Shiftwork and the psychological contract: The role of perceived organisational support

By Dianne Badcock
University of Tasmania

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Abstract

Shiftwork is nothing new in the workplace. The practice can perhaps be traced as far back as the building of the pyramids, where it is postulated that work teams were scheduled around the clock in order to complete their colossal projects sooner. In the contemporary workplace, however, the practice of working non-standard hours has increased due to a multitude of factors, including both economic and social drivers. This increase is significant not only because of the physical and social inconveniences and issues involved with performing such work, but also because of the implications this work scheduling has on the relationship between individuals and their organisations. This study explores this relationship using the psychological contract as an empirical device for assessing the nature of employment relationships. The increase in shiftwork also raises concerns for management as to how best to manage the unique demands it places upon employees and workplaces. Employee perceptions of the shiftwork support offered to them by their organisations are thus investigated as an element contributing to and related to their overall perceptions of psychological contract.

Background

The changing nature of work, its antecedents, and its implications have been extensively documented in the industrial relations and human resource management literature (Boswell, Moynihan, Roehling & Cavanaugh, 2001; Dawson, McCulloch & Baker, 2001; Howard, 1995). Among the changes prevalent in the contemporary workplace is the increased incidence of shiftwork arrangements in numerous industries. Shiftwork has emerged from its relegation to industries such as health and emergency services, where such working arrangements are considered a necessity (Bohle & Tilley, 1998; Fitzpatrick, While & Roberts, 1999; Wedderburn, 1975), to non-traditional shiftworking industries such as retail, hospitality and transport.

The Australian workforce is no exception to this trend. Data collected in the year 2000 revealed that 9% of Australian employees surveyed permanently worked according to a shift system, 60% of the sample indicated that they had worked nights or weekends within the previous 4 week period, and 65% of respondents who identified their employment status as casual had worked nights or weekends within the previous 4 week period (Australian Bureau of Statistics, 2001).

Costa (2001:15) notes that “the 24 hour society appears to be an ineluctable process towards a social organisation where time constraints are no more restricting the human life. Shiftwork… [is] the milestone of this epochal passage, of which shiftworkers are builders and victims at the same time”. It is thus recognised that shiftwork, as a social phenomenon, has both positive and negative effects for workers engaged in such arrangements.

The changing nature of work is credited with altering the content and composition of employment relationships (Boswell et al, 2001; Coyle-Shapiro & Kessler, 2000). The manner in which individuals perceive their employment relationship has evolved to encompass the emergent norms of flexibility, reduced job security, contingent employment structures and self-career management (Brown, 1997; DeCieri et al, 2003; Iles, 1997). A central element to the perception of employment relationships is the psychological contract (Rousseau, 1995).

Psychological contract offers an analytical framework through which to study the constitution of employment relationships (Guest & Conway, 2002). The nature of psychological contracts has also undergone dramatic change as a consequence of the changing nature of work (Smithson & Lewis, 2000). This change has been comprehensively researched and discussed within the relevant literature (e.g. Cooper, 1999; Hendry & Jenkins, 1997; Hiltrop, 1995, 1996).
However a notable omission from the empirical coverage of ‘new’ psychological contracts is an application of the theory to shiftworkers. Psychological contract studies have been conducted into various workplace contexts and workforce groups, including part-time employees (Gakovic & Tetrick, 2003), contingent and flexible employees (Bayliss, 1998; Parks, Kidder & Gallagher, 1998), temporary employees (McDonald & Makin, 2000) and contractors (Millward & Brewerton, 1999). Psychological contract research has been conducted into professions such as nursing, which involve extensive shiftwork; however the focus of these studies has been on the profession rather than the employment arrangements to which these professionals work. Hence, the context of shiftwork has been somewhat overlooked as an investigation subject for psychological contract research.

In summary, the prevalence of shiftwork across industries has increased with the changing work environment. Research investigating shiftworkers has concentrated primarily on the physical aspects of shiftwork, with only minimal studies investigating the perceptions of employing organisations held by these workers. The objective of this study is to investigate the attitudes and perceptions of shiftworkers, specifically, the perceptions of shiftworkers towards their organisation and their employment relationship with their organisation. The psychological contract is considered an appropriate tool for such an endeavour, as it has been validated as an effective explanatory framework for investigating employment relationships (Conway & Briner, 2002; Shore & Tetrick, 1994).

The psychological contract is also a useful means of assessing the obligations that individuals expect of their organisation (Rousseau, 1989). Expectations within employment relationships are particularly relevant to the situation of shiftworkers as these workers may require greater organisational support than their non-shiftworking counterparts (Bohle & Tilley, 1998). The dominant vein of shiftwork literature, concerning the physical implications of such work, highlights the many ergonomic requirements of shiftworkers; whilst the behavioural and the management streams of the literature emphasise the importance of fostering organisational commitment and job satisfaction among shiftworkers. Attitudinal research of shiftworkers suggests that shiftworkers expect their organisation to treat them with adequate care and provide them with adequate facilities (Wedderburn, 1978).

This study intends to capitalise upon the available research opportunity, as outlined above, and investigate the nature of shiftworkers’ psychological contracts and the shiftwork-specific expectations of support that may exist within these perceived contracts. This study therefore aims to shed light on the attitudes and perceptions of shiftworkers, particularly towards their organisation and the extent and manner of shiftwork support. In doing so, it is anticipated that this study will contribute to literature concerning psychological contract, perceived organisational support, and shiftwork.

**What is shiftwork?**

Presser (1995) distinguishes shiftwork as employment arrangements consisting of work performed outside the traditional working hours of 9am to 5pm, Monday to Friday. Shiftwork does not imply a particular permanency status (full-time, part-time, or casual). Indeed, shiftworkers can belong to any of these employment classifications, with no specific classification appearing to take prevalence (Beers, 2000). Neither is shiftwork exclusive to any particular industry, sector, occupation or task (Beers, 2000; Fenwick & Tausig, 2001; Wedderburn, 2000). The treatment of shiftworkers as a discrete workplace group is justified by the commonality shared by and particular to such workers – the non-traditional times of day during which they work (Wedderburn, 2000).

Mayshar and Halevy (1997:198) define shiftwork as “the operation of the same capital stock by different teams of workers on alternate hours”. These ‘alternate hours’ are determined by
individual organisations and thus are varied, however the standard classifications of shifts are
day, evening, night and morning (Khaleque & Rahman, 1984; Mayshar & Halevy, 1997;
Wedderburn, 1978). Day shift refers to a shift scheduled in alignment with the typical
conception of a ‘traditional’ working day. Evening (or afternoon) shifts are scheduled
primarily between 3pm and midnight; night shift refers to work scheduled primarily between
the hours of 10pm and 8am; and morning shift refers to those shifts typically scheduled
between 5am and midday.

**Psychological effects of shiftwork**

Shiftwork not only infiltrates traditional work/life balance – the psychological effects of such
work also impact upon the workplace perceptions and attitudes of relevant employees.
Khaleque and Rahman (1984) conducted an instrumental study into the attitudes and
perceptions of shiftworkers on fixed and rotating schedules. Here, attitudes were considered
the fundamental key to unlocking understanding of job satisfaction and physical adaptability
to shiftwork. Khaleque and Rahman’s study found that shiftworkers preferred to work a fixed
day shift, and least preferred to work a rotating shift. Interestingly, workers on a rotating shift
were found to experience greater psychosocial problems than other shift categories. Thus the
link was forged between perceptions of particular shifts and psychosocial problems (work/life
balance, job satisfaction and morale).

Bohle and Tilley (1998:62) claim that “relatively few studies have explored the determinants
of attitudes or examined shiftworkers’ perceptions of the characteristics of particular shifts
and the advantages or disadvantages associated with them” (emphasis added). It is
acknowledged that perceptions of the work environment play a major role in satisfaction and
positive attitudes towards shiftwork. Bohle and Tilley (1998) further acknowledge that
perceptions and resultant attitudes are influenced by characteristics unique to the individual as
well as characteristics of the organisation. The endeavours of organisations to foster positive
perceptions and attitudes have not been examined in great depth within the relevant literature.

**Moderating shiftworkers’ perceptions**

Several factors have been found to moderate shiftworkers’ perceptions of their organisation.
These include health and ergonomic initiatives of organisations (Bohle & Tilley, 1998),
encouragement of employee participation (Fenwick & Tausig, 2001), socio-demographic
differences and biological adaptability of individuals (Jamal & Baba, 1992),

Another factor moderating negative perceptions of shiftwork is the higher than average pay
rates intended to compensate for working on a shift basis. Thierry, Hoolwerf and Drenth
(1975) report finding positive attitudes towards pay and shift penalty rates in their sample of
shiftworkers. Level of shiftworkers’ pay was also found to positively correlate to
shiftworkers’ job satisfaction, which led to the suggestion that money is a primary motivator
for shiftworkers. However, although positive attitudes towards pay were identified, Thierry et
al (1975) note that more than merely money is required to create positive perceptions of
shiftwork, stating that “compensating by means of sheer money may conceal the real negative
effects and inconveniences of shiftwork” (1975:230).

**Psychological contracts**

A psychological contract can be defined as “individual beliefs, shaped by the organisation,
regarding terms of an exchange agreement between individuals and their organisation”
(Rousseau, 1995:09). Deconstruction of this definition illustrates some of the major themes
within the psychological contract. Firstly, psychological contracts involve ‘individual
beliefs’. One’s psychological contract is specific to that individual, their personality, and
experience (Turnley & Feldman, 1999; Van Buren, 2000). One’s psychological contract has
only to consist of one’s beliefs (Rousseau, 2001), meaning that psychological contract is based on individual perception over any objective reality.

Secondly, it is commonly agreed that psychological contracts are ‘shaped by employing organisations’ (Guzzo & Noonan, 1994; Kickul & Liao-Troth, 2003). Organisational activities and characteristics such as recruitment, induction, culture, climate and performance management can shape the psychological contracts of employees (Robinson, Kraatz & Rousseau, 1994). It should be noted here that psychological contracts are not static - they have the capacity to change over time according to individual or organisational influences (Guzzo & Noonan, 1994; Sparrow, 1996). Therefore, organisational activities and processes need to be constantly maintained in order to maintain positive psychological contracts among employees.

Thirdly, psychological contracts involve ‘exchange agreements’. These exchange agreements consist of obligations that each party expects of the other. In this sense, psychological contracts are similar to formal, legal contracts (Knapp, 1980; Spindler, 1994). The distinction between legal and psychological contracts, however, is that psychological contracts are implicit and unwritten (Atkinson, 2002; Herriot, Manning & Kidd, 1997; Hiltrop, 1995, 1996; Rousseau, 1989). These implied agreements specify what mutual expectations the parties to the contract have of each other – for instance, a fair day’s pay for a fair day’s work (Rousseau, 1995). However, as the psychological contract is subjective and unique to each individual, these exchange agreements are often perceived differently by different parties (Guzzo & Noonan, 1994).

Fourthly, stemming from the given definition, the parties to psychological contracts are individuals and organisations. Whilst it is possible to conceive of the term in an individual-to-individual sense, common parlance applies the term to the employment relationship between individual and organisation (Rousseau, 1995; Spindler, 1994).

Early authorities on the topic of psychological contract, including Argyris (1960), Levinson, Price, Munden, Solley (1962) and Schein (1980) based their theories of psychological contract in social contract theory (Smithson & Lewis, 2003). Social contracts are “unwritten sets of rights and obligations that determine the nature of the relationship between the state and its subjects” (Makin, Cooper & Cox, 1997:13). Social contract theory assumes that individuals voluntarily consent to belong to an organised society (Smithson & Lewis, 2003, Van Buren, 2000). This theory of social behaviour is considered an underlying concept in psychological contract; in particular, psychological contract is considered an extension of the philosophical concepts of social contract theory (Smithson & Lewis, 2003).

Forms of psychological contracts

Purvis and Cropley (2003) note that the term ‘psychological contract’ pertains to three different aspects of the employment relationship: process, content and form. The process of exchange refers to the “wants and offers” of the individual and the organisation (Purvis & Cropley, 2003:111). These wants and offers consist of what each party is prepared to offer in order to fulfil the psychological contract. Content refers to an individual’s beliefs concerning the terms and conditions of the exchange agreement (Rousseau, 1989). As previously noted, the individual need only believe these terms and conditions, as they are true in the eye of the beholder (Robinson & Rousseau, 1994). The form of the exchange agreement describes the type of psychological contract held by an individual. MacNeil (1985) categorises contract form as being transactional or relational. The relational and transactional dimensions of psychological contracts are basic elements in employment relationships (Rousseau, 1995).

The transactional form of the psychological contract denotes an attitude of “money comes first” (Millward & Brewerton, 1999b:02). It is often described in terms of economic
exchange (Shore & Tetrick, 1994) whereby the focus of the employment relationship is on monetary and material outcomes. According to Rousseau (1995:91) typical transactional contract terms involve the following:

- Specific economic conditions as primary incentive
- Limited personal involvement in the job
- Close-ended time frame
- Commitments limited to well-specified conditions
- Little flexibility
- Use of existing skills (no development)
- Unambiguous terms readily understood by outsiders

The relational form of the psychological contract, however, is akin to a working ‘partnership’ between individual and organisation (Millward & Brewerton, 1999b:02). Relational contracts can engender in employees feelings of affective commitment and trust, and employers offer support, training and development (Aselage & Eisenberger, 2003; Millward & Brewerton, 1999). In contrast to the economic focus of the transactional contract, relational contracts are based in social exchange (Shore & Tetrick, 1994). Rousseau (1995:92) lists the following terms as typical of relational contracts:

- Emotional involvement as well as economic exchange
- Whole-person relations
- Open-ended time frames
- Both written and unwritten terms
- Dynamic and subject to change over the life of the contract
- Pervasive conditions
- Subjective and implicitly understood terms

Millward and Hopkins (1998) developed a quantitative measurement of the relational and transactional dimensions of psychological contracts based upon the clustering of responses to either category. Relational and transactional contracts are considered to exist alongside each other on two separate continua as bipolar constructs (low-high transactional; low-high relational), meaning that an individual can be both highly transactional and highly relational in their employment relationship (McDonald & Makin, 2000).

The relational contract is associated with the bureaucratic organisational structure, which supported perpetual employment throughout one’s career and a high level of job security and was paternalistic (Atkinson, 2002; Hiltrop, 1996; Rousseau, 1995). However, the trends of downsizing and layoffs have altered the nature of employment relationships (Parks & Kidder, 1994). The ‘old’ relational contract prevalent in bureaucracies is giving way to the ‘new’ transactional contract, which allows for greater flexibility and economic rationalism (Hiltrop, 1995; Parks & Kidder, 1994; Rousseau, 1995).

This movement towards transactionalism is twofold: organisations pursue increasingly transactional relationships with employees for reasons of flexibility, and employees pursue transactional relationships with their organisations for reasons of lifestyle and self career management (Atkinson, 2002; Hendry & Jenkins, 1997; Macguire, 2002). These drivers have been previously identified as providing organisational and social impetus for shiftwork, leading to the hypothesis that the psychological contracts of shiftworkers will be predominantly transactional in form. This hypothesis is supported by data from the Australian Bureau of Statistics (2001), which reveals that although 9% of the sample indicated they worked according to a shift arrangement, only 4% actually preferred this arrangement. These figures therefore lend themselves to the suggestion that the remaining 5% may possess higher levels of transactionalism.
Expectations

The psychological contract can be viewed as a series of mutual expectations, where any denied or unfulfilled expectation may be perceived as breach (Goddard, 1984; Robinson, Kraatz & Rousseau, 1994). Mutual expectations are commonly communicated through organisational practices and procedures, and on a more implicit level, through behaviours and organisational culture (Kickul, 2001; Peters, 1975; Purvis & Cropley, 2003). However, McGovern, Stiles and Hope (1996) report that organisations may deliberately manage expectations in such a way as to lessen the amount and intensity of expectations that employees hold of them. This practice is a response to the contemporary work environment and the increased desire for flexibility and transactionalism.

The expectations individuals expect of their organisation, if unmet, can result in breach and associated negative outcomes such as reduced organisational loyalty, reduced productivity and greater turnover intention (Ahasan, 2002; Khaleque & Rhaman, 1984). If individuals perceive that expectations are met, positive outcomes such as commitment, intent to stay and productivity will typically ensue (Fitzpatrick et al, 1999). Individuals may perceive that their organisation has promised benefits and support as leverage to the psychological contract, and may therefore come to develop expectations regarding organisational support (Rousseau & Tijoriwala, 1998). This is important to shiftworkers as expectations regarding support may be pivotal to performance (Fitzpatrick et al, 1999).

Perceived organisational support

Perceived organisational support (POS) involves employee’s beliefs towards their organisation, specifically, “beliefs concerning the extent to which an organisation values their contributions and cares about their wellbeing” (Hutchison, Sowa, Eisenberger & Huntington, 1986:500). POS then refers to the perceptions of employees with regard to the degree to which they believe their organisation supports them in their work and work-related activities, such as transport, rostering and work/life balance.

POS creates positive outcomes for organisations through its influence on employee attitudes and commitment (Yamaguchi, 2001; Fitzpatrick et al, 1999). By fostering high perceptions of support, which is best achieved through providing actual support, organisations can engender greater affective and continuance commitment from employees. Several studies show a significant predictive relationship between degree of POS and affective organisational commitment (Hutchison et al, 1986; Liden, Wayne & Kraimer, 2003; Rhoades & Eisenberger, 2002; Shore & Wayne, 1993; Yoon & Thye, 2002).

Shiftwork and POS

Shiftworkers often perceive that they are ‘hard done by’ in their organisation. They are more prone to health and alertness complaints, are often not privy to the organisational privileges available to regular day workers, and are often excluded from organisational events (Tomlinson, 2002). Several studies have found shiftworkers’ attitudes towards their work to be lower than attitudes of traditional workers towards traditional working hours. However, it is suggested that organisational support for shiftworkers can have a moderating influence upon these attitudes (Bourgeois-Bougrine, Mollard, Coblentz, Petel & Contassot, 2000; Settoon, Bennett & Liden, 1996).

The POS/psychological contract relationship

Like psychological contract, POS is grounded in social contract theory (Ambrose & Schminke, 2003). POS theory is constructed upon notions of social exchange, therefore
aligning it to the relational component of the psychological contract (Gakovic & Tetrick, 2003; Kraimer & Wayne, 2004). However, although POS and psychological contract theory both emphasise social exchange processes in the establishment and maintenance of the employment relationship, they are not synonymous – rather, the two constructs are mutually interdependent (Aselage & Eisenberger, 2003; Shore, 2002).

The relationship between POS and psychological contract is typically conceptualised as one of mutual interdependence and influence. Perceptions of organisational support are often treated as contributors to the overall state of a psychological contract. In this capacity, POS may also act as a moderator of psychological contracts (Lynch, Eisenberger & Armeli, 1999). As a moderating variable, POS can determine the levels of both relationalism and transactionalism that an individual perceives within their employment relationship.

This effect is explained by Shore and Barksdale (1998) in the following manner: highly transactional employees feel obligated to work hard if they perceive they are compensated equitably, and highly relational employees feel obligated to work hard if they perceive their employer has made some substantial investment in them. If support mechanisms are equated with due or desired compensation and/or investment, it follows that these support mechanisms will in turn moderate psychological contracts. So whilst POS is typified as an element of social exchange and is therefore identified with relationalism, it may also be an influential factor to transactional contracts (Lynch et al, 1999).

It is commonly agreed that this moderating role of POS to psychological contract stems from the conception of POS as an expectation within the employment relationship (Eisenberger, Fasolo & Davis-La Mastro 1990; Guzzo, Noonan & Elron, 1994). Various empirical studies have substantiated the instrumental role of POS as an expectation in employment relationships (Ambrose & Schminke, 2003; Armeli, Eisenberger, Fasolo & Lynch, 1998; Farmer & Fedor, 1999; Gakovic & Tetrick, 2003; Yamaguchi, 2001). As noted, the expectations individuals have of organisations, and whether such expectations are satisfied, greatly influence perceptions of employment relationships, as measured through the psychological contract.

However, a circular connection between POS and psychological contract may also exist. Whilst POS may be a contributing factor to psychological contracts, it was found by Shore and Barksdale (1998) that employees reported higher POS when they perceived their psychological contracts were fulfilled. The causal factor in the POS/psychological contract relationship then becomes confused – it appears that one may impact upon the other. This integrative characteristic of the POS/psychological contract relationship has been picked up by Masterson and Stamper (2003), who locate both constructs as feeders in a conceptual framework leading to perceived organisational membership.

**Methodology**

Several writers have recently contested the nature of methodological approach most suited to psychological contract research. Originally approached through qualitative lenses (Guest, 1998; Rousseau, 1989), psychological contract research has evolved to adopt a greater emphasis on quantitative lines of analysis (Rousseau & Tijoriwala, 1998). Convincing justifications can be constructed for either approach (Parks et al, 1998; Rousseau & Tijoriwala, 1998), however the predominant method of psychological contract research in recent literature has been quantitative. Approaching this study through a positivist, quantitative lens has facilitated the collection of a relatively large quantity of data from a diverse sample. This approach was deemed most salient and appropriate to the investigation of the research question.
Participants
Participants were recruited for this research via two channels. Firstly, organisations selected for their operation in industries identified in the literature as being prolific users of shiftwork were contacted and invited to involve their employees in the survey. Those organisations willing to facilitate the conduct of the survey were liaised with on an individual basis and the surveys distributed in the fashion most convenient to each organisation. The second recruitment technique used for this study involved inviting university students deemed eligible to participate in the survey. Students were approached en masse and were offered surveys to complete in their own time. Both recruitment methods were designed to ensure respondent anonymity and optimise local, available response opportunities.

Instrument
This study used a questionnaire survey as the instrument of data collection. The use of surveys in all of psychological contract research, POS research, and shiftwork research is well established. The format of the survey was arranged into three sections, the first section (Part A) addressing the form of psychological contract, the second section (Part B) addressing levels of POS, and the third section (Part C) sought demographic and work-related information from respondents.

Preliminary Results
At the time of this paper’s publication, data collection for this research was limited to 22 survey responses collected for the pilot test of the instrument, and 40 survey responses collected from university students working in various industries. Although both small samples, they have revealed interesting results worthy of discussion.

Results to date have proven contrary to the expectations as developed in the literature. Survey responses were analysed using the software program SPSS, and revealed a high degree of relationalism among shiftworkers. In 73% of cases, psychological contract ratings were predominantly relational and less transactional in form. This result is interesting, as many authors advocate a highly transactional nature of contingent work and shiftwork (Millward & Brewerton, 1999; Purvis & Cropley, 2003).

Correlations were then performed to test for association between each form of psychological contract and POS ratings. A moderately strong negative correlation (-.478) was calculated between transactionalism and POS; and a moderately strong positive correlation between relationalism and POS (+.533) were found at a probability level of 0.05. This result is consistent with the literature identifying POS with the relational form of psychological contract.

The results of these correlations reveal a moderately strong positive association between relational forms of psychological contracts and perceptions of support. The results are also revelatory of an absence of POS within transactional forms of psychological contracts. These results are expected, as the literature and extant research are strongly supportive of such relationships. However the preliminary results defy such expectation in that they indicate high degrees of relationalism among individuals working shifts. This preliminary finding is interesting and will be explored and elaborated upon as additional data becomes available.

Preliminary results also show varied levels of POS among the sample (from very low to very high). Interestingly, respondents indicating higher levels of relationalism, organisational commitment and job satisfaction also indicated higher levels of perceived shiftwork support. However, no significant relationship was discernable with regard to levels of POS across different shift designations or industries of employment. The preliminary results therefore present mixed findings with regard to expectations derived from the literature.
Suggestions for further research

Smithson and Lewis (2003:07) list in their recommendations for further research the suggestion that greater investigation be conducted into POS and psychological contract. The authors ask how “perceptions of organisational supportiveness for work and family impact on psychological contracts, and with what consequences for individuals and organisations?” As goes shiftwork, Brooks (2000:11) states, “there is a requirement for more context sensitive research to establish both the nature of the mechanisms acting to reduce the detrimental effects of shiftwork and the extent to which such moderation occurs.” Thus, further enquiry into the shiftwork/POS/psychological contract triad, as this study attempts, is recommended.

It should be noted that this research is not devoid of limitations, particularly concerning underlying motivations for participating in shiftwork. Many are self-selected into shiftwork for reasons such as conflictual obligations, (child care, university or second jobs) or because non-traditional work hours complement desired lifestyle. Inclusion of these factors into the present study was not feasible within the allowable scope and time, however they present an intriguing opportunity for subsequent research. Another interesting avenue for further research concerns the potential relationship between breach and violation of psychological contract and perceptions of support.

References


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