.1112		
PERF3	0.8296	0.8295	0.8401	0.6421	0.0497	16.9092		
PERF4	0.7293	0.7292	0.7404	1.0024	0.0776	9.5460		
PERF5	0.8962	0.8961	0.9099	0.4010	0.0310	29.3244		

References

- Anderson, Craig A. 1995. Implicit personality theories and empirical data: Biased assimilation, belief perseverance and change, and covariation detection sensitivity. *Soc. Cognition* **13**(1) 25–48.
- ——, Kathryn L. Kellam. 1992. Belief perseverance, biased assimilation, and covariation detection: The effects of hypothetical social theories and new data. *Personality and Soc. Psych. Bull.* 18(5) 555–565.
- —, James J. Lindsay. 1998. The development, perseverance, and change of naïve theories. Soc. Cognition 16(1) 8–30.
- ——, Mark R. Lepper, Lee Ross. 1980. Perseverance of social theories: The role of explanation in the persistence of discredited information. *J. Personality and Soc. Psych.* 39(6) 1037–1049.
- Ang, Soon, Cynthia M. Beath. 1993. Hierarchical elements in software contracts. J. Organ. Comput. 3(3) 329–362.
- Ang, Soon, Assafa Endeshaw. 1997. "Legal case analysis in IS research: Failures in Employing and outsourcing for IT professionals," in *Information Systems and Qualitative Research*, London, U.K.: Chapman & Hall. pp. 497–523.
- ——, Larry L. Cummings. 1997. Strategic responses to institutional influence on information systems outsourcing. *Organ. Sci.* 8(3) 235–256.
- —, Christine Koh. 2000. Psychological contracting in IT contracts. Effective Management of IT Disputes. Butterworths, Singapore, 39–50.
- —, Sandra Slaughter. 2001. Work outcomes and job design for contract versus permanent information systems professionals on software development teams. MIS Quart. 25(3) 321–350.
- ——, ——. 2002. A taxonomy of employment insourcing and outsourcing strategies in information systems. R. Hirschheim, J. Dibbern, eds. *Information Systems Outsourcing in the New Econ*omy: Enduring Themes, Emerging Patterns and New Directions. Forthcoming, Springer-Verlag, The Netherlands.

- ——, Detmar W. Straub. 1998. Production and transaction economics in information systems outsourcing: A study of the U.S. banking industry. MIS Quart. 22(4) 535–552.
- —, See-Kiat Toh. 1998. Failure in software outsourcing: A case analysis. Leslie Wilcocks, Mary Lacity, eds. Strategic Sourcing of Information Systems. John Wiley, New York, 351–368.
- Bargh, John A. Felicia Pratto. 1986. Individual construct accessibility and perceptual selection. J. Experiment. Soc. Psych. 22(4) 293– 311.
- Blau, Peter M. 1964. Exchange and Power in Social Life. Wiley, New York.
- Campbell, Donald T. Donald W. Fiske 1959. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psych. Bull.* **56**(2) 81–105.
- Carlsmith, J. Merrill, Elliot Aronson. 1963. Some hedonic consequences of the confirmation and disconfirmation of expectancies. J. Abnormal and Soc. Psych. 66(2) 677–688.
- Chaiken, Shelly, Suzanne Yates. 1985. Affective-cognitive consistency and thought-induced attitude polarization. J. Personality and Soc. Psych. 49(6) 1470–1481.
- Colaizzi, Paul F. 1978. Psychological research as the phenomenologist views it. Ronald S. Valle, Mark King, eds. *Existential Phenomenological Alternatives for Psychology*. Oxford University Press, New York, 48–71.
- Cook, T. D., D. T. Campbell. 1979. Quasi-Experimentation: Design and Analysis Issues for Field Settings. Houghton Mifflin, Boston, MA.
- Creswell, John W. 1994. *Research Design: Qualitative and Quantitative Approaches*. Sage, Thousand Oaks, CA.
- DeNisi, Angelo S., Thomas P. Cafferty, Bruce M. Meglino. 1984. A cognitive view of the performance appraisal process: A model and research propositions. *Organ. Behavior and Human Decision Processes* **33**(3) 360–396.
- Deutsch, M. 1958. Trust and suspicion. *Conflict Resolution* **2**(4) 265–279
- DiRomualdo, Anthony, Vijay Gurbaxani. 1998. Strategic intent for IT outsourcing. *Sloan Management Rev.* **39**(4) 67–80.
- Eisenhardt, Kathleen M. 1985. Control: Organizational and economic approaches. *Management Sci.* **31**(2) 134–150.
- —, 1989a. Building theory from case study research. *Acad. Management Rev.* **14**(4) 532–550.
- ——, 1989b. Agency theory: An assessment and review. *Acad. Management Rev.* **14**(1) 57–74.
- Falk, R. F., N. B. Miller. 1992. A Primer for Soft Modeling. University of Akron Press, Akron, OH.
- Fiske, Susan T., Shelley E. Taylor. 1991. *Social Cognition*. McGraw-Hill, New York.
- Ganesan, Shankar. 1994. Determinants of long-term orientation in buyer-seller relationships. *J. Marketing* **58**(2) 1–19.
- Gefen, David, Detmar Straub. 1997. Gender difference in the perception and use of e-mail: An extension to the technology acceptance model. *MIS Quart.* **21**(4) 389–400.
- —, —, Marie Boudreau. 2000. Structural equation modeling and regression: Guidelines for research practice. *Comm. AIS* 7(August) 1–78.

When Subordinates Become IT Contractors

- Giffin, Kim. 1967. The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. Psych. Bull. 68(2) 104-120.
- Gollwitzer, Peter M., Ronald F. Kinney. 1989. Effects of deliberate and implemental mind-sets on illusion of control. J. Personality and Soc. Psych. 56(4) 531-542.
- Granovetter, Mark S. 1973. The strength of weak ties. Amer. J. Sociology 78(6) 1360-1380.
- Harris, Stanley G. 1994. Organizational culture and individual sensemaking: A schema-based perspective. Organ. Sci. 5(3) 309-321.
- Henderson, John C., Soonchul Lee. 1992. Managing I/S design teams: A control theories perspective. Management Sci. 38(6) 757-777.
- Hogan, Eileen A. 1987. Effects of prior expectations on performance ratings: A longitudinal study. Acad. Management J. 30(2) 354-
- Igbaria, Magid, Tor Guimaraes, Gordon B. Davis. 1995. Testing the determinants of microcomputer usage via a structural equation model. J. Management Inform. Systems 11(4) 87–114.
- -, Saroj Parasuraman, Jack J. Baroudi. 1996. A motivational model of microcomputer usage. J. Management Inform. Systems 13(1)
- -, Nancy Zinatelli, Paul Cragg, Angele L. M. Cavaye. 1997. Personal computing acceptance factors in small firms: A structural equation model. MIS Quart. 21(3) 279-305.
- Koller, Michael, Robert A. Wicklund. 1988. Press and task difficulty as determinants of preoccupation with person descriptors. J. Experiment. Soc. Psych. 24(3) 256-274.
- Krackhardt, David, Jeffrey R. Hanson. 1993. Informal networks: The company behind the chart. Harvard Bus. Rev. 71(4) 104-111.
- Krueger, Richard A. 1994. Focus Groups: A Practical Guide for Applied Research. Sage, Thousand Oaks, CA.
- Kruglanski, Arie W. 1989. Lay Epistemics and Human Knowledge. Pelnum, New York.
- Lacity, M., Leslie P. Willcocks. 1995. Interpreting information technology sourcing decisions from a transaction cost perspective: Findings and critique. Accounting, Management, & Inform. Tech. 5(3&4) 203-244.
- -. 1998. An empirical investigation of information technology sourcing practices: Lessons from experience. MIS Quart. 22(September) 363-408.
- -, ---. 2000. Survey of IT outsourcing experiences in U.S. and U.K. organizations. J. Global Inform. Management 8(2) 5-23.
- Landis, J. R., G. G. Koch. 1977. The measurement of observer agreement for categorical data. Biometrics 22 79-94.
- Lewicki, Pawel, Thomas Hill, Irene Sasaki. 1989. Self-perpetuating development of encoding biases. J. Experiment. Psych. General 118(4) 323-337.
- Lord, Charles G., Lee Ross, Mark R. Lepper. 1979. Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. J. Personality and Soc. Psych. 37(11) 2098-2109.
- Louis, Meryl R., Robert I. Sutton. 1991. Switching cognitive gears: From habits of mind to active thinking. Human Relations 44(1) 55-76.

- Marsden, Peter V. Karen E. Campbell. 1984. Measuring tie strength. Soc. Forces 63(2) 482-501.
- Masten, Scott E. 1991. The legal basis of a firm. O. E. Williamson, Sidney G. Winters, eds. The Nature of the Firm: Origins, Evolution, and Development. Oxford University Press, New York, 196-212.
- Mayer, John D., Gordon H. Bower. 1986. Learning and memory for personality prototypes. J. Personality and Soc. Psych. 51(3) 473-
- Millar, Murray G., Abraham Tesser. 1986. Thought-induced attitude change: The effects of schema structure and commitment. J. Personality and Soc. Psych. 51(2) 259-269.
- Morgan, Robert M., Shelby D. Hunt. 1994. The commitment-trust theory of relationship marketing. J. Marketing 58(3) 20-38.
- Moscovici, S., M. Zavalloni. 1969. The group as a polarizer of attitudes. J. Personality and Soc. Psych. 12 125-135.
- Myers, D. G., H. Lamm. 1976. The group polarization phenomenon. Psych. Bull. 83 63-66.
- Nunnally, Jum C. 1967. Psychometric Theory. McGraw-Hill, New York.
- Peterson, Mark F., Peter B. Smith, Adebowak Akande, Sabino Ayestaran, Stephen Bochner, Victor Callan, Nam Guk Cho, Jorge C. Jesuino, Maria D'Amorim, Pierre-Henri Francois, Karsten Hofmann, Paul L. Koopman, Kwok Leung, Tock Keng Lim, Shahrenaz Martazavi, John Munene, Mark Radford, Arja Ropo, Grant Savage, Bernadette Setiadi, T. N. Sinha, Ritch Sorenson, Conrad Viedge. 1995. Role conflict, ambiguity, and overload: A 21-nation study. Acad. Management J. 38(2) 429-452.
- Robinson, Sandra L., Matthew S. Kraatz, Denise M. Rousseau. 1994. Changing obligations and the psychological contract: A longitudinal study. Acad. Management J. 37(1) 137-152.
- Ross, Lee, Mark R. Lepper, Michael Hubbard. 1975. Perseverance in self-perception and social perception: Biased attribution processes in the debriefing paradigm. J. Personality and Soc. Psych. 32(5) 880-892.
- Rousseau, Denise M., Judi M. Parks. 1993. The contracts of individuals and organizations. L. L. Cummings, Barry M. Staw, eds. Research in Organizational Behavior, vol. 15. JAI Press, Greenwich, CT, 1-43.
- -, Sim B. Sitkin, Ronald S. Burt, Colin Camerer. 1998. Not so different after all: A cross-discipline view of trust. Acad. Management Rev. 23(3) 393-404.
- Simon, Herbert A. 1951. A formal theory of the employment relationship. Econometrica 19(3) 293-305.
- Slaughter, Sandra, Soon Ang. 1996. Employment outsourcing in information systems. Comm. ACM 39(7) 47-54.
- Slusher, Morgan P., Craig A. Anderson. 1987. When reality monitoring fails: The role of imagination in stereotype maintenance. J. Personality and Soc. Psych. **52**(4) 653-662.
- Snyder, Mark, Julie A. Haugen. 1994. Why does behavioral confirmation occur? A function perspective on the role of the perceiver. J. Experiment. Soc. Psych. 30(3) 218-246.
- -, Elizabeth D. Tanke, Ellen Berscheid. 1977. Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. J. Personality and Soc. Psych. 35(9) 656-666.

HO, ANG, AND STRAUB

When Subordinates Become IT Contractors

- Spradley, James P. 1979. *The Ethnographic Interview*. Holt, Rhinehart, and Winston, New York.
- Staples, D. Sandy, John S. Hulland, Christopher A. Higgins. 1998. A self-efficacy theory explanation for the management of remote workers in virtual organizations. *J. Comput. Mediated Comm.* 3(4), (www.ascusc.org/jcmc/vol3/issue4/staples.html).
- Staw. Barry M., Lance E. Sandelands, Jane E. Dutton. 1981. Threatrigidity effects in organizational behavior: A multilevel analysis. *Admin. Sci. Quart.* **26**(4) 501–524.
- Strickland, Lloyd H. 1958. Surveillance and trust. *J. Personality*. **26**(June) 200–215.
- Tashakkori, Abbas, Charles Teddlie. 1998. Mixed Methodology: Combining Qualitative and Quantitative Approaches. Sage, Thousand Oaks, CA.
- Thibaut, John, Michael Ross. 1969. Commitment and experience as determinants of assimilation and contrast. *J. Personality and Soc. Psych.* **13**(4) 322–329.
- Willcocks, Leslie P., Mary C. Lacity. 1998. Strategic Sourcing of Information Systems: Perspectives and Practices. John Wiley & Sons, 11 K

Suzanne Rivard, Associate Editor. This paper was received on June 20, 2000, and was with the authors 8 months for 3 revisions.