# AN INVESTIGATION OF PSYCHOLOGICAL CONTRACTS IN CONSTRUCTION PROCUREMENT

Jefferies, M.C.<sup>1</sup>; Davis, P.R.<sup>2</sup> and Ke, Y.<sup>3</sup>

### **Abstract:**

**Purpose:** A psychological contract (PC) is an unwritten contract with mutual obligations as the central issue and it fills the gaps in a relationship and shapes employee behaviour. To date, there has been limited research that has examined PC with respect to procurement methods in construction projects. There is a lot written about PCs, as a theoretical framework in areas such as strategic supplier partnering and relationships, but little research has been undertaken within a construction management context. An increased understanding of PC would enable procurement teams to identify the nuances associated with relationships in procurement and stakeholder selection.

Aim/Objectives: This research aims to examine social exchanges in construction contracts so that partners can better manager their relationships in projects. Specific objectives of the broader research are to: identify the presence of psychological contracts in construction projects; identify and catalogue the affect that the PC's has on the teams in various procurement models currently utilised within construction management and deliver a conceptual model of the PC in traditional and relationships style procurement scenarios.

**Method:** This paper reports on the first stage of a broader research project. To check and maintain currency of the topic, focus groups are held with key industry players and this is followed by the development of a survey instrument administered to a large sample of construction professionals involved with project delivery (n=100).

**Results:** PCs are clearly present in the construction delivery team and they have considerable effect on the interaction between the project stakeholders. It appears that the PC variables underpin behaviours to a considerable extent. The next stage of the research is to use the output from the triangulated survey to develop a conceptual model of the PC in traditional and relationships style procurement scenarios.

KEYWORDS: PSYCHOLOGICAL CONTRACTS; TRADITIONAL PROCUREMENT; ALLIANCE CONTRACTING; FOCUS GROUPS.

# 1. INTRODUCTION

The Australian construction industry was the third largest contributor to the nations GDP and the third largest employer in the year 2010–11, with the value of construction completed work valued at A\$167 billion (Australian Bureau of Statistics 2012). The quality of the product is closely linked to the performance of building and property in the wider socio-economic community it serves and yet the Australian construction industry appears inefficient when compared to countries such as the US and UK. A major contributing factor to this inefficiency is due to relationships that exist within the industry

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<sup>&</sup>lt;sup>1</sup> School of Architecture & Built Environment, University of Newcastle, Australia. Email: marcus.jefferies@newcastle.edu.au

<sup>&</sup>lt;sup>2</sup> School of Architecture & Built Environment, University of Newcastle, Australia. Email: peter.davis@newcastle.edu.au

<sup>&</sup>lt;sup>3</sup> School of Architecture & Built Environment, University of Newcastle, Australia. Email: yongjian ke@newcastle.edu.au

(Davis and Love 2011, Davis and Walker 2009). Effective participation in relationship development and the avoidance of traditional 'business as usual' thinking has the potential to significantly enhance project outcomes (Davis 2010). Despite relationship and integrated procurement opportunities being available for some time, it is clear that Australian firms have been slow to adopt them and those that have participated have problems in articulating significant benefits. To examine *how* relationships are being nurtured in Australian construction projects we investigate psychological contracts, or the *personal deal*, analysing the impact of trust and commitment associated with a psychological contract in a strong procurement relationship. Outcomes reported could be used as a management tool to guide and support the adoption of relationship style contractual arrangements that reduce the likelihood of firms together with their clients experiencing losses in relationships that affect productivity and project success.

A psychological contract (PC) is an unwritten contract with mutual obligations as the central issue. It fills the gaps in a relationship and shapes employee behaviour (Anderson and Narus 1998), it highlights unwritten expectations as opposed to conscious expectations. An example is 'long term... prospects' which are articulated outside a contract or written agreement. PC's are analogous to an internal motivator and they drive individuals to determine a perceived or institutional contract that is often a departure from a written or more formal document of governance or contract. The characteristics of a PC can be either transactional or relational over a number of dimensions: their focus, a time frame, inherent stability, overall scope, and tangibility (Anderson and Narus 1998).

To date, there has been limited research that has examined PCs with respect to procurement structures in construction projects. There is a lot written about PCs, as a theoretical framework in areas such as strategic supplier partnering (Blancero and Ellram 1997), buyer- supply relationships (Hill, Eckerd et al. 2009), supplier distribution relationships (Kingshott and Pecotich 2007), customer service relations strategy (Cutcher 2008), performance management (Stiles, Gratton et al. 1997) and workplace safety (Walker and Hutton 2006), but little research has been undertaken within a construction management context. Dainty (2004) in research limited to construction organisations identified a PC of a reciprocal nature containing variables that underpinned relationship-building. We suggest that increased understanding of PC would enable procurement/delivery teams to identify more successfully the nuances associated with relationship development in construction procurement and stakeholder interaction. This research aims to examine social exchanges in project procurement so that partners can better manager their relationships.

# **Psychological contracts (PC)**

The term 'psychological contract' (PC) first gained popularity in human resource studies during the 1990s (Guest and Conway 1997, Rousseau 1990, 1995, Sparrow 1998). In 2004 Dainty first wrote about psychological contracts displayed by construction project managers (Dainty, et al. 2004), investigating the dynamics that govern the PC between construction project managers and employees in order to understand its influence on

employee turnover. They identified that the understanding based on trust in the traditional PC was being undermined at the time by "widespread organizational expansion and flattening organizational structures" (Raiden et al 2009 p.78). Crucially, the aforementioned 2009 UK study relating to strategic human resource management in the construction industry found that "employee resourcing practices often rely on the personal assessments of line management, which have the potential for inconsistencies, poor allocation decision and hence, disillusion employees through a violation of the psychological contract" (Raiden 2009 et al p.84). As a result, the authors recommended that a more flexible approach to the employee resourcing function in construction organizations be adopted where "the individuals" preferences and expectations are taken into account throughout the resourcing process" (Raiden 2009 et al p.83).

Subsequently, Dainty reiterates that because individualization of the employment relationship is vital to ensure maximum productivity, that the PC is more relevant than ever (Dainty 2012 p.24). They note that intrinsic rewards are becoming more important in the job market and cite an example from their case study where individuals involved on a construction project suggested that the PC "at its best it may offer scope for creativity, innovation and a feeling of long-term impact on the environment 'the desire to make something that will last' (Project Director)" (Dainty 2012 p.258).

Beyond this limited body of scholarly writing, studies centered on the application of the PC in the construction industry have been largely unexplored, with the exception of recent interest specifically in PC and workplace safety in the construction industry (Walker 2010, 2013, Walker and Hutton 2006).

# The intra-organisational PC

The basis of the PC relationship within a firm is reciprocity between the organization and employees on the perceived obligations and expectations from one another (Guest 2002). The main theoretical underpinnings of the concept are generally attributed to Rousseau (Rousseau 1990, 1995) who distinguishes between two types of PC:

- 1. Transactional contracts: involve specific, monetizable exchanges between parties over a finite and often brief period of time. For example, competitive wage rates and the absence of long-term commitments. (Robinson et al. 1994)
- 2. Relational contracts: which in contrast, involve open-ended, less specific agreements that establishes and maintains a relationship. These contracts involve both monetizable and non-monetizable exchanges. For example inducements in relational contracts characteristically include training and development opportunities and a long-term career path within a firm. (Robinson et al. 1994)

Relational contracts provides a well-matched perspective for the organisation focus that forms the focus of this research. What is clear is that as the PC evolves around individual beliefs and perceptions, it is highly subjective and can be particular to each employee (Rousseau 1995). In essence, the PC constitutes an unwritten agreement between the organization and employees based on mutually accepted promises and obligations among the organization and the employees (Sparrow 1998).

#### The PC as a Personal Deal

The view of the PC as an analytical HR tool to examine complex changes that occur throughout an organization when new employment practices are adopted and Sparrow (1998), Rousseau (1998) together with Guest and Conway (1998) suggest the PC is a means to understanding the overall state of the employment relationship within an organization. They argue that the PC should be regarded as a tool through which management can establish and maintain a 'healthy' PC, and that change could subsequently be instituted more easily, with increased levels of commitment and satisfaction (Guest and Conway 1998). They used employee perceptions of trust in management and whether employees felt they were fairly treated to measure the extent to which employees believed that promises by the organization had been fulfilled.

In the context of the study, they concentrated not on pinpointing the 'who, what and when' of original promises made but on confirming that the important outcome was that employees *believed* promises had been made. Guest and Conway (2005) offered a model built on the existing literature and the relationship between the type of contract and other background factors, for example, the state of the PC and a range of relevant outcomes including motivation, innovative behaviour and commitment. This model was from an employee's perspective and showed the outcome of an individual's evaluation to an exchange between and organisation and an employee. The key being that it assessed the extent to which employees believed that the organisation had met his promise and obligations and had treated them fairly. Background variables include a range of individual biographical and occupational factors, including possible variations in orientations to work and levels of job involvement. The other key background variable is the type of employment contract, while a simple distinction between permanent and fixed term/temporary can be made, in practice this distinction may need to be refined from study to study.

### 2. RESEARCH METHOD

A preliminary review of literature identified a gap in PC knowledge, being the affect the PC has on the implementation of construction project delivery (Gundlach et al. 1995, Leuthesser and Kohli 1995, Morgan and Hunt 1994a, Rousseau 1996). To check and maintain currency of the topic a focus group with key industry stakeholders from 2 major contracting organisations was facilitated and a pilot survey instrument was delivered to a purposive sample of stakeholders for verification and final amendment. The final survey was electronically administered to a large sample of construction professionals involved with project delivery (n=100) (Krueger and Casey 2000).

The research instrument contained four sections: issues specifically examined were relational orientation, trust, commitment and the PC itself. Relational orientation was measured using a scale adapted from Leuthesser and Kohli (1995) to determine the extent of initiating, signaling and disclosing behaviours within a relationship. The items in the scale reflect perceptions about the partner across these aspects. An additional section determined satisfaction with the partners. Trust items were measured using the Morgan

and Hunt (1994a) scales specifically developed to understand perceptions of suppliers in a procurement relationship. The measure of trust captures the level of reliability, integrity and confidence within the relationship. Commitment represents the importance of and belief about, maintaining the relationship and this measure reflects the attitudinal element of commitment proposed by Gundlach *et al.* (1995). Psychological contracts were measured with four factor scales adapted from Rousseau's extensive work to examine the extent that employees believed certain intrinsic/extrinsic promises are made in dealing with their major partners. The four factors were: good faith and fair dealing, relational benefits, relational conditions and intrinsic relational characteristics. All items in these measures use a 5-point Likert scale with strongly disagree and strongly agree as anchors (Bryman 2004).

The analysed results of the survey used a mixed method of both quantitative and qualitative techniques that were triangulated with a further industry focus group (Creswell 1994). Analysis of the results using SPSS supports its reliability and consistency. The main statistical methods used were descriptive statistics and one-sample t test. The one-sample t test procedure was performed on the items to determine if they were embraced to a significant extent.

### 3. RESULTS

Survey questionnaires were sent to a broad sample of industry practitioners. A total of 53 valid responses were returned. With regard to the sample validity, it is observed that 53 sets of valid responses were received. The general convention is that when the sample size is over 30, it is considered to be large by the Central Limit Theorem (Nunnally 1978). Moreover, Cronbach's alpha value of research instrument is 0.961, suggesting that the responses have a high internal consistency (Nunnally 1978). It is concluded that this data is reliable and further statistical analyses may be conducted.

The following identifies the characteristics of the sample and their project environment. It was observed that a large majority of respondents were male, with less than 10% of the respondents being female (9.4%). Most of the respondents were between 40 and 59 years of age (54.7%), next were 21 to 39 years old respondents (35.8%), followed by respondents 60 year old and over representing 9.4% of the sample. The majority of respondents had in excess of 30 years experience in project delivery (22.6%), 15.1% of the respondents had over 26 years experience and a further 11.3% had over 21 years experience. So it can be seen that the respondents were experienced in their roles. The majority (42%) were described as Project Managers with a further 17% identifying themselves as general managers the balance were contracts administrators, engineers, site managers or buyers, a large proportion (58%) worked from their headquarters with 26% working from a regional office and 14% working on site. A large proportion of the respondents were from the private sector (62%) with the balance from the public sector. When asked about their organisations turnover nearly 60% indicated that their organisation turned over more that \$200million per annum operated in organisations that employed over 100 but not exceeding 500 staff.

# Satisfaction

The focus of the questions revolved around the respondent's perception of their procurement partner's **satisfaction** whilst working with them on a recent project. All subsets of the primary question were identified as significant in the context of the survey. The subset questions may be synthesized as a commitment to an overall relationship that would continue in the forthcoming years, identified as a pleasurable experience with few problems. The questions followed Leuthesser and Kohli (1995) and were adapted with reference to Morgan and Hunt's (1994b) earlier survey instrument that was originally utilised in a study of the nature of relationship marketing. The link between relational behaviours and satisfaction are likely to be stronger when the output is important and there is a notably dynamic environment. 39% of the projects that the sample identified ranged between the value of more than \$1 million and less than \$25 million. Assuming that project cost has a relationship to importance to the client and overall dynamics of the project environment it is of little surprise that the sample in this survey identified these factors as significant. Leuthesser and Kohli (1995) suggest that relational behaviours that include initiating, signalling and disclosing behaviours improve buyer satisfaction.

#### Trust

The series of questions under the construct of trust were derived from Morgan and Hunt's (1994) scales specifically developed to tap perceptions of procurement partner's trust whilst working on a recent project. The measures of trust captured the level of **reliability** (they do what they say) and **integrity**. Trusting behavior may manifest in psychological contracts or the 'personal deal' that has been extensively researched by the likes of (Dabos and Rousseau 2013) and others who suggest that PCs may exist between an individual and groups or interdependent organisations, however, despite extensive research the relationship between an individual and an organisation is somewhat uncertain (Conway & Briner 2005). In a trusting relationship such as a PPP or an alliance, which represent the most integrated of delivery systems in a procurement continuum (Davis and Love 2011), stakeholders are able to focus on essential long-term benefits. These long-term benefits are suggested to provide amongst other things, enhanced competitiveness/innovation and lift productivity.

Interestingly, trust is aligned very closely with **commitment** and scales in the survey were designed to measure commitment and the parties belief about maintaining the relationship. Morgan and Hunt (1994b) suggest that in alignment commitment and trust maintain relationship investments that in this study are crucial to complex integrated project environments, engendering cooperation within the team. Commitment and trust supports long-term engagement typically required in more advanced/ mature project delivery methodologies similar to Alliance or PPP delivery systems which are inherently long-term in their nature. Essentially the combination of commitment and trust promotes efficiency, productivity and effectiveness that lead directly to behaviours that are conducive of long-term relationships and process success.

### Commitment

Commitment scales were adapted from Gundlach, Achrol et al. (1995) and designed to measure perceptions of partnership commitment, as it is suggested that opportunism

moderates the process of commitment. It would be clear to a reader of construction research that much is written that catalogues the adversarial nature of the construction industry. A review of several sources of academic work identifies many papers that highlight problems derived from the adversarial nature of construction - for example see (Boukendour and Hughes 2014, Eriksson 2010, Rose and Manley 2014, Smiley, Fernie et al. 2014)

As discussed earlier commitment is closely aligned to trust, it is essential to long-term relationships and follows the desire of contracting parties that remaining in the relationship would provide better outcomes than not. It is said to be close to mutuality, loyalty and the forsaking of others and is clearly distinguishable in long-term relationships (Gundlach, Achrol et al. 1995). In focus group meetings, where the findings of the quantitative survey were explain, participants indicated that to them commitment was linked closely to future work. Upon reflection with regard to the likes of opportunism they referred to a *three tender rule*. This was described as a *rational check*, for example; after a period of time by those within the team, most particularly the lead client may require a more stringent tender process after a period of relationship to check on aspects of value for money. In his research into Alliance relationship building Davis (2005) establish similar traits in catalogued relationship building models.

# **Relational Benefits**

A series of questions considered relational benefits, the questions were adapted from Rousseau's (1996) measures to determine the extent that perceived future tangible relational outcomes, for example future projects, were promised by a major partner. In particular the sample were asked to reflect on incentives linked to their organisations performance. Determined as significant by the respondents and subsequently referred to in the focus group it was suggested that the term "promise" was too strong a word used in a construction industry context; it was suggested by one of the focus group participants that a promise "is more implied rather than stated - an 'implied undertaking' if you like". He used the example that "Giving a good price is still a long way from any guarantees to win future work". The implication being that future work is still going to be measured against performance and competition - and this relates back to the point made above on commitment.

# Intrinsic relationship characteristics

This final set of questions that were deemed to be of significance by the sample considered autonomy and overall responsibility in the value chain. Using an adaptation of a survey instrument from Rousseau's previous work (1996) the sample were directed to reflect on constructs including: interesting (...a relationship role that is interesting to our organisation...), meaningful (...major partner promised a meaningful role for our firm within the overall relationship.), challenging (...promised a role that is challenging to our organisation) and responsible (...major partner promised a role that has high levels of responsibility).

At its core a personal deal is essentially an individual's motivation, providing a meaningful, challenging and responsible role drives the motivation to a stimulating

outcome, as indicated in Dainty's research a positive PC will offer scope to an individual to be creative, innovate and be part of something that is of long term impact and will last (Dainty 2012 p.258). Take for example the oft-used expression 'yes, that's one of my buildings' an expression that whilst used widely, given consideration, serves to support this argument. In addition Guest and Conway have shown growing evidence that the use of a set of "high commitment" practices is likely to be associated with a range of positive outcomes (Guest and Conway 1998) that lead to better than business as usual outcomes, overall process and relational success that often would be seen to manifest in higher levels of productivity and reduced cost in the process consequent of good levels of quality and accountability.

### 4. CONCLUSIONS

It is noteworthy that the differences among the two schools of thought caused arguments between two of the most important representatives: Rousseau and Guest, whose publications contrast each other's views on a personal level, with particular emphasis in the terminology of using implied 'obligations' (Rousseau 1998) or 'expectations' (Guest and Conway 1998) in the definition of the PC. Eventually, there was a definition adopted that comprised both aspects (Guest 2002). There is no clear consensus on the definition of the psychological contract, however, most researchers accept that it should be viewed as a two-way exchange of perceived promises and obligations. Slightly adapting the definition provided by Herriot & Pemberton (1997), we define the psychological contract as:

"the perceptions of both parties to the employment relationship - organisation and individual - of the reciprocal promises and obligations implied in that relationship".

As Schalk and Raeder (2011) and Rousseau (2001) suggest, there are interesting issues about who speaks for the organisation. There are also questions about how feasible it is to draw a clear line between expectations, promises and obligations. Although literature makes important conceptual observations about the PC and its place within organizations, there is little knowledge of whether organizations take the concept into account and if any apply it in practice (Conway & Briner 2005). Due to its subjective nature and the numerous factors influencing its course, the PC is highly fluid and frequently merits redefinition and renegotiation (Guest 2002, Rousseau 1995).

At the outset of this research we aimed to identify the presence of psychological contracts in construction projects and identify and catalogue the affect that the PC has on the teams in various procurement models currently utilised within construction management. It is apparent that through the lens of PC constructs that include disclosing behaviours, satisfaction, trust, commitment, professionalism, relational benefits, resources and support and intrinsic relational characteristics, important aspects of the PC or personal deal manifest in project delivery. Future research is proposed that will compare traditional procurement models with relationships style procurement models and develop a PC model of construction project delivery. Ongoing research into this area is vital to

ensure the development of sustainable procurements methods and that greater rewards are provided for all project stakeholders, no matter the procurement model used.

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