Psychological Contract in IT Outsourcing:
A Systematic Literature Review

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Abstract

Recent IT Outsourcing (ITO) studies have highlighted the importance of a construct known as the Psychological Contract (PC) and its impact over the outcome of ITO agreements. However, there is still a lack of a consolidated view on the subject matter. To address this matter, we conducted a systematic review and analysis on the PC within ITO studies by examining the main themes, topics and methodologies that have been used in the research to date. Our findings suggest that despite the importance of the PC in ITO being well recognised, it is still an under explored concept with only 12 studies identified to date. Furthermore, subsequent analysis of these studies also highlighted several gaps caused by a lack of consistency over the definition, boundaries and application of the PC. To ensure that these gaps are addressed, we propose several recommendations that we encourage future studies take into consideration.

1. Introduction

Since the first major ITO agreement in 1989 when Eastman Kodak outsourced its entire information systems function to three vendors - IBM, DEC and Businessland, there has been significant interest and growth in ITO [1] . Recent figures suggest that the ITO industry has since surpassed $288 billion USD in 2013, with an expected compound annual growth rate of up to 5.5% from 2013 to 2017 [2]. Despite this growth, successful ITO outcomes continue to be elusive for firms with some studies suggesting that the percentage of ITO agreements which fail outright or do not meet expectations still exceeding 40% [3]. One of the main reasons for this high rate of failure is because ITO is evolving to become more complex as activities closer to the firm's core competencies are included [4]. Whereas firms originally engaged in ITO primarily as a cost saving exercise, it now includes strategic and social reasons such as accessing qualified staff; improving service levels and freeing up internal resources as well [5].

In response to these additional risks and challenges, current research suggests that managing the ITO relationship is an important part of improving its outcomes [4, 6]. This is because the strategic and social aspects of the ITO agreement are often difficult to cover through the formal contract, and hence improving the Relationship Quality (ReQ) between the client and vendor is necessary to ensure that work beyond the contractual obligations is carried out by all those involved [7]. However, assessing the factors that impact the ReQ has been difficult because they often depend on social factors that extend beyond the formal agreement making them subjective and complex in nature. For instance, a recent study identified over 150 different determinants associated with ITO relationships based on 164 empirical articles that were investigated [5]. As a result, there have been inconsistent and even contradictory results from the literature to date on the subject of ITO relationships and its factors [8].

As a means of addressing this issue, subsequent studies have highlighted the emerging importance of a construct known as the Psychological Contract (PC). This is because the PC enables the modelling of successful relational governance structures based on the PC and inter-organisational rents [9] as well as enabling ReQ to be investigated from multiple perspectives (vendor, individual and psychological) which have often been neglected in prior ITO studies but have been considered important to better understand ITO relationships [10].

However, despite the frequent mention of the importance of the PC in ITO literature, a recent study by Schmidt et al. [11] highlighted that the data set on the PC within the ITO context is relatively small, with long-term longitudinal results lacking. Furthermore, the subjective and often complex nature of the PC has resulted in some ambiguity over its terminology and application to ITO. Accordingly, the main purpose of this study is to investigate *how the Psychological Contract has been applied in IT Outsourcing studies to date*.

To address the research question, we conducted a systematic literature review to identify, summarise and synthesize the studies on the PC within the ITO

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context. In tune with the research gaps and limitations identified by Schmidt et al. [11], we also found a limited number of studies (12) through our literature search, and also found contrasts between these studies based on how the PC has been utilised within the ITO literature. A summary of these differences is therefore provided, which we used as the focus point for our discussion to explain how the PC has been applied in ITO studies to date, and what are critical issues that future studies must address. We then conclude this study by highlighting the theoretical and practical contributions, and acknowledging the study limitations.

2. Background on Psychological Contracts

A Psychological Contract (PC) represents a collection of mutual beliefs that individuals have on the reciprocal obligations within a contractual relationship [12, 13]. It is a multidimensional construct that is constantly evolving and changing due to technological advancements and shifts in how organisations structure their working relationships [14].

PC's can come in two types – either transactional or relational based on the nature of the relationship. Transactional PC's refer to agreements that are made which require a certain task to be done in return for some sort of tangible or finance reward. On the other hand, Relational PC's focus on the social exchanges which fulfil intangible expectations and requirements [15]. However, at its core the PC still emphasises the fact that all contracts are inherently subjective in nature, and relies on a degree of trust between stakeholders in which there is a belief that the contractual partner will not only commit to the promises and obligations set forth within the legal contract, but also perceived obligations that extend beyond the legal contract as well [15].

Although there are many ways that the PC has been conceptualised, there are three important dimensions of the PC which distinguishes it from other forms of social and implied contracts [15]. The first dimension is *mutuality*. A PC can only be established once there is a mutual acknowledgement that a working relationship has been established based on a particular deal or agreement. Based on this acknowledgement, a series of perceived mutual expectations and obligations in the context of the relationship are formed by participants [16]. The second dimension is *psychological*. As the PC is based on unwritten and obligations which extend beyond the written contract, it resides in the *eye of the beholder* thus is psychological in nature. More

importantly, as it is impossible to address all the conditions of a relationship into a formal, written contract, the PC fills in this gap by ensuring that there is a certain level of understanding between everyone on what is expected of them. The third dimension is *individuality*. Although a written contract may have been agreed upon by the parties, the everyday activities of the working relationship are conducted by individuals who all have their own subjective opinion and perspective on the contractual obligations. Therefore, the PC is considered to reside in the mind of an individual [12].

Also, due to the sense of accountability a PC creates through its psychologically binding nature, an individual may believe that their PC have been fulfilled or breached based on whether or not the perceived obligations have been kept [12]. If an individual believes that their PC has been severely breached, this may result in a violation of the PC which reduces the overall ReQ levels between stakeholders and can bring about attitudes and behaviours that may lead to poor performance outcomes [17]. PC *breach* (PCB) over time may lead to a sense of anger, betrayal and resentment by the individual, eventually leading to PC *violation* (PCV). As a PCV is an emotional experience, individuals who have a perception that their PC has been violated will likely result in negative attitudes and behaviours towards the party which was unable to fulfil its promises based on the PC [14].

However, measuring whether or not an individual's PC is currently being fulfilled or breached is incredibly difficult as a PC may contain hundreds of items, which can be very specific due to its individual and psychological nature [16]. As a result, existing studies have highlighted the importance of understanding the differences between individuals and their behaviour towards the PC and PCB [18]. In particular, attempts to find a systematic way to incorporate personality traits and individual values (i.e. trust and commitment) from the industrial and organisational psychology to determine an individual's PC has been a key research focus of recent studies [19]. This is because studies have shown that personality traits and personal values influence the value that individuals place on different contractual terms, as well as their response if they think a breach of those terms has occurred [19].

3. Literature search methodology

To summarise and integrate existing knowledge on the PC within the ITO context, a comprehensive literature review was conducted following the guidelines recommended by Cooper [20]. The first

step of the literature review process was to clearly define the boundary and scope of this review. This was important as the size and scope of ITO has expanded rapidly over the years with different streams of IT Outsourcing emerging such as IT Offshoring, Business Process Outsourcing (BPO) and Business Services Outsourcing (BSO) further pushing the boundaries of what is defined as ITO. Although differences exist between each stream, all of them share a common dependency on the client-vendor relationship to ensure success, and was therefore included in this study [21].

Next, an extensive database search (i.e. JSTOR, SCOPUS, EBSCO) was conducted. As the first paper to define the Psychological Contract as a term was in 1989 [15], the timeframe for the search was set between 1989 – 2017. Using search strings similar to the one provided in, a total of 513 studies were identified. To ensure that only relevant studies were selected for this study, we conducted a three-step filtering process as per Figure 1 below.
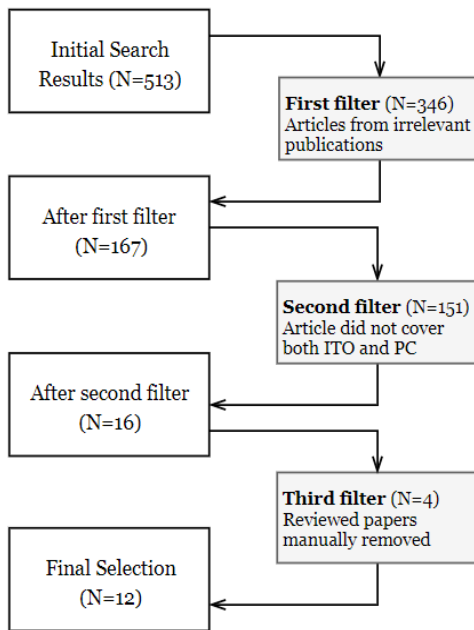
Sample search string:

(((((((psychological contract) AND ("it offshoring")) OR ("business process outsourcing")) OR ("business services outsourcing")) OR ("BSO")) OR ("BPO")) OR ("ITO"))

Figure 1. Literature selection process

The first filtering process eliminated a total of 346 studies from publications that were deemed irrelevant to this study. This involved studies published in fields that were considered non-relevant to Computer or Information systems (e.g. Medical science; Education; Civil administration etc.), as well as studies based on book chapters; research-in-progress papers or from journals and conferences which had a rank below an 'A' based on CORE [22].

Based on the remaining 167 studies, the second filter removed another 151 studies which did not include both the PC and ITO related terms in the Title, Abstract or Keyword sections. This was to ensure that papers that merely referenced or highlighted the PC were removed. From the remaining 16, the third filter removed another 5 studies because they were follow-up studies which included a significant part of a prior study (e.g. Lin [23] vs. Lin and Hekkala [24]) or were considered to be focused on a IS related topic which only had a minimal overlap with ITO (e.g. Moquin and Riemenschneider [25]). In the end, a total of 12 studies were assessed for the purpose of this study.

4. Assessment and summary of the studies

Based on the 12 studies identified through the literature search, a detailed analysis of each paper was conducted that outlined the research context; topic; methodology and other important details of the study. For each study, a study profile card was created using the guidelines recommended by King and Torkzadeh [26] which contained a summary of important information in regards to the paper as per Table 1. Based on all twelve of these profile cards, an assessment of the studies was carried out, which we then used to present the summary of PC studies in ITO studies as per Table 2 below.

| Study #2

Author (Year):
Koh et al. (2004)

Publication:
Information Systems Research | **Research Question:** (1) What are the critical customer-supplier obligations in an ITO outsourcing relationship? (2) What is the impact of fulfilling these obligations on success?

Context: IT Outsourcing

Focus: Relationship; Success; Contract

Theoretical lens: Psychological Contract | **Method:** Mixed methods approach (Case study + Survey) | **Data Analysis:** Qualitative + Quantitative (PCA) | **Unit of analysis:** Individual

Findings: ITO clients and vendors share a PC, and fulfilment of PC obligations from both sides explained a significant amount of variance in outsourcing success. |

Table 1. Example study profile card

Criteria / Study #	1	2	3	4	5	6	7	8	9	10	11	12	Total
Context													
IT outsourcing	x	x	x	x				x	x	x	x	x	9
IT offshoring					x	x							2
Business process outsourcing							x						1
Opensourcing					x								1
Research focus													
HR management	x					x		x	x				4
Relationships		x		x	x					x			4
Formal contract		x	x	x			x			x			5
Success		x		x									2
Psychological contract			x	x			x		x	x	x	x	7
Governance			x			x	x			x	x	x	6
Theoretical lens													
Psychological contract	x	x			x	x		x					5
Control						x		x					2
Social Exchange									x				1
Equity				x									1
Not available			x				x			x	x		4
Research method													
Case study						x					x		2
Survey	x			x			x	x	x	x			6
Mixed methods		x			x							x	3
Conceptual			x										1
Data analysis													
Qualitative						x					x		2
Quantitative	x			x			x	x	x	x			6
Qualitative + Quantitative		x			x							x	3
Not available			x										1
Unit of analysis													
Individual	x	x		x	x	x	x		x	x	x		9
Business unit								x					1
Social network												x	1
Not available			x										1

#1 Ang and Slaughter [27]; **#2** Koh et al. [10]; **#3** Miranda and Kavan [9]; **#4** Kim et al. [28]; **#5** Ågerfalk and Fitzgerald [29]; **#6** Prifling et al. [30]; **#7** Leimeister et al. [31]; **#8** Liu and Yetton [32]; **#9** Chiang et al. [33]; **#10** Kim et al. [7]; **#11** Lioliou et al. [34]; **#12** Lin and Hekkala [24]

Table 2. Summary of the PC studies in IT

4.1. Context of study

All 12 studies included at least one of the search criteria terms as the context of their study. The majority of studies identified IT outsourcing (n=9) as its primary context followed by IT Offshoring (n=2); and then Business Process Outsourcing (n=1). In Study #7, a form of offshoring where the development strategy is based on relying upon a community of open source developers (Opensourcing) was also identified. This suggests that the role of the PC in different variations and subsets of ITO are valid.

4.2. Research focus

In total, six major research focus topics were identified based on the summary of the PC & ITO studies as outlined in Table 2

In six out of the twelve studies, **ITO governance** was identified as a focus topic. From the summary of the studies examined, there are three key associations made between the PC and ITO governance. Firstly, it is that the PC is considered as a form of governance. For example, Study #11 states that this is because of the binding nature of the PC, which enables it to be used as a substitute of formal governance, and a complement of relational governance. Similarly, in Study #3, they argue that post-contractual ITO relationships require governance through the PC, rather than the formal contract. Secondly, the status of the PC between individuals working together on the ITO agreement can influence the type of governance method used. In Study #7, for example, it was found that a project manager's decision to govern through either formal or relational governance methods was determined based on the status of their PC. In Study #6, they outlined how the strength of the interpersonal networks formed within the ITO relationship had an influence over the type of governance structure established. Finally, Studies #3 and #12 acknowledged that once the formal contract has been signed, the post-adoption phase of the ITO relationship is governed through the PC.

A total of seven studies focused on the **PC and/or the breach of the PC**. These studies focused on investigating the role of PC within ITO, and how the fulfilment, violation and breach of the PC can influence the overall ITO outcome. Studies #3 and #11 highlighted the importance of the PC in supporting the ITO relationship between a client and a vendor. In Study #3, it suggested that the PC enables alignment between a client and a vendor after a formal contract has been signed through enabling

better cooperation between the two parties whereas Study #11 emphasised the importance of the PC as a means of reinforcing the determinants of ReQ such as trust; commitment and mutual dependence. In Studies #9 and #10, it highlighted the importance of the individual's PC. In Study #9, their study identified that the violation of the PC of individuals working on ITO projects eroded commitment levels. In Study #10, the findings showed that the legal contract and ReQ established between firms is mediated by individuals based on their perception on whether a breach of the PC had occurred.

Another five studies focused its research topic on the role of the **formal contract**. Many of these studies emphasised the importance of putting together well-designed contracts to minimize the occurrence of PC violations and breaches occurring. This is because contracts that are explicit and have well specified terms results in less misunderstanding over what has been agreed upon through the formal contract (Study #2, #7). However, studies such as Study #8 also acknowledge that the formal contract cannot specify all the terms of the ITO agreement due to the complexity that typically surrounds ITO projects, and therefore, there is a need for the PC to facilitate the necessary cooperation between ITO clients and vendors.

There were also four studies which focused on the **ITO relationships**. In Studies #2 and #5, the PC was considered to provide a unique perspective on ITO relationships based on both the client and vendor's perspective; from the individual's level of analysis and its emphasis on the unwritten commitments and perceived obligations. In Studies #4 and #10, the ReQ between client and vendor was considered to impact the commitment shown towards the PC. This commitment towards the PC was deemed to have direct and mediating effects on the overall success of the ITO as it enables commitment towards both explicit and implicit obligations that mutually benefit both parties (Study #4). Also, the perception of a PCB occurring was also likely to have been mediated by the strength of the ReQ, as it enabled both the client and vendor to assess each other's obligations, and the degree to which both parties have lived up to them (Study #10).

Another two studies focused on **ITO success**. Both studies (#2, #4) emphasised the importance of fulfilling the perceived mutual obligations of the PC, and getting those involved to commit towards the PC to ensure ITO success.

Finally, there were four studies which focused on the topic of **human resource management** in ITO. In Study #1, they identified that outsourced IT workers display a more transactional PC compared to

in-house IT personnel who display more of a relational PC. Due to this difference in PC's, the behaviours, expectations, trustworthiness and individual personalities between the two groups of IS personnel differ. Consequently, organisations may need to adjust their HR practices to ensure that outsourced works are used effectively. Study #6 highlighted the importance of the PC that Project Managers have towards the ITO agreement, as their governance method differed based on its status. In Study #8, it examined the role of the project sponsor in IT services vendors, and identified two key PC obligations (support performance of vendor project teams; support collaboration between client & vendor teams) that must be fulfilled to ensure that the quality of work done in ITO agreements are improved. Study #9 highlighted that commitment levels towards an ITO agreement by employees differed based on their PC type (relational vs. transactional), and eroded at different levels when there was a violation of their PC.

4.3. Theoretical lens

Based on the studies examined, there were four different considerations for the theoretical lens used to underline the research method. It must be noted that four of the studies (#3, #7, #10 & #11) developed and proposed their own theory based on pre-existing knowledge and literature, and were hence labelled as "Not available" in Table 2.

In 5 of the 12 studies the **Psychological Contract** itself was used as the theoretical lens. In two of the studies (#1 & #6), the PC was used to identify and measure the psychological beliefs of individual IT workers. In both studies, there was an emphasis made on the fact that each individual held their own unique PC, which influenced their behaviour and attitude towards the organisation and also the ITO project itself. In the remaining 3 studies (#2, #5 & #8), the PC was applied as the theoretical lens to identify the perceived mutual obligations and beliefs that existed beyond the contractual agreement. For example, Study #2 identified the mutual obligations that clients and vendors must adhere to when engaged in ITO based on the PC, whereas Study #5 applied the PC to identify perceived mutual obligations between customers and communities engaged in Opensourcing practices.

Control theory was also applied in conjunction with the PC in two studies (#6 & #8) although at different levels of analysis. In Study #6, the control theory was applied at the project management level whilst investigating how project managers influence the selection of specific control modes, whereas in

Study #8, it was applied at the managerial level to determine how vendor based sponsorship influenced the performance of ITO projects.

Theory	Research Focus	Study
Psychological Contract	Attitudes & beliefs of ITO workers	#1 #6
	Perceived mutual obligations between ITO firms	#2 #5 #8
Control	ITO project managers & control methods	#6
	ITO vendor sponsorship & performance	#8
Social Exchange	PC violation and influence on trust and commitment	#9
Equity	Equal commitment towards PC by ITO client and vendor	#4

Table 3. Theories applied in studies

In Study #9, the **Social Exchange Theory (SET)** was identified as the theoretical lens. The SET assumes that there are social norms that influence the behaviour and interactions that occur between two parties engaged in a mutual agreement, and has been extensively used to investigate the social perspective of ITO agreements to date [35]. It was used to help investigate how the reciprocal expectations between workers such as trust and commitment, were influenced by the violation of the PC.

Finally, the **Equity Theory (ET)** was applied in Study #4. The ET establishes that each party will continually seek fair and balanced rewards or outputs based on reciprocal inputs to ensure an optimal working relationship. In Study #4, it was therefore used to determine the importance of equal commitment towards the PC by both the ITO client and vendor to ensure satisfactory project and system performance.

4.4. Research method & data analysis

In total, there were 6 quantitative surveys (#1, #4, #7, #8, #9 & #10) conducted along with 2 qualitative case studies (#6 & #11). We also identified 3 mixed methods approach studies (#2, #5 & #12), which performed both qualitative and quantitative data analysis.

A closer investigation of these studies highlighted the methods used to measure aspects of the PC in

ITO studies to date. In 4 of the studies, the PC typology (#1 & #9), PC factors that influence the project performance (#8) were measured using tools adapted from industrial and relational psychology. In addition, there were 4 studies that based their measurement tools on a survey developed by study #2 which is considered the first study to attempt formulating the ITO relationship as a PC established between a client and vendor. As a part of this study, they developed a survey which enabled measuring the perceived outsourcing success of clients and vendors based on the extent to which mutual obligations based on the PC were fulfilled. Based on this data collection tool, it was used in study #4 to measure the commitment levels towards the PC; in study 5, where it was used as the premises to test the PC in opensourcing relationships and in study #10, where it was used to measure the perception of a breach of the PC.

In Studies #7 and #12, their quantitative analysis focused on aspects beyond the PC such as the performance of BPO agreements; and identifying the interpersonal networks in ITO based on a social network analysis.

4.5. Unit of analysis

Most studies examined the research issues at the individual level (n=9), which was in tune with the individuality dimension of the PC which emphasizes the fact that a PC resides in the mind of the individual. However, there were three exceptions with study #7 selecting the business unit as the unit of analysis because its focus was on investigating project sponsorship capabilities within business units involved in a specific ITO project. In study #12, the social network was selected as its unit of analysis because it was perceived to bridge the gap between the organisational and individual levels, whilst revealing the degree of formalisation in an organisation. Study #3 was a conceptual study therefore no unit of analysis exists.

5. Discussion

In this study, a systematic review and analysis of the PC within ITO studies has been presented. In almost all of the literature that was examined, researchers have highlighted the importance of the PC in furthering our understanding of the ITO phenomenon as it has enabled the investigation of prior ITO topics such as relationships; governance and success through the unique perspective that the PC provides through its mutual, psychological and individual dimensions. However, the summary

provided in this study identified substantial differences over the interpretation and application of the PC within the ITO context. Therefore, we discuss some of the key gaps identified based on our summary of the literature to date, and provide recommendations on how these gaps may be addressed.

5.1. Application of the PC

Based on the literature review, we identified that there were two separate streams of research based on the application of the PC. The first stream (n=5) applied the PC as a theoretical lens to investigate ITO relationships and the management of ITO personnel, whereas the second stream (n=7) applied the PC as a independent variable which focused on examining the influence the fulfilment or violation of the PC had on the participants behaviour and attitude towards the ITO agreement.

None of the studies applied the PC as both a theory and a variable at the same time which has resulted in the PC being defined and applied differently between the two streams. Therefore, unless the terminology, measurement and boundaries over the PC is well established, there is a risk that the difference in approach towards the PC in ITO may pose serious problems moving forward as was the case in research from non-IS disciplines (i.e. Psychology; Management; Organisational behaviour) that have investigated the PC in greater detail over the past 25 years. For example, there have been scholars who have debated that the PC is neither a theory nor a variable that can be measured due to the nature of PC research being too descriptive and not generic enough to be replicated [36]. Furthermore, scholars have argued that the *individual* and *psychological* nature of the PC makes it difficult to directly observe or measure further blurring the lines of what the PC represents [21, 22, 44].

To ensure that these critisms are addressed, subsequent studies have placed considerable effort to ensure that the definition, measurement and boundaries of the PC are well established so that its application and assessment allows it to differentiate itself from other constructs, and to also ensure that it can be identified and measured appropriately [16, 37].

First, those studies explicitly define the PC as a *multi-dimensional construct* similar to trust, communication and commitment etc. [16, 37]. Second, from a measurement perspective, the PC can be measured based on either the positive or negative signals which appear within a working relationship when the mutual promises and obligations based on the PC have been fulfilled, breached or violated

[16]or alternatively, by evaluating the differentiated responses between individuals with either relational versus transactional psychological contracts [21]. Finally, the boundaries which differentiate the PC from other constructs can be identified by evaluating whether or not it adheres to the three dimensions of the PC (mutual, psychological, individual) [37].

It is important for ITO researchers to adhere to these dimensions whilst observing and assessing the PC in future studies because mismatches and anomalies may occur if any of them are ignored [20]. For example, 'Prompt payment' was identified through applying the PC as a theory as an important mutual obligation that clients must adhere to when engaged in an ITO agreement with a vendor [10]. However, if the PC is of psychological and individual in nature, then this obligation may be questioned as (a) many individuals engaged in an ITO project are not aware of financial payments made at an organisational level, and (b) Payments made can be checked and monitored through physical means which means it is not psychological in nature.

Therefore, this study recommends that future studies ensure the definition, measurement and boundaries of the PC are considered to ensure that it is applied correctly in future ITO studies.

5.2. Individuals perception of PC's

Based on Table 2, we can see that 9 out of the 12 studies identified the individual as their unit of analysis. This complies with the individuality dimension of the PC, which states that the PC resides in the minds of each individual, and can be interpreted differently based on the eye of the beholder. However, despite the ever-growing literature on the importance of personality traits and individual values towards understanding the PC and PCB as mentioned in the background section of this study [26, 28], none of the 12 studies reviewed have identified any of these individual differences in the context of ITO.

Although there have been calls to investigate ITO relationships strictly at an employee level (Study #11), only the perspectives of specific stakeholder roles such as the Project Manager have been highlighted in the studies to date. Unfortunately, this disregards the fact that even project managers operate differently depending on their own personality and cultural settings and therefore may have different perceptions over the PC.

Hence, we recommend that future studies evaluate and consider the differences in individual values (e.g. organisational / national culture, personality etc.) to better understand how this influences the perception of PC and PCB's in the ITO context between different individuals.

5.3. PC and ReQ

Whilst investigating the key topics surrounding the literature in further detail, we identified there were four studies that have investigated Relationship Quality (ReQ) in the context of ITO.

ReQ determinants such as trust, commitment and mutual dependence have been suggested to create stronger sense of accountability between parties through the strenghtening of the PC (Studies #7 & #12). Furthermore, the overall commitment towards the PC was considered to be determined based on the ReQ between a client and vendor (Study #4). Studies have also identified that the legal contract and ReQ which are established at the firm level, is fully mediated by the individual's perception (from the client side) of whether a PCB has occurred (Study #10). The results of these previous studies indicate that there is a significant correlation between the PC and PCB and its influence over the ReQ in an ITO relationship.

As the ReQ is a well known determinant of ITO success [7,8], this is an important matter because by understanding how the PC influences ReQ, we will also understand how the ReQ affects ITO success in greater detail. However, to the best of our knowledge, there has yet been any study that investigates the connection between the PC and ReQ within the ITO setting in detail to date.

Therefore, we encourage future studies to examine the influence the PC has over the ReQ and vice versa in ITO to help improve our understanding into how we may improve ITO outcomes moving forward.

5.4. Data analysis

The number of quantitative studies that were identified (n=9) was surprising considering the subjective and interpretive nature of PC's in general which we assumed would have resulted in significantly more qualitative studies in comparison.

A positive aspect of this is that there is quantifiable evidence that backs up the theories and frameworks used to explain the importance of the PC and PCB within the ITO context. Furthermore, future studies may also be able to compare and contrast the results from these previous studies to examine how the PC evolves and changes over time within the ITO context, and to also see if there are any changes in the PC based on different settings.

However, the fact remains that the PC is still an under-explored concept within ITO, and therefore we suggest that further qualitative studies are carried out in different contexts to enrich our observation and understanding of the PC.

6. Conclusion

In this study, a systematic review and analysis on the current status of the PC in ITO studies to date was presented. By following the literature review process recommended by Cooper [20], and applying the study profile card concept introduced by King et al. [26] to categorise the literature based on specific criterias, a summary of the 12 papers was presented as per Table 2. Through this summary, we were able to highlight and contrast the differences that surrounded the PC in ITO studies based on the research context, focus, and methodologies. Our findings suggest that the concept of the PC within ITO studies is still severely under explored, and that there were several gaps in ITO studies due to the differences in how the PC has been defined and measured to date.

As a means of addressing these gaps in the current literature, four recommendations were made that future studies should consider. First, we recommended how the PC can be defined, measured and also differentiated from other forms of implied and social contracts. Second, we recommended that future studies pay more attention to individual factors such as personality and individual values when determining the different types of PC's that exist between individuals engaged in an ITO project. Third, we encouraged further investigation into how the PC influences the ReQ levels between individuals engaged in ITO. Finally, we encoureged additional qualitative studies to ensure that we can enrich our observation and understanding of the PC within the ITO context.

Next, we also acknowledge that there are several limitations of this study. Firstly, we understand that 12 studies is a small sample size, and the inclusion of studies on the PC which have investigated client-vendor relationships such as supply chains and distributed networks etc. that are similar to ITO would have enabled us to cover a larger number of studies. For example, studies such as Kingshott [38] that investigated the impact PC had on trust and commitment levels between supplier and buyer relationships within the motor vehicle industry, has also been extensively cited in IS studies as well. Furthermore, covereage of the extensive management literature which has covered the PC in detail such as Argyris [39] would have also broadened the number

of studies identified. Although these papers were omitted from this study as the boundaries established included only CIS related papers and conferences, we encourage future studies to take a more interdisciplinary approach to better gauge the status of the PC and other forms of client-vendor relationships like ITO. Secondly, we also understand that there may be significant ambiguity over the terminology used to define the PC and its relevant attributes and procceses. However, as this is a literature review study, the terminology used throughout this paper is a mere reflection of what we have identified in the literature so far.

To conclude, our study has significant implications for both theory and practice. From a theoretical perspective, this is to the best of our knowledge the first literature review that focuses on the PC within the ITO context. Based on the analysis of the literature review, we were able to identify several gaps in the studies to date, and discussed how these issues should be addressed in future studies to come. From a practical perspective, this study raises the awareness of the importance of the PC for practitioners, and provides detailed insight into some of the factors that the PC has an influence over in ITO. For example, practitioners engaged in ITO must understand that the fulfilment and/or violation of the PC may have a significant impact on the overall ReQ levels. Therefore, this study recommends that clients and vendors first acknowledge, and then discuss the terms of the mutual obligations, activities and beliefs that extend beyond the formal written agreement to ensure that issues arising from the breach of the PC may be avoided.

7. References

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