THE CHANGING CONTOURS OF THE EMPLOYMENT RELATIONSHIP: A CASE STUDY OF THE PSYCHOLOGICAL CONTRACT

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(June 2001)

I certify that this thesis is the true and accurate version of the thesis approved by the examiners.

Signed: [Signature]

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## CONTENTS

<table>
<thead>
<tr>
<th>Title Page</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Contents Page</td>
<td>iii</td>
</tr>
<tr>
<td>List Of Figures</td>
<td>iv-vi</td>
</tr>
<tr>
<td>List Of Tables</td>
<td>vii-viii</td>
</tr>
<tr>
<td>Abstract</td>
<td>ix-x</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1 – 12</td>
</tr>
<tr>
<td>Chapter 2: Literature Review</td>
<td>13 – 105</td>
</tr>
<tr>
<td>Chapter 3: Methodology</td>
<td>106 – 166</td>
</tr>
<tr>
<td>Chapter 4: Contextual Background</td>
<td>167 – 186</td>
</tr>
<tr>
<td>Chapter 5: Research Question 1 - Results</td>
<td>187 – 257</td>
</tr>
<tr>
<td>Chapter 6: Research Question 1 - Discussion</td>
<td>258 – 283</td>
</tr>
<tr>
<td>Chapter 7: Research Question 2 - Results</td>
<td>284 – 328</td>
</tr>
<tr>
<td>Chapter 8: Research Question 2 - Discussion</td>
<td>329 – 347</td>
</tr>
<tr>
<td>Chapter 9: Conclusions</td>
<td>348 – 363</td>
</tr>
<tr>
<td>Bibliography</td>
<td>364 – 411</td>
</tr>
<tr>
<td>Appendix 1: 1996 Survey (Organisational Level Analysis)</td>
<td>412 – 418</td>
</tr>
<tr>
<td>Appendix 2: 1996 Survey (Site Level Analysis)</td>
<td>419 – 425</td>
</tr>
<tr>
<td>Appendix 3: 2000 Survey (Organisational Level Analysis)</td>
<td>426 – 444</td>
</tr>
<tr>
<td>Appendix 4: 2000 Survey (Site Level Analysis)</td>
<td>445 – 460</td>
</tr>
<tr>
<td>Figure Number</td>
<td>Figure Title</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Figure 1</td>
<td>Process Model Of The Psychological Contract</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Schematic Representation Of The Development Of The Psychological Contract</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Content Model Of The Psychological Contract (Guest and Conway, 1997)</td>
</tr>
<tr>
<td>Figure 4</td>
<td>A Model Of The Process Of Psychological Contract Violation (Rousseau, 1996)</td>
</tr>
<tr>
<td>Figure 5</td>
<td>A Model Of The Process Of Psychological Contract Violation (Morrison and Robinson, 1997)</td>
</tr>
<tr>
<td>Figure 6</td>
<td>A New Model Of The Process Of Psychological Contract Violation</td>
</tr>
<tr>
<td>Figure 7</td>
<td>A New Variance Model Of Psychological Contract Violation</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Elements Of Dunnotar's Mission Statement</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Timeline Of Organisational Events</td>
</tr>
<tr>
<td>Figure 10</td>
<td>Interview Timeframe</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Niddry's Psychological Contract Between 1997-1999</td>
</tr>
<tr>
<td>Figure 12</td>
<td>Claypott's Psychological Contract Between 1997-1999</td>
</tr>
<tr>
<td>Figure 13</td>
<td>Stirling's Psychological Contract Between 1997-1999</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Newark’s Psychological Contract Between 1997-1999</td>
</tr>
<tr>
<td>Figure 15</td>
<td>Huntly’s Psychological Contract Between 1997-1999</td>
</tr>
<tr>
<td>Figure 16</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Distributive Justice Led To Relationship Rupture</td>
</tr>
<tr>
<td>Figure 17</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Interactional Justice Led To Relationship Rupture</td>
</tr>
<tr>
<td>Figure 18</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Interactional Justice Led To Relationship Restoration</td>
</tr>
<tr>
<td>Figure 19</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Distributive Justice Led To Relationship Restoration</td>
</tr>
<tr>
<td>Figure 20</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Interactional Justice Led To Relationship Recalibration</td>
</tr>
<tr>
<td>Figure 21</td>
<td>Process Model Of Psychological Contract Breach And Violation Illustrating The Pathway Where Procedural Justice Led To Relationship</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Figure 22</td>
<td>New Variance Model Of Psychological Contract Violation</td>
</tr>
<tr>
<td>Figure 23</td>
<td>Variance Model Results – Attitudinal Outcomes</td>
</tr>
<tr>
<td>Figure 24</td>
<td>Variance Model Results – Behavioural Outcomes</td>
</tr>
<tr>
<td>Figure 25</td>
<td>A Graph Illustrating The Absenteeism Trends In Claypotts</td>
</tr>
<tr>
<td>Figure 26</td>
<td>A Graph Illustrating The Absenteeism Trends In Stirling</td>
</tr>
<tr>
<td>Figure 27</td>
<td>A Graph Illustrating The Absenteeism Trends In Newark</td>
</tr>
<tr>
<td>Figure 28</td>
<td>A Graph Illustrating The Absenteeism Trends In Niddry</td>
</tr>
<tr>
<td>Figure 29</td>
<td>A Graph Illustrating The Absenteeism Trends In Huntly</td>
</tr>
<tr>
<td>Figure 30</td>
<td>Amended Model Of The Process Of Psychological Contract Violation</td>
</tr>
<tr>
<td>Figure 31</td>
<td>Amended Variance Model Of Psychological Contract Violation</td>
</tr>
<tr>
<td>Table Number</td>
<td>Table Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Table 1</td>
<td>Employee Responses To Psychological Contract Violation</td>
</tr>
<tr>
<td>Table 2</td>
<td>Illustration Of Quantitative And Qualitative Paradigms</td>
</tr>
<tr>
<td>Table 3</td>
<td>Assumptions Of Positivism, Post-Positivism And Constructivism.</td>
</tr>
<tr>
<td>Table 4</td>
<td>Changes In Workforce Numbers At Dunnotar</td>
</tr>
<tr>
<td>Table 5</td>
<td>A Comparison of Employees’ Expectations of Work between 1994 and 1996</td>
</tr>
<tr>
<td>Table 6</td>
<td>Table of Results Relating to Calculative Trust From the 1996 Survey</td>
</tr>
<tr>
<td>Table 7</td>
<td>Employees Perceptions Of The Extent The Organisation Puts Aspects Of The Mission Statement Into Practice.</td>
</tr>
<tr>
<td>Table 8</td>
<td>Distributive Justice Results From the 1996 Survey</td>
</tr>
<tr>
<td>Table 9</td>
<td>Procedural Justice Results From the 1996 Survey</td>
</tr>
<tr>
<td>Table 10</td>
<td>Personal Trust Results From The 1996 Survey</td>
</tr>
<tr>
<td>Table 11</td>
<td>Interactional Justice Results From The 1996 Survey</td>
</tr>
<tr>
<td>Table 12</td>
<td>Organisational Commitment Results From The 1996 Survey</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Table 13</td>
<td>State Of The Psychological Contract In 1996</td>
</tr>
<tr>
<td>Table 14</td>
<td>Expectations Of Work Among Sites</td>
</tr>
<tr>
<td>Table 15</td>
<td>Differences Among Sites From The 1996 Survey</td>
</tr>
<tr>
<td>Table 16</td>
<td>Summary Table Of Trends From Qualitative Data</td>
</tr>
<tr>
<td>Table 17</td>
<td>A Comparison of Employees’ Expectations of Work between 1996 and 2000</td>
</tr>
<tr>
<td>Table 18</td>
<td>Table of Results Relating to Calculative Trust From the Year 2000 Survey</td>
</tr>
<tr>
<td>Table 19</td>
<td>A Comparison Of Employee Perceptions Of Distributive Justice Between 1996 And 2000</td>
</tr>
<tr>
<td>Table 20</td>
<td>Procedural Justice Results From the 1996 Survey</td>
</tr>
<tr>
<td>Table 21</td>
<td>A Comparison Of Organisational Commitment Between 1996 And 2000</td>
</tr>
<tr>
<td>Table 22</td>
<td>State Of The Psychological Contract In 2000</td>
</tr>
<tr>
<td>Table 23</td>
<td>Site Differences From the Year 2000 Survey</td>
</tr>
<tr>
<td>Table 24</td>
<td>A Table Of Key Events In Dunnotar Between 1997 and 2000</td>
</tr>
</tbody>
</table>
ABSTRACT

In recent years organisations have been faced with increasing challenges which have resulted in tensions between innovation and cost effective strategies. Such environmental pressures have resulted in the emergence of a new employment relationship or psychological contract. In the face of this new situation two questions become apparent: ‘how can the new psychological contract be managed effectively?’ and ‘what are the organisational consequences of an ineffectively managed psychological contract?’ This thesis evaluates two key research questions: ‘what factors shape psychological contracts?’, and ‘what are the implications of breaking such a contract?’ In order to address these questions academic literature was reviewed in Chapter 2, and it is argued that the concepts of context, trust and fairness are key variables that shape psychological contracts. Two new models of psychological contract breach and violation are presented using both processual and variance methodologies. This thesis adopts a post-positivist methodological standpoint, as highlighted in Chapter 3, and draws on both quantitative and qualitative approaches from a longitudinal case study of an industrial textile organisation described in Chapter 4. The findings of research question 1 were presented in Chapter 5, and these suggest that psychological contracts are complex and dynamic, and therefore context is crucial to understanding the nature of the relationship. Furthermore it was found that the notion of fairness impinges on the psychological contract and perceptions of injustice had negative affects on employee attitudes. It was evident that trust was crucial in understanding the psychological contract, however, it was found that personal trust or shared norms between employee and employer were not
essential for a positive psychological contract - issues expanded upon in Chapter 6. Research question 2 was addressed through the evaluation of two new models of psychological contract breach and violation, using both quantitative and qualitative methodologies. These results were discussed in Chapter 8, and the qualitative data on balance concurred with the processual model. It was evident through the evaluation of the variance model that triggers of psychological contract breach affected attitudes rather than engendering behavioural changes.
Chapter 1

INTRODUCTION
CHAPTER 1
INTRODUCTION

Background To The Research

The employment relationship has long since attracted a great deal of attention in academic and practitioner fora (Herriot and Pemberton, 1995); as such there is a rich body of knowledge that surrounds the topic. A number of disciplines have studied the employment relationship, for example psychology (Schein, 1965; Blau, 1964; Adams, 1965), sociology (Watson, 1987; Brown, 1988; Thomson, 1987), and human resource management (Guest, 1996; Herriot and Pemberton, 1997; Rousseau, 1995). Nonetheless, no agreement has been achieved on the conceptualisation of the employment relationship with different interpretations within and between disciplines. A concurrence is likely to be unachievable given essentially conflicting theoretical underpinnings and assumptions (Brown, 1988); and indeed it is questionable as to whether a consensus is desirable as each perspective challenges and questions existing theories and thereby pushes back the boundaries of knowledge (Kuhn, 1970).

The psychological contract is an increasingly influential construct that seeks to explain and analyse the employment relationship. The origins of the concept lie in the early 1960s, receiving attention from both Argyris (1960) and Levinson et al. (1962), who have been credited with originating the term. The psychological contract has been defined as an “individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement... key issues here include the belief that a promise has been made and a consideration offered in exchange for it” (Rousseau, 1989: 125). Essentially the concept is rooted in exchange theory (Blau, 1964) and equity theory
(Adams, 1965) with the emphasis on perceptions of employers’ and employees’ obligations to one another.

Although the origins stem from the 1960s, the psychological contract construct has experienced resurgence in the 1990s due to claims of the demise of the 'traditional' employment relationship largely in the U.S.A. (Hiltrop, 1996; Rousseau, 1995; Guest 1997). Organisations have experienced intense pressures from the external environment in terms of increased competition, deregulation and the globalisation of markets (Cappelli, 1995; Hiltrop, 1995). Consequently organisations are now required to be more flexible, innovative and responsive to customer needs, yet continue to be efficient and cost effective (Hiltrop, 1995). Organisations have responded by sub-contracting (Gudron, 1994) and/or downsizing (Kanter, 1989), both of which have had a significant impact on the employment relationship.

The 'traditional' psychological contract has been characterised by employers providing job security in return for hard work and loyalty from employees (Sims, 1994). Due to environmentally driven pressures, organisations have increasingly been unable to fulfil all of their obligations to employees, principally job security (Sims, 1994). However, employers still expect hard work and loyalty from their workforce, and it has been argued that employers are only honouring part of the psychological contract (Hiltrop, 1994). As a result employees have felt that the 'deal' has been transformed without their agreement (Rousseau, 1995). The 'new' psychological contract has been portrayed as a change in the balance of the employment relationship where employees are no longer reliant on a single employer. Concepts of employability (Cappelli, 1997; Bagshaw, 1997) and non-dependent trust (Gordon...
Sorohan, 1994) have been cited as the basis of the new deal, with employees offering flexibility and expertise in return for employer support in the development of new skills. As a result, the employment relationship has become more rational and calculating, which has implications for issues of trust and commitment.

**Research Questions**

The new psychological contract poses a number of challenges for employers two of which are addressed in this research are:

‘How can the new psychological contract be managed effectively? Furthermore, does it matter if the psychological contract is not managed effectively?

These research questions were derived from review of existing literature and research and are explicated more fully in Chapter 2. Two principal research questions were formulated to help address these research problems:

1. **What factors shape the psychological contract?**
2. **What are the implications of breaking the psychological contract?**

These questions are addressed in Chapters 5, 6, 7 and 8. It was evident from the results of the thesis that issues of trust, fairness and context are important in shaping psychological contracts, and breaking the contract has implications for employee attitudes and at times behaviour. I also propose a new model of psychological contract violation for future research.
Justification For the Research

The research problem is important on several theoretical and practical grounds, which are outlined below:

1. The importance of the employment relationship has long since been recognised by both academics and practitioners (Herriot and Pemberton, 1995). The increased pressures facing organisations have forced a change in the character of the employment relationship (Hiltrop, 1996). It is important to investigate the extent and nature of this change in order to manage employees effectively. Furthermore it is important to determine the implications for the both employee and employer of failing to manage the employment relationship effectively.

2. The psychological contract construct has attracted increased interest. However, Herriot (1998) argued that there is the potential for the psychological contract to become merely a convenient label for the changing employment relationship and to down play its analytical value. This thesis seeks to address such a concern by utilising the psychological contract as an analytical tool for examining the employment relationship and to analyse the contributions of ‘soft’ human resource management. This thesis also aims to describe the development of the employment relationship and finally, to comment on the implications of its disintegration.
3. Many authors (Guest, 1996, 1998; Arnold, 1996; Herriot, 1996; Rousseau, 1995) have argued that the psychological contract suffers from a lack of fieldbased evidence. Furthermore, empirical work has often drawn on MBA students using quantitative methods, for example see Robinson and Rousseau (1994) and therefore downplays the importance of organisational context. This thesis seeks to address this problem by adopting an in-depth, longitudinal case study approach in order to examine the changing nature of the psychological contract within the natural setting of an organisation.

**Methodology**

Traditionally two methodological and ideological stances have been presented in the management literature: positivism and subjectivism, each having a distinct perspective on the way the world should be studied (Burrell and Morgan, 1979). Much debate has surrounded the extent to which such paradigms are commensurable with ‘paradigm warriors’ arguing that the philosophical underpinnings of each paradigm are such that they can never be reconciled (Burrell, 1996; Carter and Jackson, 1997). The philosophical underpinning of this thesis is post-positivism which assumes that the positivist and subjectivist paradigms are compatible (Sayer, 2000).

Like positivism, post-positivism adopts a realist epistemology and believes there is a single ‘reality’ which is independent of social actors (Tashakkori and Teddlie, 1998). However, post-positivism is not merely an extension of positivism but is a distinct methodological approach in itself. It rejects many of the main tenets of positivism...
(Trochim, 1999) in that it contests the notion of ‘grand theories’ due to the lack of attention to contextual variables (Tashakkori and Teddlie, 1998; Sayer, 2000). Furthermore post-positivists reject the view that human behaviour can be explained without examining meaning, and interpretation and consequently the suitability of statistical measurement alone may be questioned (Sayer, 2000).

Two aspects of post-positivism are worth highlighting, the notion of critical realism and transcendental realism. First, in the area of critical realism it is generally held that there is scepticism of the ability of any one technique to measure ‘reality’, as methods are always open to error (Trochim, 1999). This has implications for the research process. Mixed methods are encouraged in order to minimise the concern of the accuracy of measurement and the fallibility of any one technique through triangulation (Tashakkori and Teddlie, 1998). Consequently a mixed methodology was adopted in this research, drawing on both quantitative and qualitative techniques. Second, is the notion of transcendental realism, which refers to the belief that social phenomena are reasonably stable and can therefore be measured in a probabilistic sense, which is contrary to the post modern perspective (Sayer, 2000).

This research investigates issues of the psychological contract in a single case study organisation. Such a unit of analysis allows an in-depth, contextualised study of the psychological contract (Stake, 1994). A traditional criticism of case study research is the limitation of statistical generalisability (Yin, 1994). However, this study can both test models and propose trends thus giving analytical generalisability (Yin, 1994), which can be subsequently be tested for statistical generalisability.
A longitudinal approach has also been adopted which brings time into the analysis frame thereby allowing the assessment of change. In order to achieve this, a mixed methodological approach has been adopted, which is in line with the post-positivist approach. An outline of the data collection process is shown below:

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<thead>
<tr>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude survey</td>
<td>Interviews with all levels</td>
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</tr>
<tr>
<td>of the workforce</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the table above illustrates, two attitude surveys were conducted in 1996 and 2000. This provided trends, which draw on statistical evidence and provided a measure of the extent of ‘absolute’ change in a longitudinal sense. One hundred and fifty interviews were conducted during the time period 1997 – 1999. The value of the interview data was two-fold, first it provided a means of triangulating results and second it meant that the rationale behind the trends could be explored, thereby giving a clearer picture of the nature of the psychological contract.

This section has provided an overview of the methodology of the thesis both in terms of philosophy and the data gathering process and will be discussed fully in Chapter 4.
Outline Of The Thesis

The thesis is composed of nine chapters as described below:

Chapter 2 reviews the literature surrounding the psychological contract. This chapter initially defines the concept of the psychological contract before exploring the theoretical underpinnings and antecedents of the construct, thereby examining the contribution of the concept of the psychological contract to the understanding of the employment relationship. The chapter then turns to the psychological contract literature, examining content and process models. Finally, the literature surrounding psychological contract violation is analysed and a new model of violation is proposed.

Chapter 3 outlines the background to the research. The thesis adopts a contextual perspective that highlights organisational factors. The chapter describes the organisation’s current product portfolio and philosophy as defined by the mission and policy statements. The history of the company is subsequently outlined. The company consists of five distinct sites and the chapter summarises the distinct histories and cultures of each site.

Chapter 4 introduces the methodology adopted in the thesis. The chapter firstly examines the philosophical underpinnings of research by discussing positivist and subjectivist paradigms. The paradigm underpinning the thesis, post-positivist is discussed. The chapter then turns to issues of case study research and longitudinal analysis before outlining the details of data collection.
Chapter 5 presents the findings of the first research question, ‘what factors shape the psychological contract?’ The chapter is divided into three time periods: 1996, 1997-1999 and 2000. The first time period, 1996, outlines the organisational context before presenting the statistical results at the organisational and site level from the 1996 survey. The second time period, 1997-1999 also charts the changing organisational context. This time period draws on qualitative data collected during 1997-1999 at site level. The final time period, 2000, delineates the organisational context before highlighting the results from the 2000 survey at the organisational and site levels.

Chapter 6 discusses and analyses the findings presented in Chapter 5. The chapter focuses on the first research question, factors that shape the psychological contract and analyses the implications of the results for the employment relationship and psychological contract models.

Chapter 7 describes the findings of the second research question, ‘the implications of breaking the psychological contract’. The chapter is divided into three sections: the first section tests the processual model of psychological contract violation, presented in the literature review, by using individual case studies. The second section tests the variance model of psychological contract violation, drawing on statistical evidence from the 2000 survey. The final section draws on attendance data collected by the organisation to explore the extent to which psychological contract violation impinges on absenteeism.

Chapter 8 discusses the second research question which examines the implications of breaking the psychological contract. A new and unique framework of psychological
contract violation is presented and applied, drawing on both the process and variance methodologies and are subsequently analysed in light of the results.

Chapter 9 draws the thesis together by highlighting the principal conclusions. It then turns to the implications the research has for policy and practice. Subsequently the limitations of the research are presented before suggesting areas for further research.

**Definitions**

Definitions adopted by researchers are often not uniform, so key and controversial terms are defined to establish positions taken in the research. As such, there has been debate as to the boundaries of the psychological contract. A number of authors (Argyris, 1960; Levinson et al, 1962; Schein, 1978; Herriot and Pemberton, 1995) have conceptualised the psychological contract as an exchange between the two parties of the employment relationship, with expectations and obligations of both the employee and employer being considered. In contrast Rousseau (1990) adopts a narrower definition which focuses on individual employee’s perception of the mutual obligation. Essentially the debate is concerned with whether the psychological contract is a bilateral relationship between the employer and employees or whether it is unilateral, viewing the employment relationship from the individual employee’s perspective.

Rousseau’s (1990) unilateral perspective has been adopted as a standard for the psychological contract. In this thesis the rationale behind this was that the literature anthropomorphises the ‘employer’ without establishing who or what represents the
employer. Is it management, the owners or an undefined concept? Consequently it is
difficult to establish 'the employers' perspective of obligations and expectations of
employees. There are two issues relating to this point. Firstly managers may have
different perceptions from each other, and secondly managers are also employees and
therefore if managers represent the 'employer', then how do managers define 'the
employer'. As a result the research focuses on employees perspective of mutual
obligations.

**Conclusion**

This chapter has laid the foundations for the thesis. It has outlined the background to
the research and presented the research questions. The contributions and justifications
of the research have been specified and definitions presented. The methodological
philosophical underpinning and the data gathering process were briefly described.
The boundaries of the research were also given. The following chapter reviews the
literature surrounding the psychological contract.
Chapter 2

LITERATURE REVIEW
CHAPTER 2
LITERATURE REVIEW

Introduction

In recent years, economic forces of increasing international competition, deregulation and globalisation of markets have placed considerable pressure on organisations to be flexible, innovative and responsive to customer needs, yet remain cost effective (Hiltrop, 1995). In response to these environmentally driven demands, many organisations have attempted to use their human resources more efficiently, either by ‘leaning out’ production (Robinson and Rousseau, 1994; Robinson, 1996; Turnley and Feldman, 1999; Kanter, 1989) or alternatively externalising labour practices (Allen and Henry, 1997; Cappelli, 1995), although it has been argued that such trends have been overstated (Thomas and Dunkerley, 1999; Salisbury, 1997). These economic changes in conjunction with major organisational restructuring have resulted in the elimination of jobs at all levels of the hierarchy, not merely among the ‘numerically flexible’ groups. Such trends impact not only on the physical characteristics of jobs, but also on the subjective psychological contract between employees and employers (Rousseau, 1995).

This chapter seeks to outline and analyse the body of knowledge surrounding the psychological contract address two key questions through reviewing the current literature:

1. What factors shape an individual’s psychological contract with an employer?

2. What are the implications if such a contract is broken?
In order to address these questions, the structure of the chapter is as follows. First, the grounds of the increased popularity of the concept of the psychological contract will be discussed, before embarking on the issue of defining the psychological contract. The following section investigates the academic roots and antecedents of the concept. The third section seeks to evaluate different conceptualisations of the psychological contract: reviewing the use of the concept as a metaphor to describe changes in the employment relationship, before critically evaluating process and content models. The final section analyses the implications of breaking such a contract through critically evaluating both existing models and by presenting new and a unique model of psychological contract violation.

**The Increasing Popularity Of The Psychological Contract.**

The last ten years have witnessed a renewed interest in the employment relationship through the psychological contract construct (Guest, 1998b). The revival of the psychological contract, in part, reflects changes in the business environment and consequently the reconstruction of the relationship between the employee and employer. In addition the importance of the intangible, social bonds between the two parties through the psychological contract, mirrors, and is reinforced by, the growing acceptance and recognition of the human resource management (HRM) paradigm. The ‘soft’ model of HRM stresses the importance of gaining the commitment and trust of employees (Storey, 1987) and the psychological contract provides a framework through which increased
understanding of such phenomenon may be achieved. The value of the psychological contract, however, is not confined to the realms of HRM. Disciplines such as psychology and sociology have also grappled with the construct to facilitate further appreciation of the complexities of the employment relationship, thus further expanding its profile.

The following section outlines the principal forces behind the increased interest in the psychological contract; the implications of environmental changes; the rise of HRM and the multi-disciplined approach to the psychological contract.

**Changing Economic Environment**

The concept of the psychological contract provides an explanation for, and appears to offer solutions (Herriot and Pemberton, 1995) to, difficulties many organisations are experiencing with the employee-employer relationship (Herriot, Manning and Kidd, 1997). To address such problems Herriot and Pemberton, 1995b) stress the notions of reciprocity, interdependence and negotiation to shape and clarify the expectations and obligations of both parties.

Organisations have experienced pressures from a number of sources, competitors, shareholders and consumers, all which have influenced and shaped the employment relationship. Consequently organisations have encountered the burden of increased competition and globalisation, with mounting pressure to cut costs and remain competitive (Hiltrop, 1996; Tornow and Meuse, 1994; Cappelli, 1995), particularly as managerial success is judged by shareholder value (Cappelli, 1995; Dore, 1997; Hutton, 1995). Additionally, the expectations of
consumers have increased, resulting in more attention to a rapid response time and broader product lines (Hiltrop, 1996). Consequently there has been increased focus on cost effectiveness, often under the labels of organisational and labour flexibility (Cappelli, 1997), concepts supported by government legislation of the 1980s (Cappelli, 1995). Furthermore, information technology has enabled additional streamlining in some sectors, and has allowed the managerial functions of co-ordination and monitoring to be accomplished without the input of middle managers, thus, arguably, diminishing their role (Cappelli, 1998). Essentially employees are no longer insulated from the competitive environment (Cappelli, 1997) through job security; and concepts of internal equity of jobs within a company and the worth of a job are increasingly being governed by market value (Cappelli, 1998).

The importance of context as a reference point to social and business situations should be highlighted as it lies at the heart of any discussion of the employment relationship, and the psychological contract (Herriot and Pemberton, 1997). Society shapes meanings, assumptions and expectations (Giddens, 1993) and these are therefore time and space specific. As a result all contracts are gauged by the standards of their time (Atiyah, 1981). Consequently some concepts may be deemed redundant while others emerge or are created. For example Rousseau (1995) suggested, debatably, that the notion of job security ceases to exist, while the ‘new’ concept of core and peripheral worker is created. The important point is that promises and commitments have no universal or objective meaning but are interpreted according to the values and circumstances of the time (Rousseau, 1995).
The implications of time bounded meanings can be further illustrated by the demographic profile of organisations (Sims, 1994, Hiltrop, 1996). The cohort of 'baby boomers' (those born between 1946-1956) are reaching middle age and bring fixed perceptions and expectations to the job; expectations are characterised by the 'traditional relationship' of job security in return for loyalty and hard work (Sims, 1994). Despite contextual changes and to some extent attitudinal changes of younger generations, 'traditional values' and expectations are retained and are used as a benchmark to measure the extent to which their organisations can be labelled 'good employers'. If an organisation fails to reach such levels, the organisation has breached a perceived promise in the eyes of the employee. Studies indicate that breaching of the psychological contract appears to be an increasingly common phenomenon (Robinson and Rousseau, 1994; Kessler and Undy, 1996; Hiltrop, 1996).

Effects of Environmental Changes

In terms of the employment relationship, economic and social tensions have resulted in trends of redundancies and 'downsizing' (Robinson and Rousseau, 1994; Robinson, 1996; Turnley and Feldman, 1999), particularly at the middle management level (Herriot, Manning and Kidd, 1997), which aim to both reduce costs and increase flexibility. The effects of restructuring may be positive in the sense of increased managerial empowerment, although this is sometimes accompanied by the penalty of excessive workloads and responsibilities (Thomas and Dunkerley, 1999). The disadvantages have more commonly been emphasised in the literature, arguing that restructuring has led to low employee commitment or unwillingness to work beyond contract, both of which encourage

In the existing state of turbulence and change, it has become increasingly unclear as to what employees and organisations owe to each other (Sims, 1994). Furthermore due to external pressures, it is more difficult for organisations to fulfil all the obligations they make to employees (McLean Parks and Kidder, 1994). It has been argued that organisations are only honouring half of the psychological contract; they cannot offer job security, but at the same time they do not want to lose the traditional attributes of commitment and loyalty from their employees (Hiltrop, 1995), assuming that such a relationship did exist (Hall and Moss, 1998). Cappelli (1997) has argued this point strongly in that it is imperative for organisations to have committed, flexible and highly trained employees in order to maintain high performance. Nonetheless, many employees feel that the ‘deal’ has been changed without their consent (Rousseau, 1995). Despite broken promises many employees are dependent on the organisation, which in part stems from the lack of alternative job opportunities (Cappelli, 1995). Additionally, as human capital theory would suggest, the longer an employee works for a specific organisation, the fewer the options there are in the external labour market (McLean Parks and Schmedeman, 1994). This feeling of powerlessness (Beard and Edwards, 1995) is heightened by the diminishing strength of trade unions and their bargaining power (Cappelli, 1995, 1998), although Kessler and Bayliss (1995) predict trade union resurgence because of the very powerlessness employees feel.
Hiltrop (1995; 1996) has argued that the balance of the employment relationship is changing. The ‘old deal’ centred on long-term employment with one employer; consequently the relationship is founded on job security, predictability of progression, shared responsibility and mutual commitment. In contrast it has been suggested that employers are now shifting responsibility by creating opportunities for employees to take care of themselves (Ehrlich, 1994) and fostering nondependent trust (Gordon Sorohan, 1994), thereby breaking the dependency bond and encouraging a short term relationship. The ‘new deal’ will be one in which the employee offers flexibility and professional expertise, and receives in exchange the opportunity to develop and learn new skills, making individuals more marketable both inside and outside the organisation (Brown, 1995; Martin, Staines and Pate, 1998). The new relationship has been characterised by various terms: employability (Bagshaw, 1997), boundaryless career (Arthur, 1994) and the protean career (Hall and Moss, 1998; Newell, 2000). The applicability of such notions in practice has been disputed, and they have been regarded as a desperate attempt of dealing with problems of self-esteem and identity with the demise of the ‘old’ contract (Pascale, 1995).

Environmental adjustments appear to have stimulated changes in the way individuals work nonetheless, the implications of environmental changes should be not be viewed purely in business terms but also social terms and effects may extend to society at large (Heery and Salmon, 2000). Gray (1995) has argued that opportunistic behaviour, which arises from insecurity, may have detrimental effects on community and social solidarity. Furthermore this may manifest itself
in increased crime (Kelly, 1997) and family breakdown (Beynon, 1997; Gray, 1995).

The Rise Of Human Resource Management (HRM)

Contemporary changes and their implications for the employment relationship have been well documented (Beardwell and Holden, 1997; Hiltrop, 1996; Cappelli, 1998; Heery and Salmon, 2000). With the demise of the bureaucratic model of labour, and the rise of the enterprise culture in the 1980s and 1990s, HRM emerged as an important paradigm (McBain, 1997) although the debate continues as to the extent to which human resource management differs from personnel management (Legge, 1995). HRM can be divided into two perspectives, ‘hard’ and ‘soft’ models (Storey, 1987), although the two groups are not necessarily mutually exclusive (Beardwell and Holden, 1997). Firstly, the ‘hard’ side of HRM emphasises strategic use of human resources in order to enhance organisational performance, thereby stressing the need for congruence between business strategy and HR policies. Legge (1995) stressed that from this perspective labour is viewed as a resource, and the employment relationship was described as ‘utilitarian instrumental’. Secondly, the ‘soft’ side of HRM stresses mutuality of the employment relationship and the importance of gaining commitment and trust of employees through participation and involvement (Beer et. al, 1984; Beardwell and Holden, 1997) and adopts the development humanist perspective (Legge, 1995). HRM embraces a unitarist perspective; employer and employers are essentially all working towards common goals and assumes that inherent conflict does not exist between the two parties. Essentially employees are viewed as a resource, which should be developed and are not a ‘commodity’
or a cost (Beardwell and Holden, 1997). The concept of employees as a source of competitive advantage has been long since recognised, as illustrated by the human relations movement (Kissler, 1994). To summarise the HRM rhetoric, HRM as a metaphor "offered unitarism in place of pluralism, optimism in place of uncertainty and progress in place of retrenchment" (Guest, 1998c: 38).

The Harvard model (Beer et al, 1985) has been frequently cited as a framework which delineates the boundaries of HRM. The model acknowledges that there are various stakeholders associated with the organisation, each of which has different interests. In addition, context or situational factors are perceived to be crucial to HR policy choice. Therefore, as contingency theorists would argue, there is not 'one best way' but that it HRM policies must be tailored to the context and strategy of the organisation. The Harvard model also illustrates both 'hard' and 'soft' elements of HRM. 'Soft' elements are highlighted in the HR outcomes of organisational commitment, and the 'hard' elements of cost effectiveness. Therefore the model paradoxically is pluralist in perspective in that it acknowledges different interests but also mirrors the unitarist perspective by stressing the value of organisational commitment. These tensions within the model illustrate the difficulties of defining HRM and building a definitive model (Beardwell and Holden, 2000; Cole, 2000).

With the onset of a new millennium Sparrow and Marchington (1998) outlined three themes in HRM. Firstly, the need for to emphasis a sense of partnership in the employment relationship; secondly, the necessity to forge new psychological contracts and finally to increase flexibility within organisations. Such
recommendations are in response to problems organisations currently face with declining employee motivation, commitment and trust (Herriot, Manning and Kidd, 1997; Ebadan and Winstanley, 1997; Hiltrop, 1996; Newell and Dopson, 1996). The reshaping of the employment relationship poses challenges for leadership (Tornow and De Meuse, 1994; Ehrich, 1994) and has implications for remuneration packages (Lucero and Allen, 1994) and training (Sims, 1994). The challenge is heightened by the tendency of the organisational infrastructure to reinforce the status quo consequently, the emergence of a 'new contract' will result in the equivalent of 'organisational street fighting' when it comes to disentangling the web built to resist such changes to the system (Kissler, 1994). The pathway of change may however be smoothed by attempts to clarify the psychological contract through procedures such as organisational handbooks (McLean Parks and Schmedemann, 1994) or realistic job previews (Hiltrop, 1996), thereby having further connotations for human resource practitioners.

The Psychological Contract: Multi-disciplined Concept

Sparrow (1998) suggested that the concept has achieved popularity because it offers a framework to help make sense of changes in the employment relationship. From a practitioner perspective, the psychological contract has firstly been used to describe changes the employment relationship (Kissler, 1994; Morrison, 1994). Secondly, through practitioner oriented journals, managers have tried to modify individual’s expectations of the relationship such as the diminished sense of job security and by emphasising non dependent trust (Gordon Sorohan, 1994) and employability (Pascale, 1995; Bagshaw, 1997;
Ellig, 1998) and thus stressing the implication this has for career development (Arthurs, 1994; Herriot and Pemberton, 1996; Newell, 2000).

The concept of the psychological contract has also been embraced by the academic community by a number disciplines including psychology (Mansour-Cole and Scott, 1998; Deluga, 1994; Gordon and Nurick, 1981), sociology (Fincham and Rhodes, 1988; Delbridge and Lowe, 1997; Kelly, 1997) and human resource management (Sims, 1994; Rousseau and Greller, 1994; Stiles et al 1997). Academics have firstly aimed to establish the prevalence of changes in the psychological contract (Herriot et al 1997; Guest and Conway, 1998; Rajan, 1997; Sparrow, 1996b) and secondly offered models and theories to advance understanding of the factors that shape the psychological contract (Guest et al, 1996; Herriot and Pemberton, 1997; Rousseau, 1995).

**Defining The Psychological Contract**

The concept of the psychological contract is not a new phenomenon but despite a rich history, one of the difficulties of psychological contract terminology is that it has been used to describe a range of phenomena; including expectations (Morrison, 1994; Levinson et. al, 1962) and promises (Rousseau and Wade-Benzoni, 1994; Rousseau, 1989). Indeed it has been argued that “historically, each researcher or writer has defined the psychological contract in some way that she or he feels suitable, or has adopted one of the existing definitions, with little or no explicit consideration of competing views of the contract” (Roehling, 1997:214).
The following section begins with the origins of the concept in the 1960s and traces its application to current research. This historical approach is important in 'unpacking' the concept of the psychological contract and clarifying the confines of the investigation. Competing definitions and boundaries are critically evaluated and unanswered questions are posed. It is important as the concept of the psychological contract becomes more popular and accepted, that the subtlety of meaning is not lost in the generalisations of the latest 'buzz words' or that it becomes part of the unquestioned terminology used in describing the employment relationship (Beardwell, 1997; Guest, 1998a; Sparrow, 1998).

Research From The 1960s To 1980s.

The employment relationship has been recognised as a multi-faceted construct. Consequently it is unsurprising, due to its complexity, that the concept of the psychological contract has been criticised for lacking clarity of content and confine (Littlefield, 1997). The psychological contract broadly focuses on the employment relationship at an individual and perceptual level (McFarlane Shore and Tetrick, 1994). Therefore it is highly subjective and is not bound by explicit written terms and conditions. However, the focus on perceptions causes further challenges for defining the concept, as individuals may perceive events in different ways (Rousseau, 1995).

At a surface level, there would appear to be an agreement of definition, which refers to the mutual expectations of an employer to an employee and vice versa. Nonetheless, it is not until definitions are studied more closely that it becomes
clear that the term psychological contract can often have very different meanings and interpretations.

Both Argyris (1960) and Levinson, Munden, Mandl and Solley (1962) have been credited with the origins of the term in the early 1960s. However, their conceptualisation and notion of the psychological contract were in fact very different. Argyris (1960) used the term ‘psychological work contract’ to describe the shared cultural norms and values of a group of ‘rank and file employees’ with their immediate supervisor.

By contrast, the definition used by Levinson et al. (1962) is much closer to what is now recognised and understood as the psychological contract. He suggested that the psychological contract was “a series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but which nonetheless govern their relationship to each other” (Levinson et al 1962:21).

The psychological contract is therefore a bilateral relationship. More specifically, on the employee’s part, Levinson et al. (1962) distinguished between unconscious expectations, for example nurturance, and conscious expectations such as job performance. From an organisational perspective, expectations stem from company history, business environment and culture. Moreover expectations are largely implicit and evolve according to the changing needs of the two parties.

Levinson et al. (1962) also indicated that the concept of the psychological contract should not merely be conceptualised in terms of one contract, namely between employee and employer, but that a number of contracts exist between
different groups of employees, resulting in a complex set of relationships. In short, they argued that psychological contracts may be viewed as “collateral agreements that have bearing on the person-organization relationship” (Levinson et al, 1962:38).

Kotter (1973) builds on Levinson et al. (1962) conceptualisation and defines the psychological contract as “an implicit contract between an individual and his organization which specifies what each expect to give and receive from each other in their relationship” (Kotter, 1973:92). In contrast to Levinson et al. (1962), Kotter perceives the contract as only being between two parties, the employee and employer. However, in addition, the definition suggests that the expectations are largely explicit and known, albeit not in a written form and draws on the notion of 'matching' to describe the consensus between employee and employer. However the psychological contract literature stresses that aspects remain unclear and unknown to each party (Rousseau, 1995).

This notion of visibility of expectations was highlighted by Portwood and Miller (1976) who defined the psychological contract as “an implicit agreement negotiated between the employee and employing firm, usually at the employee’s time of entry, and it is a recognition of mutual obligations to be fulfilled by both parties in the course of their association.” (Portwood and Miller, 1976:109). The concept of negotiation arises in the definition, suggesting again that the content of the contract is to a large extent known. Perhaps the area of most interest is the introduction of the notion of obligation. An obligation suggests that two parties
are involved in a legal or moral bond, an agreement, whereas an expectation is only from one party's perspective with no certainty of agreement.

Thus far, incongruences have taken the form of, firstly, the extent to which expectations or obligations are known by both parties and, secondly, the extent of 'promise making'. Nicholson and Johns' (1985) study applied the psychological contract to absenteeism at work and in doing so has added a new dimension to the concept, conceptualising the psychological contract at a collective, cultural level rather than focusing on an individual basis. They suggested that "the psychological contract emerges from interaction and communication, effectively dictating how culture is acted out" (Nicholson and Johns, 1985; 398). Therefore it is "the psychological mechanism by which collective influence is translated into individual behaviour" (Nicholson and Johns, 1985; 398). Although it is suggested that the psychological contract acts as an 'individual-organisational linkage', the idea of culture and collective meanings is emphasised, thereby the psychological contract assumes a structuralist perspective in that those of the same groups, for example occupational class, will share the same psychological contract.

From the literature of the 1960s to 1980s two key questions arose. Firstly, 'who are the parties in the psychological contract?' and 'is the psychological contract between an employee and employer or is it more complex, with multiple contracts among colleagues as well as the employer?' Moreover, the definitions anthropomorphise the 'employer' where 'the employer' has thoughts, feelings and expectations. But it is important to establish who or what represents 'the
employer'. The second key question is ‘to what extent is there a legal or moral bond?’ ‘Expectations’ are created by only one party whereas ‘obligations’ suggest some perceived agreement by both parties.

Recent Research

In the last ten years the concept of the psychological contract has experienced resurgence with increased research in the area. However, the extent to which questions posed by earlier research, concerning definitions, have been answered is debatable. The question of defining the parties to the psychological contract has to an extent gained more clarity. The majority of recent writers define the psychological contract at the individual level, not group or inter-organisational (Rousseau, 1989; 1998); therefore it is based on individual employees’ perceptions. However, concepts continue to anthropomorphise the ‘employer’. The question of whether employees perceive ‘the employer’ as an abstract phenomenon, or if it is represented through management, remains unanswered.

The extent to which there is a mutual moral bond is unclear. In recent literature, Herriot, Manning and Kidd (1997) view it as "perceptions of mutual obligations" (Herriot et al, 1997: 151). Rousseau (1989:125) emphasises a promissorial element; “the psychological contract refers to an individuals’ beliefs regarding the terms and conditions of a reciprocal exchange agreement…key issues here include the belief that a promise is been made and a consideration offered in exchange for it". Thus an obligation has been created. These terms suggest an agreement between the two parties to some extent, although the idea of
‘promises’ takes the notion of obligation a stage further in that not only is there a bond but an assurance of fulfilment of a specific deal.

Following on from this notion of obligation, Roehling (1997) suggested that early writers imply the contract consists of mutual perceptions (Kotter, 1973; Levinson et al, 1962; Schein, 1965). In contrast recent literature emphasises that the employee and employer may not hold the same views (Rousseau, 1995), moreover parties may not be fully aware of the nature or content of the psychological contract (Rousseau and McLean Parks, 1993). This is perhaps paradoxical, with recent writers’ use of the terms obligation and promises that suggest some agreement between the two parties.

Summary: Definitions Of The Psychological Contract

Research on the psychological contract portrays a number of variances in conceptualisation. There does appear to be a consensus that the contract is implicit and at the perceptual level. Furthermore, there is agreement that the psychological contract is a dynamic and changing entity, which is open to reinterpretation. However what is not clear is, firstly, the extent to which each party is aware of the content of the psychological contract. Moreover, it is not clear as to the extent to which there is an agreement or bond. The debate surrounding expectations (Morrison, 1994) versus obligations (Herriot and Pemberton, 1997) and promises (Rousseau, 1989) imply different psychological engagements with the organisation (Guest, 1998b). Thirdly, confusion has arisen surrounding the boundaries of the psychological contract. Argyris (1960), Levinson et al (1962), Schein (1978) and Herriot and Pemberton (1995b) have
suggested that the term involves an exchange relationship between two parties and therefore analyse expectations and obligations of both the employee and employer. In contrast Rousseau (1990) has introduced a narrower definition which has focused on individual employees' perception about mutual obligation. Therefore there is a debate as to whether the psychological contract involves a bilateral relationship between an individual and the organisation, or whether it is unilateral from an individual's perspective (Anderson and Schalk, 1998).

For the purpose of this thesis, Rousseau's (1990) definition has been adopted which conceptualises the psychological contract as an individual's perception of mutual obligations. The study of the psychological contract from a bilateral perspective requires a clarity of who or what the 'employer' is, as defined by employees. Further research is required to ascertain if senior management represent the employer or whether it is a more complex phenomenon. In addition this thesis examines the psychological contract in terms of obligation and promises of organisations to employees, which implies perceived agreement and is in line with Herriot and Pemberton (1997) and Rousseau, (1989). Expectations are only considered in respect to their influence on perceived obligations.

Theoretical Underpinning Of The Psychological Contract

The following section sets out the 'roots' of the concept by exploring the theoretical underpinning behind the psychological contract and by examining antecedents of the construct. The psychological contract draws upon a number of theoretical disciplines. However, due to the holistic quality of the psychological contract, the explanation by a single discipline is not sufficient in itself.
Consequently, the construct can be seen as a synergy of ideas, almost at the pragmatic level, as often ideas are in conflict on an ontological and epistemological level.

The following section firstly examines the employment relationship from the legal and economic perspective, as both disciplines are noted for their contribution to the concept of contracting (Rousseau, 1995). Subsequent discussion critically examines the contribution of psychology and industrial sociology to further clarification and understanding of the psychological contract.

**Legal Perspectives Of The Employment Relationship**

Traditional perspectives on the employment relationship and the concept of 'contracting' are dominated by the legal profession, with the emphasis on written terms and conditions of the formal employment contract (Rousseau, 1995). In recent years there has been increased stress placed on expressly written terms and this, in part, reflects a move towards a market control based relationship and is exacerbated by an increasingly litigious society, which makes employers more defensive (McLean Parks and Schmedemann, 1994).

The role of the formal contract is to outline the nature and function of employment (Selwyn, 1993). Contract law is seen as providing 'default rules' by which transactions occur (Deakin and Wilkinson, 1998). From a legal perspective, contract terms are expressly stated, usually in a written form. Even an unwritten implied term must be "so obvious that the parties did not see the need to state it expressly" (Selwyn, 1993; 65-6), although in practice contacts are
not always clearly defined and are consequently a source of litigation (Spindler, 1994). Spindler goes on to stress that, “the employment relationship is one which runs the entire contract spectrum from the strictly legal to the purely psychological” (Spindler, 1994:327), and to focus on the legal end of the spectrum only gives a limited view of the complexities of the relationship. As such, no formal contract can predict or address every element of the employment relationship (Katz and Kahn, 1966).

The psychological contract helps to reduce individual uncertainty by establishing perceived agreements upon conditions of employment (Morrison, 1994). Furthermore the idea of a contract and negotiation gives employees a sense that they are able to influence their destiny in the organisation (McFarlane Shore and Tetrick, 1994). The weaknesses of the legal perspective is that the relationship is viewed on a static, short term basis, without reference to personal interactions of employees with their employers; a focus on ‘hard’, objective outcomes, disregarding or downplaying the ‘soft’, subjective issues (Rousseau, 1995).

The Economic Perspective Of The Employment Relationship

Economic or monetary aspects often play an important part of the employment contract. From an economic perspective, contracts are conceptualised as economic transactions that focus on monetary terms and transactional costs (Williamson, 1990) and may be expressed in terms of transactional cost economics. Transactional cost economics takes a rational, neo-classical view of labour and adopts the notion of ‘economic man’ (Brown, 1988). Within this concept, two important elements are important. Firstly, employees are perceived
in terms of utility maximisers, who act in a self-interested manner to gain maximum financial benefit. Secondly, 'economic man' assumes methodological individualism, that the employment relationship is between individual actors, and that there is no referent to social relationships or networks (Brown, 1988). Therefore from a transactional cost economics perspective actors are self seeking and opportunistic with the principle of maximising returns at all times (Williamson, 1993). For that reason, in terms of the employment relationship, employees' motives focus on self interest and their endeavour to obtain the best terms, conditions and salary as possible.

The economic perspective conceptualises the employment relationship as being rationally constructed and is based on opportunism on the part of the employee and employer. The limitations of such a perspective is that by focussing on rationality, there is a failure to consider how social factors, such as groups or social networks, may undermine rational intentions (Lane, 1998). Moreover, transactions are seldom conducted in 'anonymous clinical circumstances' and the role of social relationships and trust are important because it is impossible to calculate with any level of certainty others behaviours, therefore there is always an element of risk (Smitka, 1994). The economic perspective only offers a limited view of the employment relationship and underestimates the value and potential of the social relationship (Rousseau, 1995).

Psychological Perspective Of The Employment Relationship

The concept of 'contracting' is often associated with legal and economic perspectives, therefore the term psychological contract may appear ambiguous.
However, the psychology literature plays an important role in defining the nature of contracting (Roehling, 1997), although many psychologists would argue that there is very little ‘real’ psychology behind the concept. In one sense the psychological contract is part of the psychological tradition, as one aspect of the paradigm is to explore the cognitive process of contracting, considering concepts such as social exchange (Blau, 1964) and equity (Adams, 1963; 1965; Barnard’s (1938). Social exchange theory is based on the assumption that if an individual does a service for another voluntarily, that other party has an obligation to that person (Blau, 1964), albeit unspecified obligations, therefore in a sense it is the beginnings of an unwritten contract.

Equity theory (Adams, 1965) is also important in the concept of contracting. Equity theory employs an exchange perspective and describes the conditions of employee participation. Employees will continue their participation so long as the contributions offered to them are as great, or greater (measured by individuals’ values), than the contribution employees are asked to make. The notion of exchange underpins the concept of the psychological contract, more specifically the contract element. The psychological aspect of the construct refers to the notion that the terms and nature of the contract are not written, but are based on perceptions of individuals.

Psychologists have utilised the concept of the psychological contract; indeed the clinical perspective of the psychotherapist-patient contract is credited with having made a substantial contribution to the origination of the psychological contract construct (Levinson, Price, Munden, Mandl and Solley, 1962). The
psychologist's perspective seeks to explore how social relationships in an organisational environment may actually affect the behaviour of an individual. Schein (1965) emphasised the importance of the psychological contract to understand and manage behaviour in organisations. He suggested that “expectations such as these are not written in any formal agreement between employer and organization, yet they operate powerfully as determinants of behavior” (Schein, 1965:11).

**Contribution of the Psychological Perspective**

The psychological perspective has played an important role in the development of the concept of the psychological contract. The principal aim of psychology is to understand why a person behaves in a particular way; the objective is to predict behaviour (Fincham and Rhodes, 1988). However, the psychological contract construct does not fit neatly into the psychological tradition. Industrial psychology is simply “the application or extension of psychological facts and principles to the problems concerning human beings operating within the context of business and industry” (Blum and Naylor, 1968:4). Therefore the industrial environment is of secondary importance to the intention of predicting behaviour. Thus the psychological standpoint takes a limited view of the worker, the chief focus is the individual, and views social behaviour as nothing but the actions of individuals. Walker argued that individuals do not work or act in isolation, the importance and influences of groups should not be underestimated. The psychology paradigm has also been criticised for being excessively reductionist and for the lack of consideration of the wider interplay of social exchanges in the workplace (Struass, 1979; Hartley and Kelly, 1986; Walker, 1975). Furthermore
the lack of attention to social context is exacerbated by the methodological
tradition of psychology. Psychology embraces the scientific, positivist paradigm
(Strauss, 1979; Hartley and Kelly, 1986); consequently a key objective is to
study the phenomenon in isolation and test hypotheses under controlled
conditions. This is to understate the importance and the influence of the context
of the organisation, issues that are central to industrial sociology and thereby
exemplifying the significance of the school of thought.

Sociological Perspective

Genealogy Of The Social Contract

In terms of genealogy, the concept of contracting also stems from the work of
Locke and Rousseau and the social contract (Roehling, 1997). The
psychological contract may be conceived as an extension of the philosopher’s
notion of social contracts (Schein, 1980:22). Gough (1978) distinguishes
between two types of contract, both of which are referred to under the label of
'social contract'. One form of the social contract deals with the origins of the
state and is associated with the notion of 'natural' rights (Giddens, 1993).
Another form of the social contract presupposes the existence of the state, and
centres on the contract of government or 'contract of submission' (Giddens,
1993). The latter notion of the social contract is an agreement regarding the
reciprocal rights and duties of the state and its citizen, for example the governed
promise to pay duties and taxes in exchange for security and protection. At this
level the parallels in the notion of exchange become obvious.
Nevertheless although the psychological contract can be viewed as the conception of the social contract. The psychological contract focuses on reciprocal agreements in the realms of work. More specifically it deals with ways of organising social relationships at work (Morrison, 1994) and not the broader unit of analysis of state and citizen.

_The Influence Of Industrial Sociology_

The limitations of the psychological perspective for the psychological contract lie principally in the lack of recognition of the importance of context. The contribution of industrial sociology is its ability to focus on contextual matters. Industrial sociology scarcely existed before the Second World War, research on social problems within industry was dominated by the psychological tradition (Brown, 1992). In contrast to the psychological perspective, the sociological perspective assumes that no action is made in isolation or in a vacuum, but relates to the wider culture, social structure and social processes (Watson, 1987).

Sociology seeks to understand individualistic explanations and also wider social factors, and the interplay between the two (Watson, 1987).

An integrated approach to sociology does not exist; but a number of distinct standpoints are evident. The following section discusses a number of sociological perspectives in particular orientations to work, system theory, the Marxist and post modern perspective and their contribution to the psychological contract.
**Orientation To Work Approach**

The ‘orientation to work’ thesis concentrated on the effects of socialisation on attitudes to work (Brown, 1992). The classic study was Goldthorpe and Lockwood’s “Affluent Worker”, which examined the attitudes and behaviour of assembly line workers in Vauxhall plant in Luton. Goldthorpe et al (1969) argued, controversially, that attitudes were largely formed outside the workplace. More specifically to define the orientation to work thesis: “the meaning attached by individuals to their work which predisposes them to both think and act in particular ways with regard to that work” (Watson, 1987: 86). Goldthorpe et al (1969) argued that people do not possess an innate orientation towards work as Wright Mills (1956:215) commented “neither love nor hatred of work is inherent in man, or inherent in any given line of work. For work has no intrinsic meaning.” Consequently attitudes to work are a result of socialisation through both broad cultural values and ideologies and sub-cultures (Fox, 1971; Goldthorpe et al, 1968). It was argued that the socialised underlying orientation to work promotes employees’ perceptions of work and therefore the organisation.

Goldthorpe et al (1969) identified three distinct orientations to work: instrumental; bureaucratic and solidaristic orientations. Those with an instrumental orientation to work have limited social and emotional involvement with the organisation and what involvement they do have is calculative and opportunistic. The job is merely a means of earning a living, with a sharp divide between work and non-work relationships. In contrast, the bureaucratic orientation to work is characterised by an individual’s need for career progress and there is some sense of obligation to the organisation. Typically the
individual’s self esteem and identity is linked to their position and prospects within the organisation. An individual with a solidaristic orientation to work has a strong bond with colleagues or the organisation, there is potentially a ‘moral’ identification with the organisation, however, there is potential for it to become an alienative situation if the bond with colleagues is stronger than with the employer.

In terms of the employment relationship, employees’ orientation to work shapes individuals’ priorities, and therefore the content of the bargain or implicit contract and the connection is clearly illustrated (see Watson, 1987: 102 or appendix 5). Watson (1987) emphasises the connection between the orientation to work approach and the psychological contract, and presents the employment relationship in terms of bargaining positions. The employee offers resources in terms of skill and knowledge however, the extent to which they are applied so that the company benefits is, in part, determined by the motives, expectation and interests of an individual, factors which Goldthorpe et al (1969) attribute to socialisation outside employment, namely class, education and family background.

Analyzing The Orientation To Work Approach

The value of the orientation to work approach is that it avoids the insular perspective of focusing wholly on the organisation itself. Furthermore it emphasises aspects of employee behaviour which are attributed to non-work sources and situations, thereby sustaining the idea that socialisation outwith the workplace impinges upon expectations of work (Brown, 1988).
However, in terms of explaining the employment relationship the approach has a number of weaknesses. First, has been criticised for over emphasising external factors that influence an employee’s initial choice of job. Nonetheless, socialisation is only one part of the employment relationship, it may account for an inherent perception but that is not to say that it cannot be changed (Daniel, 1973). Additionally Thompson (1989) argued that there should be a distinction made between working (the immediate work experience) and coming to work (ideology). For example, the experience of the immediate job may not be congruent with an individuals’ basic ideology of work but that is not to say that the ideology will necessarily change. Third, the orientation to work approach assumes that people in particular groups will view things in the same way, the psychological contract does not embrace a collective perspective but is applied at an individual level. Finally the perspective also assumes that an individual’s behaviour and attitude is freely expressed however it has been criticised for giving inadequate acknowledgement to the constraints within which the employee has to act (Brown, 1988).

Systems Theory

The orientation to work approach emphasises the importance of socialisation out with the work environment however does not address inter-relationships within the workplace. Systems theory, in contrast, focuses on such inter-relationships and interdependencies (Brown, 1988). Parsons (1951) was influential in the development of systems theory, and between mid 1950s to 1970s it virtually became an orthodoxy (Watson, 1987).
The systems concept has been associated with functionalism, where the focus is on the contribution elements of any social system make to the maintenance and persistence of the system as a whole. An underlying assumption is that the organisation acts within an open system therefore stressing the importance of the role of the external environment (Grint, 1991). A fundamental belief of systems theory is that an organisation must find coherence between elements of the organisation and the external environment, thereby maintaining equilibrium.

**Analysis Of Systems Thinking**

The value of systems theory is that it highlights the importance of context and is a counter to the over individualistic approaches such as the psychological perspective. Essentially the systems approach emphasises that the employment relationship can not be studied in isolation, due to the importance of both economic and social contexts. However, the systems approach has been criticised on a number of grounds. Firstly, the organisation has been described at an anthropomorphic level as it views the organisation as a distinct and coherent entity; therefore 'the organisation’ almost becomes separated from those who compose it. This obscures and underplays conflicts of interest within an organisation (Brown, 1992).

Secondly, systems theory studies the interaction between elements of a system; such elements are said to be homogeneous. Employees are a constituent of the internal environment and perceived to be a single group, a single entity, essentially all employees are the same. If the systems approach is taken too far
there is the potential to omit totally the role of the people involved (Watson, 1987). Furthermore, the perspective has a tendency to over emphasise integration and consensus and supports a unitarist perspective, therefore all parties are assumed to have a common set of beliefs (Watson, 1987; Brown, 1988). Within an employment relationship, this is not realistic; it denies inherent conflict (Grint, 1991). The psychological contract adopts an individual perspective in that it focuses on the relationship between the individual employee and the individual employer, thereby retaining the unique identity of the individual. In contrast systems theory operates at the macro level and whereas these tensions do impact upon the psychological contract, it is perhaps part of the day-to-day dynamics of that contract.

*Marxist Perspective*

Unlike orientation to work approach or systems theory, Marxism is part of the critical theory school of sociology. It has been argued that Marxism is not just a theory, but a method of analysis, one which does not divide polity, economy and society, and one which tries to unite theory and practice (Watson, 1987). It has been suggested that the recent revival of the Marxist perspective can be understood as “part of a reaction to the tendency of much academic sociology to be consensus-oriented, to be non-critical at best and justifying the status quo at worst and also to its tendency to restrict its attention to the ‘social’ at the expense of the economic and political” (Watson, 1987: 51).

Gramsci (1978) studied the influence of the permeation of the beliefs and values to the whole economic and social system. The underlying rationale of Marxism
is that society is made up of those who own the means of production (bourgeoisie) and those who sell their labour, the proletariat. It is assumed that each group is interdependent but in conflict. It is argued that the bourgeoisie dominate the superstructure of legal, political and cultural institutions and therefore can exert power of the proletariat thus allowing the capitalist system to operate (Gramsci, 1976).

An underlying assumption of Marxism is that humans achieve fullness of their humanity through their labour (Watson, 1987). However the conditions under which they perform this are crucial, as under the capitalist system, power is uneven and owners aim to extract maximum work from individuals or ‘surplus value’, in order to maximise profits (Thompson and McHugh, 1995). Consequently the employment relationship is characterised by an inherent conflict between those who own the means of production and those who sell their labour. It has been argued that alienation has resulted as a consequence of the capitalist system. Erikson and Vallas (1990:21) defined alienation as “the process by which human beings are cut adrift from their natural moorings in the world as the result of unnatural, alien work arrangements”. They argued that sources of alienation stem from the increased subdivision of labour and skills and organisational structures are such that they control workers and undermine their professional autonomy.

In terms of the employment relationship, the value of the Marxist perspective is that it provides a critical perspective on the underlying assumptions of capitalist organisations. A crucial point is that Marxism, through concepts such as
alienation, focus on the subjective experience of employees. It can perhaps be argued that employees have a distinct type of psychological contract, albeit in a negative form.

_Evaluation Of The Contribution Of Marxism._

The Marxist debate provides a critical perspective on the employment relationship. It emphasises the prominence of control and co-operation in the study of organisations (Brown, 1992). In addition, it avoids an insular perspective, by emphasising the relationship of social relations within both work and those outside the workplace (Brown, 1988).

It is important initially to consider the Marxist interpretation and underlying assumptions for the employment relationship. The Marxist perspective is grounded in economic arguments, distinguishing between those who own the means of production and those who sell their labour. In terms of the employment relationship, it is perceived that there is an inherent conflict between the employer and employee, the consequence of which is alienation. This standpoint is based on economic determinism, in that all capitalist production systems are based on exploitation. Additionally, the primary concern of Marxism is with large scale, historical change, and essentially a revolutionary transformation. The question arises, can its concepts be separated from this overall context or society and history (Brown, 1988)?

The Marxist perspective contributes to the psychological contract construct in that it offers a further perspective on the employment relationship, but like
systems theory, on a macro level. It segregates by class, and assumes that all people in that class have the same psychological contract and therefore are a homogeneous group. As iterated before the psychological contract views the relationship at the individual level.

The Marxist perspective is critical of the capitalist mode of exchange, and assumes that alienation an inevitability of such a system but is it? It is argued, debatably, that there has been a move from coercion to consent, stemming from increased internal labour markets and individualism (Thompson, 1987). Furthermore, conflict has been addressed through institutionalisation through trade unions or HRM policies (Thompson, 1987), thereby reducing it or at least containing it.

Post Modern Perspective

The post modern perspective offers a distinct view of ‘reality’ based on a subjectivist epistemological stance and provides a critique of conventional sociology. Furthermore, the post modern perspective rejects the existence of a universal objective reality, a reality that is independent of actors, but rather that humans construct their own ‘reality’ through interaction with others. Therefore each employee will have a very different perspective on the employment relationship, based on his or her specific interactions with the employer. The underlying assumption is that the individual and society are independent units, although to an extent interdependent, but the relationship is not arrived at in a deterministic fashion (Watson, 1987). Therefore the employment relationship is
viewed from an individualistic perspective, not from a collective, societal viewpoint.

The post modern perspective, like Marxism, offers a critical perspective on organisations. Organisations are viewed as a means of exerting both material and ideological control (Grint, 1991). Derrida (1973) argued that organisations aim to hide the uncertainty of life via a façade of control and rationality, therefore this prevents recognition of the ‘real’ nature of the social world (Knights and Willmott, 1989). In terms of the employment relationship, Foucault (1980) argued that organisations are maintained by covert systems of control and discipline, which are set in the rules and framework of the organisation. Rose (1988) suggested that terms of employment, work organisation, supervision structure, employee representations and commitment to the organisation are all control mechanisms.

At one level the psychological contract could be perceived as another means of control, if the employer is aware of the nature of the contract and if they seek to change it. However, on another level, the psychological contract is ‘owned’ by the individual employee, and due to its subjective nature it remains their own therefore the extent to which it is a mechanism of control is debatable. Although power relations are not equal, and due to history, organisational culture and the institutional network, employees ‘give’ power to managers, power is not innate but socially constructed (Foucault, 1980).
The value of this perspective is that it moves from the generalist to the individual level, and argues that there is no one contract, as an individual's view of reality, dictates the nature of the relationship, thus it is an individual contract. However, post modernism itself is a perspective, and not a theory, and does not assist further appreciation of the employment contract itself but provides a different mechanism for considering the contract. The perspective promotes debate but actually raises more questions than it answers because it assumes uniqueness thus no generalisations can be made.

Contribution Of Theoretical Background

In reviewing the literature what becomes evident is that there is a solid bedrock of academic study surrounding the employment relationship. Nonetheless there remains no consensus on the means of conceptualising it; indeed most interpretations have very different theoretical presuppositions (Brown, 1988). There appear to be three principal debates in conceptualising the employment relationship. Firstly, there are theoretical debates surrounding the level of study, essentially whether the employment relationship should be studied on an individual or collective basis. The level of study for the orientation to work approach and the post modern perspective is an individual basis. In contrast, systems theory and Marxist interpretation view the employment relationship in collective terms, assuming groups have homogeneous perceptions. Second, the role of macro environment in understanding the employment relationship has been debated. Systems theory, Marxist interpretations and the orientation to work approach look out with the immediate work environment for factors that affect
employees’ attitudes and behaviour at work. Nonetheless, each approach has very different underlying assumptions and emphasises different variables in the macro environment, orientation to work views socialisation as key, while Marxist interpretation focuses on the economic system as characterised by the inherent conflict between the bourgeoisie and the proletariat. Systems theory, in contrast, argues that there is equilibrium between the external environment and the organisation. Third, the character of the employment relationship between employer and employee is debated; whether there is a potential for harmony or if there is an inherent conflict between the two parties. Systems theory assumes a unitarist stance, with focus on harmony and balance; in contrast, the Marxist perspective defies that such a harmony is possible, and that the employer and employee relationship is characterised by an inherent conflict of interests.

Despite differing interpretations what does become clear is that the employment relationship cannot be explained in narrow economic terms, and that behaviour at work is influenced by a number of social factors albeit that interpretations differ among perspectives.

The contribution of strands of the reviewed literature can be found in many of the models of the psychological contract. The psychological contract has been perceived in terms of tensions between the internal and external variables, through processual models (Herriot and Pemberton, 1997; McFarlane Shore and Tetrick, 1994) and is in line with systems theory. However, there has not been the same emphasis on harmony and balance but stress the potential for differing opinions between employee and employer. The orientation to work approach
emphasises the need to examine social factors out with the workplace, and both linear (Guest and Conway, 1997) and processual models (Herriot and Pemberton, 1997; McFarlane Shore and Tetrick, 1994) incorporate the wider social environment, although it is not their central focus. The value of the Marxist and post modern perspectives is that they provide different and critical ways of viewing the employment relationship. They are more radical in the sense that they challenge many of the underlying assumptions of traditional perceptions of the employment relationship. Marxism criticises in terms of the whole basis on the capitalist system and post modernism challenges universal and collective perspectives.

The psychological contract has tried to address traditional concerns of those studying the employment relationship. What the theoretical underpinnings provide are perspectives of the employment relationship, each emphasising different variables. However, many of the strands of the theoretical background, while commenting on the employment relationship, come from very different perspectives and emphasise different facets of the relationship. For example the Marxist perspective focuses on class differences and the inherent conflict in the capitalist system while systems theory focuses on the integration of internal and external environment. The orientation to work approach also centres on the variables outside the world of work but from a sociological perspective, which examines individuals’ socialisation and the implications this has for an individual’s approach to work. Therefore, while the theoretical strands play an important part in the understanding of the psychological contract, the concept is more than its genealogy. However basic assumptions behind the underpinning
literature are often in competition between perspectives and also challenge many of the presuppositions of the psychological contract. The fundamental the focus is different, unlike the psychological contract, the reviewed perspectives do not seek to understand the changing nature of the relationship between employee and employer, and this is where the gap is most evident.

The Role Of The Psychological Contract In The Understanding Of The Employment Relationship

The extent to which the psychological contract is a new phenomenon has been questioned. Huczynski (1993) has argued that all management theories can be traced back to six families: bureaucracy, scientific management, administrative management, human relations, neo-human relations and guru theory. The concept of the psychological contract is no different and can be incorporated as an element of the neo-human relations movement. Furthermore the aim of the psychological contract is also nothing new as it aims to increase understanding of the world of work mores specifically, the employment relationship, on which there is a rich history.

A further criticism is that psychological contract is merely a fad, which is in need of further conceptual and empirical work (Arnold, 1996). A ‘fad’ has been described as a ‘short lived fashion’ by the Oxford English Dictionary (1997). The psychological contract has its origins in the 1960s, and although the use of the construct has experienced a resurgence in the last ten years, a decade itself is still a significant period of time and perhaps exceeds the notion of ‘short term’ in
itself. Furthermore the implications of a fad is that they have little substance. The psychological contract is part of a large body of literature with roots in a number of disciplines such as psychology and sociology. Therefore the construct has a solid bedrock of literature on which it can build on.

The psychological contract has been applied in a number of ways, one of which is to use it as a metaphor for describing changes in the employment relationship (Millward and Brewerton, 1999). At this level there is a danger that it becomes a convenient label with little substance behind it. In addition, Herriot (1998) highlights the potential for the psychological contract to become a rhetorical device, with the ‘old’ contract of loyalty in exchange for security being seen by implication as ‘bad’ and ‘new’ employability concept as ‘good’ merely because the use of the term ‘old’ implies that it is out of date and bad whereas ‘new’ suggests progressive and forward thinking and therefore ‘good’. A number of authors (Guest, 1996, 1998; Arnold, 1996; Herriot, 1996; Rousseau, 1995) have expressed concern over the use of the term and stress the need for further empirical work and the development of the psychological contract as an analytical construct. The very highlighting of such concerns and the need for further research should diminish the notion of the psychological contract as a fad and a concept that is worth developing.

A further criticism of the psychological contract surrounds the use of established constructs such as job satisfaction, commitment and trust. It is acknowledged that many of the components of the psychological contract are well established constructs, however, this can in fact be used to the researcher's advantage, for
example, in measuring such phenomenon. Nonetheless what is distinct about the psychological contract is its holistic nature; it aims to explain and understand the employment relationship between the employee and employer and all its complexities. To fulfil this objective, numerous factors must be taken into account. Therefore despite the psychological contract being made up of 'known' and established constructs, it is the relationship between them which is important and the way in which they affect the perceptions of the employment relationship as a result, the concept has the potential to integrate a number of key constructs (Guest, 1998a). Additionally, the psychological contract does not only draw on established constructs but has provided new concepts, such as breach and violation (Robinson and Rousseau, 1994), which give a different perspective on the employment relationship.

A further criticism is that it has been argued that the concept is 'all things to all people', reflecting debates of focus of expectations and obligations and level of analysis with application at the group or individual level (Roehling, 1997). Rousseau (1998) has argued that for contemporary researchers there is clarity and coherence, emphasising beliefs regarding reciprocal obligations at the individual level. Furthermore she has argued that there is construct validity as researchers consistently find that violation of the psychological contract is different from unmet expectations. Additionally she has argued that different responses of those with predominantly transactional against relational contracts have been noted suggesting that the psychological contract is both 'specific and rigorous' (Rousseau, 1998).
The influence of the psychological contract has increased with the notion of the transformation of the employment relationship. Sparrow (1998) has argued that the psychological contract may aid both researchers and practitioners understand the extent and the nature of change of this complex phenomenon. Furthermore, Anderson and Schalk (1998) suggested that the psychological contract has high face validity with employees and employers and therefore has achieved credibility with practitioners. Moreover, much of the research (Rousseau and Greller, 1994; McLean Parks and Schmedemann, 1994; Lucero and Allen, 1994) has practical recommendations to make and has implications for policy makers (Guest, 1998a). Therefore, not only does the psychological contract ‘capture the spirit of the times’ but also has implications for managing the employment relationship more effectively (Guest, 1998a).

The previous section has analysed the contributions of the theoretical underpinnings of the psychological contract. The next section turns specifically to the psychological contract literature in order to clarify conceptualisations of the construct.

**Conceptualising The Psychological Contract**

The concept of the psychological contract has drawn on a number of academic disciplines including sociology, psychology and human resource management. However, it is only with the relatively recent revival of the psychological contract that authors have moved from a purely two-dimensional descriptive typology, distinguishing between economic and social exchange (Fox, 1974), to a three-dimensional model, which seeks to understand the content and process of...
the psychological contract. The following section firstly discusses the assumptions behind the psychological contract and the problems they present for examining its content, before analysing the role of the transactional - relational typology. Subsequent discussion critically evaluates the contribution of both process and content models before summarising key variables, which shape the psychological contract.

Assumptions Of The Psychological Contract

Notwithstanding differing opinion over the definition of the psychological contract (Rousseau, 1995; Herriot and Pemberton, 1997) there does appear to be at least a degree of agreement over many of the assumptions behind the concept. Firstly, it is assumed that the construction of a psychological contract is inevitable; everyone has a psychological contract with his or her organisation in some form, as no formal contract can address every aspect of employment. Such inevitability stems from the limitations of formal, written contracts and the psychological contract seeks to reduce uncertainty by establishing perceived mutual obligations (Morrison, 1994). Contracts are voluntary in nature and commitments must be made freely; no one can be forced to change their psychological contract (Rousseau, 1995).

Secondly, the psychological contract is derived from individuals’ perceptions of events and situations. Therefore due to bounded rationality (Simon, 1958) contracts are incomplete and at the mercy of the information available and the subjective way in which it is interpreted. Consequently due to the subjective nature of the contract, each contract may be different, which reflects different
perspectives and multiple perceptions of realities (Lucero and Allen, 1994; McLean Parks and Schmedemann, 1994; Rousseau, 1989; McFarlane Shore and Tetrick, 1994; Herriot, 1996), although there are likely to be similarities and continuities between some contracts (Herriot et al, 1997). However, it is only at the individual level that an accurate assessment can be made, with reference to organisational, social and personal dimensions. As a result contracts are often vague and ambiguous and the employer may not even be aware of the content or nature of the psychological contract (Rousseau and McLean Parks, 1993) especially as contracts tend to be flexible and dynamic in nature as events unfold (Rousseau, 1995). This inherent changeability creates the potential for conflict as it has been argued organisations may be dealing with a moving target, although Lord and Foti (1986) have suggested that in reality established mental models may be fairly stable and may actually resist change.

Finally, all contracts should be measured by the standards of their time (Atiyah, 1981) as ‘acceptable’ behaviour is related to time and space. Consequently the importance of analysing the psychological contract within a given context should not be underplayed (Sparrow, 1998).

The very nature of the implicit psychological contract poses a number of problems for deciphering the content of such a construct. First, a psychological contract is formed at the perceptual level, consequently sources of information maybe communicated directly (for example by the manager) or based on organisational actions (for example, past treatment of employees). However, the interpretations of actions may differ among individuals due to bounded
rationality and this affects the state of their psychological contract in different ways. For example, employees with a negative psychological contract are characterised by low trust and will be more inclined to perceive a situation in a negative light (Robinson, 1996). Further complications arise in that the organisation is often anthropomorphised, and this by implication, assumes that the organisation as an entity, holds a distinct and coherent view. However, in practice organisations themselves do not have views or values; and representatives of the organisations, for example managers, may have different views and send out different messages. Such events may also themselves alter the state of the contract. Consequently, such difficulties pose problems to the study of the content of psychological contracts.

**Conceptualising The Psychological Contract.**

Despite, and perhaps as a result of, inherent problems in conceptualising the psychological contract, the literature in this area has grown in recent years. The psychological contract literature has become increasingly more complex as the concept has been applied in a number of different ways (Millward and Brewerton, 1999). First, the term has been used as a metaphor for analysing changes in the employment relationship (Hiltrop, 1996); characterised by a transition from an ‘old’ relational contract towards a ‘new’ transactional contract (Rousseau, 1995). Second, models which define and delimit the contracting process, (for example Herriot and Pemberton, 1997; Rousseau, 1995), take a psychological and cognitive perspective based on phases an individual goes through when forming and ‘negotiating’ their psychological contract. Finally those which focus on the content of the psychological contract, place more
emphasis on the antecedents and consequences of a positive or a negative relationship (Guest and Conway, 1997).

The following section evaluates the three distinct conceptualisations of the psychological contract: firstly, as a metaphor for describing the change in the character of the employment relationship; secondly models which examine the process of contract; and finally, content models. The subsequent discussion analyses common factors that mould the psychological contract, which run through different conceptualisations of the construct.

1. Transactional And Relational Typology

Guest (1998a) has argued that a strength of the psychological contract is that it highlights the 'sign of the times' and changes to the employment relationship. Recent research on the psychological contract builds on Fox's concepts of 'economic and social exchange'. Economic exchange rests on formal contractual agreements, which bring highly specific reciprocation from both parties (Fox, 1974). In contrast, social exchange involves unspecified obligations and is bound by common values and beliefs between employee and employer.

In the 'new' terminology, the literature suggests that there are two principal types of psychological contract, transactional and relational, each representing opposite ends of a continuum. Transactional contracts are based on a short-term horizon and are characterised by economic self-interest on both the employee and employer's part. Responsibilities are precisely defined principally through the formal written contract and consequently have a tendency to be static. Relational
contracts, in contrast, are based on a long-term, open ended relationship where the focus is on both economic and emotional ties, thus the whole person is invested in their work. The contract is based in both written and unwritten terms and therefore the scope of tasks is pervasive and may change depending on conditions.

The value of the typology is that it highlights two different contracts, which helps to clarify the notion of the psychological contract making the construct less abstract. Rousseau (1995) suggested that the transactional-relational typology represent two ends of a continuum, therefore the degree to which an individual’s contract is transactional or relational may differ. Using such a continuum the nature of an individual’s psychological contract may change over time as circumstances dictate.

Many distinctions have been made between 'old' and 'new' contracts (Ehrlich, 1994; Kissler, 1994; Morrision, 1994; Rousseau, 1989, 1995; Rousseau and Greller, 1994; Sims 1994; Sparrow, 1996b). The literature suggested that the 'old' contract was characterised as stable, predictable, fair and based upon mutual respect. In contrast, the 'new' contract focuses on short-term gains with the emphasis on flexibility, individuality (Hiltrop, 1996), and is based on 'non-dependent trust' (Gordon Sorohan, 1994) and employability (Pascale, 1995; Martin, Staines and Pate, 1998). Essentially the transition is characterised by a move from transactional and relational contracts. Therefore the typology is useful in that it gives a broad indication of the nature of changing social relationships in organisation.
The distinction between transactional and relational contracts however, only gives an indication of the state of the employment relationship. An employee’s contract may move along the continuum in either a transactional or relational direction, but is it meaningful? What are the implications for having a contract in the middle of the continuum? A further weakness of the transactional–relational typology as a means of conceptualising the psychological contract is that it gives no indication of content. The concepts are relative because one person's understanding of a relational contract may not be the same as another.

Finally the transactional - relational continuum has been questioned (Millward and Brewerton, 1999). It has been suggested that the situation is more complex than the continuum concept would imply. Millward and Brewerton’s (1999) concept mirrors the idea behind Herzberg et al. (1959) notion of hygiene and motivating factors, in that individuals seek fulfilment of transactional, monetary components before relational aspects can be considered (Herriot, Manning and Kidd, 1997; Millward and Brewerton, 1999). A further weakness is that it does not give attention to social context and the complexities to which it presents.
2. Processual Models

The principal value of the transactional–relational typology is that it allows the psychological contract to be tangible and meaningful and move away from an ambiguous construct. Additionally it takes into account the changing nature of the psychological contract, although the process of such change is beyond its limits. Herriot and Pemberton (1996) take a more processual approach to the conceptualisation of the psychological contract as shown in Figure 1. The psychological contract is seen in terms of an 'open system' not only in the sense that the organisation and external environment are linked, but also in the sense that organisations and employees negotiate, ideally to reach a compromise. In many respects this mirrors the systems approach as discussed earlier however unlike the systems approach, equilibrium is not perceived to be inevitable because each party has the potential to terminate the whole agreement.

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Figure 1: Process Model Of The Psychological Contract

![Diagram of the psychological contract model](Figure1-diagram.png)

(Source: Herriot and Pemberton, 1997:46)
The processual model of the psychological contract (Herriot and Pemberton, 1997) essentially follows a pathway of negotiation: to inform, negotiate, monitor and renegotiate, taking into account what both the employee and the organisation would like and are prepared to offer. The issue of perceived fairness in negotiation is key in order for there to be an agreement.

The strength of the processual model is that it takes social and business environments into account and emphasises that these may impinge on the contracting process. In addition, the model is dynamic and suggests that the contract will change over time. Furthermore the model does not prescribe the content of the contract and therefore a number of different contracts may coexist, which is congruent with the post modern notion of multiple realities, as discussed earlier (Watson, 1987).

Despite the value of the processual model a number of limitations are evident. Herriot and Pemberton (1996) defined the model in terms of stages of contract, thereby suggesting a rational decision process. Further the model is unidirectional, suggesting that employees will automatically proceed to the next stage. Consequently there is the assumption that there will be a ‘fair’ bargaining process where the individual and organisation hold equivalent levels of power. However, this does not take into account the power disparity between the two parties (Watson, 1987), a notion highlighted strongly by Marxist interpretations, as discussed earlier. Moreover it is not an even bargaining process since each party does not have the same bargaining position, particularly with a saturated labour market which offers few alternatives (Cappelli, 1995).
The model also anthropomorphise the organisation, as it suggests the organisation has needs and wants independent of its employees. A key question is ‘who is the employee bargaining with?’ Is it management? But the management team are themselves employees and agents of the organisation, this creates a duality and potentially a contractual dissonance (Hallier and James, 1997).

McFarlane Shore and Tetrick (1994) provide an alternative processual model of the psychological contract. Their model also views the psychological contract in terms of the contracting process; inform or inquiry, monitor and negotiation. However, this is seen as only part of the process that feeds into an individual’s psychological contract. The model also takes into account employees’ employment goals, whether they want a transactional or relational contract. Information is acquired through both the formal and implied contract and all information then feeds into the ‘think’ function from which the state of the psychological contract is derived. The model is presented below in Figure 3:

There are a number of similarities between the above model and Herriot and Pemberton’s model (1996). The focus of the model is the process by which the psychological contract develops, highlighting the parties involved and the contracting and cognitive processes. Despite such similarities, the McFarlane Shore and Tetrick model (1994) differs on a number of grounds. Firstly, the organisational actors are identified, more specifically co-workers, supervisors and person responsible for recruitment. Secondly, the model does not take the social background or the economic environment into account.
In summary, the process approach aims to analyse the stages of the formation of the psychological contract in many senses from a cognitive perspective consequently it draws attention to the process of contracting and the implications actions may have on an individual’s psychological contract. This results in an increased understanding of the development of the psychological contract. Additionally it provides a critique of prescriptive models by suggesting that the individualised nature of the psychological contract does not allow the content to be defined.

**Content Models**

The third means of conceptualising the psychological contract is through content models. Contemporary models do not seek to describe in a universal or
prescriptive way the content of the psychological contract; indeed the subjective
nature of the contract suggests that it is not possible or even desirable to try to
construct such a model as so much is hidden (Morrison, 1994). However, there
are forces that may encourage a degree of similarity between contracts within a
single organisation (McFarlane Shore and Tetrick, 1994). Therefore there may
be a degree of commonality between psychological contracts as illustrated by the
that although schemas develop over time, nonetheless some elements remain
stable and are resistant to change.

The Guest and Conway (1997) model seeks to operationalise the concept of the
psychological contract by outlining causes, content and consequences, as shown
in Figure 3.

Guest and Conway’s (1997) model takes a linear form outlining causes, content
and consequences of positive and negative psychological contracts. In terms of
causes two levels have been identified: organisational and individual levels.
Organisational factors that impinge on the psychological contract include
organisational climate and the nature of the human resource policies, while
individual factors include the degree of expectations, prior work experiences and
the extent of alternative job prospects. Such causes will have bearings on
perceived fairness, trust and the extent to which the company fulfils its part of
the bargain, and when combined define the content of the contract.
Consequences of a positive psychological contract include both attitudinal
factors, such as job satisfaction and behavioural variables including
organisational citizenship. The implications of a positive psychological contract not only mean that the employee is motivated but also that it will actually positively affect their performance.

Figure 3: Content Model Of The Psychological Contract (Guest and Conway, 1997)

<table>
<thead>
<tr>
<th>CAUSES</th>
<th>CONTENT</th>
<th>CONSEQUENCES</th>
</tr>
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<tbody>
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<td>Organisation climate</td>
<td>Fairness</td>
<td>Attitudinal consequences</td>
</tr>
<tr>
<td>Organisational climate</td>
<td></td>
<td>Organisation commitment</td>
</tr>
<tr>
<td>HRM policy/practice</td>
<td>Trust</td>
<td>Job satisfaction</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td>Employment relations</td>
</tr>
<tr>
<td>Expectations</td>
<td>Delivery of deal</td>
<td>Security</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
<td>Behavioural consequences</td>
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<td>Motivation</td>
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<td>Attendance/ absence</td>
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<tr>
<td></td>
<td></td>
<td>Organisational citizenship</td>
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<td></td>
<td></td>
<td>Intention to stay/ quit</td>
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</tbody>
</table>

(Source: Guest and Conway, 1997:6)

The strength of the Guest and Conway (1997) model is that it seeks to outline not only the content of the psychological contract, but also through empirical work, identify causes and consequences. There are similarities to the Herriot and Pemberton (1996) model in that the social environment is taken into account although the importance of the external business context is not taken into account.
The Guest and Conway (1997) model adopts a particular view of human nature and the employment relationship, one that is congruent with the human relations school. The human relations school emphasises the social side of the employment relationship, stressing issues such as commitment and satisfaction (Guest, 1987; Storey, 1989). Further, employee performance may be improved through positive behavioural outcomes, such as effort and citizenship. The debate surrounding the extent to which ‘soft’ HR issues affect performance is well documented in the HRM literature (Beardwell and Holden, 1997; Hendry, 1995; Legge, 1995; Delaney and Huselid, 1996; Luthans and Stajkovic, 1999; Porath, 1999; Becker and Gerhart, 1996). In taking such as unitarist perspective there is a tendency to take a normative view of the psychological contract, in that positive contract is ‘good’ and negative contract is ‘bad’ (Herriot, 1998). For example, HR rhetoric gives the impression that if an employee is not highly committed, it follows that the individual is selfish and unproductive, yet there is little evidence to support the relationship between performance and commitment (McKendall and Margulis, 1995). To overemphasize ‘soft’ issues downplays the effects of ‘hard’ factors such as monetary rewards, which, arguably, affect performance (Lucero and Allen, 1994; Luthano and Stajkovic, 1999).

Advantages of a loyal and committed workforce have been documented, with reduced absenteeism and turnover and psychological outcomes of a feeling of belonging (McKendall and Margulis, 1995; Delaney and Huselid, 1994; Porath, 1999). However McKendall and Margulis (1995) have argued that there are also problems associated with loyalty and commitment. They argued that to focus on loyalty and commitment ignores the reality of organisational purpose in a...
capitalistic society, that of profit (McKendall and Margulis, 1995). In addition, redundancies would have profound effects on a loyal and committed workforce, with survivors feeling increasingly violated, which has implications for the future of the state of the employment relationship (Robinson, 1996). Furthermore psychologically detrimental effects may occur if a person becomes reliant on an artificial entity (the organisation) (McKendall and Margulis, 1995).

The strength of the model is that it takes a holistic view of the employment relationship. However, a limitation is that each variable, trust and fairness and commitment, are complex phenomenons. For example the commitment literature distinguishes between attitudinal and behavioural commitment (Coopey and Hartley, 1991; Mowday et al, 1982), each having different implications for work (Somers, 1993). The model is also prescriptive and static, downplaying the dynamic nature of the psychological contract.

Factors That Shape The Psychological Contract

An important issue that emerges from the literature surrounds the question, ‘what factors shape a psychological contract?’ The debate is significant to both an academic forum for theory development and also the practitioner as it increases the awareness of organisational agents’ actions. In considering the content and process perspectives of the psychological contract, a number of common factors are evident that mould the psychological contract: the social and business context, trust and fairness.

The first aspect is the importance of context, both in terms of the business and social environments. Process models, such as Herriot and Pemberton (1997) do
not try to define the context any further than the broad categories of an individual’s social background and business context in which the organisation lies. Guest and Conway (1997) defined context through causes of the psychological contract and stress the importance of organisational culture and HRM practices within an organisation. Additionally, an individual’s prior work experience, expectations and aspirations play an important role in shaping the psychological contract. Consequently the specific context is vital in determining the nature of the employment relationship.

The second common factor that seems to influence the psychological contract is the notion of trust. Guest and Conway (1997) outlined trust as a constituent of the ‘content of the contract’. Additionally, because process models focus on the negotiation of a contract by an individual and their organisation, trust is a key element of negotiation (Herriot and Pemberton, 1995b). Consequently trust is highlighted through the process of contracting, and without trust bargaining is difficult.

The third factor that shapes the psychological contract is fairness. Again fairness is specifically defined as a content element in Guest and Conway (1997) model. Furthermore employees are less likely to react negatively if the organisation’s actions are perceived to be fair (Moorman, 1991; Lind and Tyler, 1988; Scarlicki and Folger, 1997). Fairness is also an integral element of the processual model because the bargaining process is based on perceived equity (Adams, 1965). Perceived equity will be shaped by an individual’s needs, wants and expectations and the extent to which the organisation delivers them. Context, trust and
fairness are multi-faceted constructs, consequently the following section aims to explore them in more depth.

1. Context

To view the psychological contract holistically is to take all variables into account, both within the organisation and extraneous to the organisation (Martin, Staines and Pate, 1998). Contextual issues fall into three categories: individual, organisational and business influences.

Research indicates that sociological issues and individual characteristics affect the employment relationship. For example, women have different attitudes from men (Gallos, 1989), and attitudes change with age, and stage of career (Arthur et al, 1989). Furthermore general attitude is important due to selective perception and selective attention, people focus on information that confirms prior cognition's (Eagly and Chaiken, 1993). In addition the desire to remain in one organisation (Rousseau, 1990) and length of service affects the nature of the employment relationship, the longer a person is with an organisation the more they expect in return (Meyer and Allen, 1984).

The nature and type of organisation an individual works in may also affect the psychological contract. From an organisational perspective the size of the organisation affects the essence of the perceived obligation, for example the larger the organisation the more scope there is for career progression (Herriot, 1992). Furthermore the human resource strategy may have implications for the psychological contract (Rousseau and Wade-Benzoni, 1994; Parks, 1992; Tsui et

At an organisational level, the culture of a company also sets the tone of the psychological contract (Guest and Conway, 1997). For example, in a role culture a calculative contract exists, the psychological contract moves closer to the formal contract, while a support culture fosters a relational contract. The culture of an organisation will also impact upon the nature of the socialisation process with co-workers, a factor that is important in the way an individual processes information (Herriot, 1992; Rousseau and Wade-Benzoni, 1994).

The economic context in which an organisation finds itself plays a significant role in the nature of the psychological contract. The state of the market and its effect on the company determines the extent to which the organisation is financially under pressure and also affects strategy and HR policies that may be formed. Therefore contextual factors have indirect implications for employees psychological contracts. In addition, specific or local labour market factors may impact on the relationship between employee and employer obligations as employees are more likely to feel powerless if they have few alternative job opportunities with a saturated labour market (Rousseau, 1990; Cappelli, 1997).

Herriot and Pemberton (1995b) argued that due to different types of employment and different priorities for individuals, no single psychological contract exists. Herriot and Pemberton (1995b) suggested three types of contract: firstly, lifestyle
contracts, which aims to match work with an individual's social circumstances and will often be part time, for example the flexibility required for single parents. Secondly, autonomy or project contracts where the focus is on free movement between employers and employees act as contractors by working on different projects and initiatives. Thirdly, development contracts that will tend to represent the 'core' worker, where career development is stressed within one organisation.

The previous section has highlighted the importance of context in its various guises. The following section outlines the second factor that shapes the psychological contract, the notion of trust.

2. Trust

Trust plays a crucial role in shaping the psychological contract. However, conceptualising the phenomenon has proved difficult, particularly as the view of trust has changed over time. The 'old' view sees trust and distrust as two ends of a continuum, with trust by association as good and distrust being bad (Lewicki et al, 1998). Additionally the relationship was often viewed in unidimensional terms, thus a single component determines the quality of the whole relationship; a relationship driven by balance and consistency (Lewicki et al, 1998). In contrast the 'new' interpretation views trust and distrust as a multifaceted construct, thus one party may trust where the other does not (Lewicki et al, 1998). In addition, it is suggested that balance and consistency is but a temporary state or in 'quasi-stationary equilibrium' (Deutsch, 1968). Finally it is suggested that trust and distrust are separate and distinct constructs, as low
distrust is not the same as high trust: using Luhmann’s (1988) definition, trust reduces social complexity by allowing specific undesirable conduct to be removed from consideration, while distrust removes desirable conduct from the view. Therefore trust has an innate positive view, no matter how weak, while distrust is inherently negative. By demonstrating changes of perceptions of trust over time, the complexity and dynamism of the construct is highlighted.

Moreover, not only do perceptions and consequently definitions change over time, but they also differ according to perspective. Sitkin and Roth (1993) suggested four clusters of measures, which seek to unpack the notion of trust:

- Trust as an individual attribute
- Trust as a behaviour
- Trust as a situational feature
- Trust as a set of institutional arrangements

Each of the above issues relate to particular perspectives. Personality psychologists view trust as an individual characteristic; "a generalised expectancy held by an individual or group that the word, promise, verbal or written statement of another individual or group can be relied on" (Rotter, 1971:444). In contrast social psychologists view trust within contextual factors that enhance or inhibit the development and maintenance of trust (Lewicki and Bunker, 1995), consequently it is an expectation that is specific to a transaction. Economists are concerned with the costs and benefits of specific behaviours (Kreps, 1990). Therefore if trust is an important factor in shaping the psychological contract, from which perspective does it come?
There are different ways in describing what trust is; again partly dependent on the perspective taken. For example, trust has been subdivided by a number of authors (Bigley and Pearce, 1998). McAllister (1995) distinguishes between cognitive based trust and affect based trust. While Lewicki and Bunker (1995) identifies three types; calculus, knowledge and identification trust. In contrast Sitkin (1994) suggests the three subdivisions of competency, benevolence and value-based trust. Bigley and Pearce (1998) suggest that the thread connecting the many different types of trust is thin, therefore building a coherent model proves difficult.

What becomes clear is that trust is a complex phenomenon, the definition of which varies with perspective and views change over time. Further challenges are posed in the measurement of the construct, not only because it is an abstract notion but also because it is multifaceted: a party may trust another in some circumstances but not in other situations. In addition, trust will vary depending on whether it is vertical or lateral trust (Fox, 1974) and the extent to which trust is institutionalised (Fox, 1985).

Williamson (1993) has argued that there has been a convergence in definitions of trust based on Gambetta (1988). "Trust is a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action" (Williamson, 1993: 463). Such a definition narrows and focuses the broad concept but is still open to different interpretations. Tyler and Kramer (1996) suggested that there are two umbrella perspectives in understanding trust; rational and social perspectives. The rational
notion of trust focuses on an individual’s gains, usually materially. Agency theory (Deutsch, 1985) can be applied to this notion in that there is a structuring of the economic exchange relationship which is based on self-interest; each party tries to protect their own interests. Game theory (Deutsch, 1985) takes this a stage further and assumes opportunism and is based on the view that each guest calculates the value of continuing the relationship given the likely behaviour and response of the other party, this is known as ‘nash equilibrium’. To relate it back to the definition the “agent assesses the extent to which the other agent will perform a particular action” (Williamson, 1993; 463).

The social perspective focuses on group identity and reflects feelings of duty and commitment. Social exchange theory (Blau, 1964) examines the scenario when an individual benefits another voluntarily thus invoking an obligation of the other to reciprocate. The key notion is voluntarism and in contrast to the rational perspective is not based on self-interest or calculating the probability of return. Again to go back to the definition, the social perspectives, as defined by social exchange theory, also assess the extent to which an agent will perform action although from a different perspective.

A number of authors have offered classifications and typologies of trust, usually drawing on both rational and social perspectives (Zucker, 1977; Sako, 1998; Wewick and Bunker, 1996). Four attributes seem to emerge from the literature: calculative trust, knowledge based trust, institutional trust and personal trust each will be outlined below:
Calculative Trust

Calculative trust is rooted in the rational perspective of trust and is often viewed from an economic perspective in the form of transactional cost economics (Williamson, 1993). This perspective is based on opportunism and self interest; individuals aim to maximise returns. Despite being a rational perspective, it assumes that actors have bounded rationality, thus rejecting 'hyper-rationality'. Therefore actors intend to act in a rational manner but in practice do so only in a limited way (Simon, 1957). Agency theory and game theory play key roles in defining and explaining actors' behaviour.

Calculative trust has been criticised for failing to consider the social actions which undermine rational thought (Lane, 1998). Furthermore it is not possible to calculate another's behaviours with certainty, as trust tends to build up incrementally (Lane, 1998). In addition, within the economic approach there is a “preoccupation with intended effects to the neglect of unintended effects” (Williamson, 1993:460). Also the perspective tends to be static and does not highlight changes in contextual factors, which may affect the risk of opportunism.

Knowledge Based Trust

The notion of knowledge based trust (Weick and Bunker, 1996) or cognition based trust (Bachmann, 1998) is similar to calculative trust in as much as it is based on predictability of behaviour. However, where the two notions diverge is the basic assumption of calculative trust, which is self-interest and opportunism. In contrast, knowledge based trust is concerned with the "probability with which
an actor assesses that another actor will act in a certain way” (Hardy et al, 1998: 98). For example, there are no value judgements but are merely concerned with the predictability of behaviour. If there is predictability then there can be a trust in something happening, predictability of cause and effect and this stability that reduces uncertainty and risk.

**Institutional Trust**

Institutional trust refers to the social and organisational context within which contracts are embedded (Williamson, 1993). This notion is based on impersonal trust in that trust is not placed in individuals but systems and procedures. Essentially in order to control and co-ordinate, contracts and bureaucratic systems act as a substitute for personal trust by reducing uncertainty and risk.

Kronman (1988) argued “legal right to enforce a promise can reduce but not eliminate the insecurity associated with all temporarily asymmetrical exchanges” (Deakin and Williamson, 1998: 150). Sitkin and Roth (1994) go on to suggest that legal structures can only go so far, they argued that a legal response can restore trust when violations are specific to a particular task or context. However, if a fundamental value has been violated, legal remedies merely erode interpersonal foundations and create barriers by placing a distance between parties.

**Personal Trust**

Personal trust (Williamson, 1993) or value/ norm based trust (Lane, 1998) embraces the social perspective. The basis of personal trust is grounded in
common values or norms between the two parties. Parsons (1951) went as far as
to suggest that trust is a suspension of self-interest in favour of a collective
orientation.

3. Justice and fairness

The concept of fairness or justice is an important element of the psychological
contract as like trust, the perspective adopted is important and affects analysis.
For example, Skarlicki, Folger and Tesluk (1999) suggested that personality
theorists assume that individuals have predisposed behaviours most of which are
relatively stable over time. Therefore an individual has an innate sense of what
is ‘right’ and ‘wrong’. This takes a very narrow view of humans and assumes
that external influences have no affect on an individual’s actions. In contrast,
social cognitive theorists emphasis the importance of context and situation a
person finds themselves so actions are more contingent.

Sheppard et al (1992) suggested that there are two key principles of justice;
firstly balance, which refers to the process whereby similar actions or situations
are compared with each other. The second principle was correctness, that is the
evaluation of a decision, action or procedure. Sheppard et al (1992) go on to
suggest that individuals attach different meanings to the notions of balance and
correctness and that this is often related to their goals whether they are related to
individual achievement or collective well being.

Three types of justice has been identified in the literature, distributive, procedural
and interactional justice (Greenberg, 1987), which are examined below:
Distributive Justice.

Distributive justice refers to the perceived fairness of the distribution of resources, for example, pay. Brockner and Greenberg (1990) identified three normative rules by which fairness is judged; first, equity, when resources are allocated proportional to their contribution; second, equality, the receipt of resources to all individuals; and finally need, resources are allocated on the basis that they are required. The dominant focus in the literature, however, appears to centre around equity and is usually expressed through Adam's equity theory (1965).

Greenberg (1987) has suggested that justice, based on Adam’s equity theory (1965), forms the organisational justice approach. Equity theory is originated from exchange theory: individuals evaluate equity through comparison of inputs and outcomes, feelings of fairness come from the level of outcomes in comparison to others and the relative contributions that have been made (Mullins, 1996). "When the ratio of a person's total outcomes to total inputs equals the perceived ratio of other people's total outcomes to total inputs there is equity" (Mullins, 1996: 509). Therefore issues such as pay or promotion may be judged on this basis of relative contribution and impacts on feelings of fairness.

Despite the prominence of equity theory in issues of distributive justice, the theory has been criticised on a number of grounds (Deutsch, 1985; Leventhal, 1980). Firstly, it has been argued that equity theory presents fairness in the form of a quantitative equation. However, in reality employee behaviour is not as
simple, there is no 'psychological common currency' as individuals' perceptions differ. Furthermore the concepts of 'inputs' and 'outputs' are abstract and vague, particularly when it is not clear from whose perspective they are viewed from. Secondly, the underlying motivational aspects are questioned, that humans are always maximisers and consequently selfish. Deutsch (1985) argued that people may have other motives, for example the wellbeing of other people and will therefore not always act in an individualistic and opportunistic manner. Leventhal (1980) elaborated and suggested that other justice rules include adhering to commitments, legality rule and status rule. A related point is that the theory is based on the notion of 'economic man'; that humans act rationally and are motivated by extrinsic rewards. However, humans are limited by bounded rationality and social conditions that influence the decision making process. Fourthly, the theory assumes that everyone supports the value that outcomes should be distributed proportionally to contribution. Sampson (1983 cited in Deutsch, 1985:26) argued that this 'meritocracy' is perpetuated by the upper middle class in a particular socio-historic period and is a particularly Western phenomenon. Therefore it is time and space specific. The final criticism of equity theory is targeted at the methodology. Deutsch (1985) argued that the evidence was "illustrative rather than demonstrative, it has shown when it could happen rather than what must happen" (Deutsch, 1985: 25).

Fundamentally Leventhal (1980) has argued that equity theory overstates the importance of fairness on behaviour. He suggested that the extent to which individuals place importance on fairness is determined by the importance of two other goals, the probability of violation and management style. Leventhal (1980)
also made the important distinction between fairness and ‘quasi-fairness’, the appearance of fairness. He goes on to argue, debatably, that fairness is rooted in the concept of ethical and moral behaviour is philosophically based whereas as quasi-fairness is concerned with the appearance of equity. It is important to beware of the limitations of the distributive justice approach however, the notion of perceived fairness of tangible outcomes plays a crucial role in establishing the nature of the psychological contract.

Procedural Justice

Procedural violation refers to the perception of the unfair application of procedures such as promotion. The original concept was based on a court room study by Thibaut and Walker (1975) in which the results indicated that adversary procedures were perceived as being fairer than inquisitorial procedures because individual’s had a chance to voice their opinion. It was argued that the process impinges upon perceptions of the fairness of the outcome, no matter what the tangible outcome actually was. Therefore voice can be seen as an important antecedent of procedural justice (Cobb and Wootey, 1995).

Leventhal et al (1980) proposed criteria for decision making in order to adhere to this procedural justice. He suggested that decisions should be consistent, non-biased, accurate, representative and ethical. Nonetheless a key problem with such criteria is that they are all value based and individuals will hold different perceptions and meanings of what constitutes ethical. Furthermore these criteria are often difficult to implement in practice and depend on the context in which the decision is being made.
Interactional justice

Interactional justice is the most recent introduction to the justice literature (Greenberg, 1987). Bies and Moag (1986) stressed the inadequacy of viewing fairness in terms of abstract rules. Interactional justice goes some way to addressing this deficiency by focusing on interpersonal aspects, therefore issues such as respect, dignity and voice are important. To some extent there is a degree of overlap between procedural and interactional justice, and Folger and Skarlicki (1999) suggested that they may act as substitutes for one another.

Mikula et al (1990) reported that a considerable proportion of perceived injustice arose from interactions and encounters with others. Tyler and Bies (1990) suggested 'enactment procedures', considering employees’ viewpoints, suppressing biases, applying rules accurately and consistency and providing feedback and explanations of decisions.

Effects and Implications of Positive or Negative Psychological Contracts

1. Positive Psychological Contract

The question can be asked, ‘what are the implications of having a positive psychological contract?’ Returning to the models, the processual models do not suggest outcomes of the psychological contract, with the exception of reducing the likelihood of exiting the company (Herriot and Pemberton, 1997). The content models, in contrast, do offer potential outcomes and include, organisational commitment, citizenship, job satisfaction, motivation, and intentions to stay with the organisation (Guest and Conway, 1997). Some of the outcomes will directly benefit the company, for example intentions to stay
however, the extent to which ‘soft’ issues such as organisational commitment directly affect performance is still open to question.

This theme is part of a wider debate on the value of human resource management. Beer et al (1984) have suggested that soft issues of commitment and job satisfaction lead to improved organisational performance under the unitarist ethos. Critics have argued that unitarism is a managerial tool for increased control (Legge, 1995).

2. Negative Psychological Contract

By implication if an individual has a negative psychological contract, those supporting the unitarist philosophy would argue that performance would be affected. However, there has been increased discussion of negative or breached psychological contracts and this has opened a new strand of literature, which focuses on the process, frequency and implications of one party, usually the employer, not fulfilling perceived obligations.

**Violation Of The Psychological Contract**

The foregoing analysis has suggested that the psychological contract has provided a mechanism to understand changes in the employment relationship. With the turbulent business environment, arguably the traditional psychological contract, long term job security in return for hard work and loyalty, has come under pressure (Sim, 1994). Organisational changes often make it unclear as to what both parties, the employee and employer, actually owe each other, thus making fulfilling obligations more difficult (McLean Parks and Kidder, 1994).
As a result there is an increased likelihood of misinterpretation and violation of the psychological contract (Robinson, 1996; Braun, 1997). Prior research indicates that psychological contract breach is relatively common (Robinson and Rousseau, 1994). The psychological contract literature is dominated by the process of contract formation (Rousseau and Greller, 1994; Rousseau and McLean Parks, 1993; Shore and Tetrick, 1994) and there is little attention given to the violation of such a contract (Morrison and Robinson, 1997). However, in focusing on the literature specifically concerning psychological contract violation, three themes have emerged: the frequency to which breach and violation occurs (Robinson and Rousseau, 1994), the effects of violation, (Braun, 1997; Robinson and Morrison, 1995) and the process by which violation occurs (Morrison and Robinson, 1997; Andersson, 1996).

The aim of the following section is to define psychological contract violation before critically analysing the process and effects of violation, as defined by current models. Finally the author proposes a new model of psychological contract violation which syntheses concepts from trust, organisational justice and psychological contract literature.

Defining Psychological Contract Violation

Psychological contract violation has been defined as a failure of the organisation to fulfil one or more obligations of an individual’s psychological contract (Robinson and Morrison, 1995; Robinson and Rousseau, 1994; Rousseau and McLean Parks, 1993). Morisson and Robinson (1997), however, have argued that this definition focuses on the rational, mental calculation of what individuals
have or have not received and downplays the emotional aspect of violation. As such they make the distinction between psychological contract breach and violation. Morrison and Robinson (1997) have referred to perceived breach as “the cognition that one’s organization has failed to meet one or more obligations within one’s psychological contract” (Morrison and Robinson, 1997:230). Therefore breach is essentially the identification of perceived unmet obligations: consequently it may be relatively short-term phenomenon and may result in individuals returning to their relatively ‘stable’ psychological contract state, or alternatively it may develop into full violation.

In contrast to the concept of breach, violation is an “emotional and affective state that may follow from the belief that one’s organization has failed to adequately maintain the psychological contract” (Morrison and Robinson, 1997:230). Contract violation is more than the failure of the organisation to meet expectations; responses are more intense because respect and codes of conduct are called into question because essentially a ‘promise’ has been broken and it is more personalised (Rousseau, 1989)

Psychological contract violation has been described as multi-faceted (Morrison and Robinson, 1997) because it incorporates a wide range of responses. At one level, violation invokes responses of disappointment, frustration and distress (Robinson and Morrison, 1995; Pate and Malone, 2000). More extreme emotional responses include anger, resentment, bitterness and indignation (Rousseau, 1989; Pate and Malone, 2000). Violation has also been associated with behavioural outcomes such as lower organisational citizenship, reduced
commitment, satisfaction and trust while cynicism increases (Robinson and Rousseau, 1994; Robinson and Morrison, 1995; Robinson, 1996; Herriot, Hirsh and Reilly, 1998; Pate, Martin and Staines, 2000). As a result when an individual’s psychological contract is violated the relationship becomes more calculated and transactional, but how far it moves along the continuum is dependent on the strength of the perceived violation (McLean Parks and Kidder, 1994; Pate and Malone, 2000). Content analysis has shown that violation frequently relates to training and development, compensation and promotion (Robinson and Rousseau, 1994).

Sheppard, Lewicki and Minton (1992) offer a sequence of events in response to felt injustice. Firstly individuals will ‘name’ or identify a harmful event, then ‘blame’ and responsibility will be assigned before the final stage, the ‘claiming’ period, which refers to individuals voicing their grievances. Nonetheless the way in which individuals cope with violation may differ, and Rousseau (1995) suggested that responses can either fall into active or passive categories and may also be constructive or destructive as illustrated below:

<table>
<thead>
<tr>
<th></th>
<th>Constructive</th>
<th>Destructive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>Voice</td>
<td>Neglect/ destruction</td>
</tr>
<tr>
<td>Passive</td>
<td>Loyalty/ silence</td>
<td>Exit</td>
</tr>
</tbody>
</table>

(Rousseau, 1995: 135)

The above table demonstrates different responses of individuals to psychological contract violation. Similarly Shore and Tetrick (1994) offer a typology of responses based on social cognitive constructs. Those with ‘action orientation’
are more likely to maintain or reinstate the contract while those with a ‘state orientation’ are more inclined to stay silent or withdraw from the situation.

The section has clarified the concepts of psychological contract breach and violation and has touched on the outcomes and responses to violation. The following section seeks to analyse the process of psychological contract violation in more detail.

**Process Of Violation**

To further the understanding of psychological contract violation a number of models have been constructed, most of which adopt a processual perspective. For evaluative purposes, two models have been selected, Rousseau's (1995) model and Morrison and Robinson’s (1997) model as their principal aim is to explain the process of psychological contract violation. For alternative models that have a slightly different focus, see McLean Parks and Kidder’s model (1994) which explores the role of power, whether symmetric or asymmetric, and violation, and Andersson (1996) who uses a psychological contract violation framework to explain organisational cynicism.

Rousseau’s (1995) model focuses on process from identification of a contract discrepancy in the contract to violation and then the aftermath. The model is illustrated below:
The first stage in the model occurs when a contract discrepancy is identified, which leads to perceived loss. However, the extent to which injustice is felt is dependent on two issues: the perceived voluntariness of the breaching party and the extent of remediation. Firstly, voluntariness of the breach: causes of injustice may be inadvertent where both parties are willing to maintain the contract, but due to divergent interpretations one party feels there is a breach. Alternatively contracts may also be breached due to disruption where one party cannot fulfil their end of the bargain, or finally breach of contract may occur where there is an ability to fulfil the bargain, but one party is unwilling to do so (Rousseau, 1995). The source and motivation behind the discrepancy is important, in-conjunction with the credibility of the explanation which acts as a mediating factor. Secondly, the extent of remediation of the discrepancy also impinges on the
extent to which loss is felt, if problems are solved initially there will be felt violation. If there continues to be a perceived loss violation may occur and this is particularly notable if there is also a feeling of procedural injustice. If the relationship is not strong this may lead to continued monitoring of the relationship and as such selective information processing may increase the probability of discrepancy of perceptions.

The above model views psychological contract violation as a process and thereby stresses various factors that affect the development of violation. However, the model suggests that the source of violation is 'outcome discrepancy' which suggests the extent of distributive justice or other sources, such as interactional issues may stimulate perceived violation. Furthermore the context of the situation is not included.

Morrison and Robinson (1997: 232) have also created a processual model of violation. The model is illustrated in Figure 6. The authors suggested that triggers of violation stem from the reneging of perceived promises, which occurs either because the organisation is unwilling to fulfil a promise or is unable to. A second source of violation arises from incongruent expectations of the parties, which may result from different interpretations of situations, the complexity of obligations that leads to confusion or lack of communication.
Figure 5: A Model Of The Process Of Psychological Contract Violation

**Inability**
- Amount promised
- Turbulence
- Organizational performance

**Unwillingness**
- Power asymmetry
- Employee behavior
- Type of exchange

**Reneging**

**Incongruence**

**Divergent schemata**
- Cultural promises
- Socialization

**Complexity and ambiguity**
- Implicit promises
- Incomplete promises

**Communication**
- Realistic job previews
- Leader-member exchange
- Perceived similarity

**Vigilance**

**Perceived Unmet Promise**

**Perceived breach of contract**

**Vigilance**

**Uncertainty**
- Newness
- Change

**Nature of Relationship**
- Transactional exchange
- Trust

**Perceived costs**
- Employment alternatives
- Options for redress
- Self-esteem

**Self-serving bias**
- Self-esteem
- Mood state
- Accurate feedback

**Threshold Effects**
- Equity sensitivity
- Type of exchange
- Power asymmetry

**Comparison Process**

**Outcome assessment**
- Magnitude
- Implications

**Attributions**
- Trust
- Accounts

**Fairness Judgements**
- Formal procedures
- Interactional justice

**Social contract**
- Base rate
- Type of exchange

**Interpretation Process**

The extent to which reneging or incongruence result in perceptions of unmet promises is dependent on the extent of the discrepancy, described as 'salience' in the model. Further, the degree to which individuals are evaluating the organisation's side of the bargain is described as 'vigilance' in the model. Factors, such as the extent of uncertainty, the nature of the relationship and perceived costs affect the extent employees are monitoring the relationship. The movement from identifying an unmet promise to perceived breach of contract depends partly on personal dispositions (referred to self serving bias) such as self-esteem or mood and also on individual perception of the power symmetry and type of exchange, which act as 'threshold effects'. Such issues affect the way individuals compare themselves with others and their feelings about the comparison.

To move from breach to violation is dependent on a number of interpretation processes, such as the important of the issue (referred to as outcome assessment), the strength of the social relationship (referred to as attribution), the extent of trust (referred to as fairness judgements), and judgements on the fairness of the process and how it was handled (social contract).

Evaluation Of Psychological Contract Violation Models

The aim of both Rousseau's (1995) and Morrison and Robinson's (1997) models are to explain the process by which psychological contract violation occurs. There are a number of similarities between the models. Both trace the cognitive stages an individual goes through in a potential violation situation taking into account mitigating circumstances and issues such as the importance of the
potential violation issue and justice issues. Morrison and Robinson (1997), however, are more comprehensive and highlight numerous issues which may affect the progression to the next stage of the model.

There are many similarities between Rousseau’s (1995) and Morrison and Robinson’s (1997) models, however, they deviate on the issue of triggers of violation. In Rousseau’s (1995) model, predominant sources of violation concern: contract outcome discrepancy, distributive justice or the way the process was handled and procedural justice. These concerns draw on justice literature. Morrison and Robinson (1997), in contrast, argued that reneging on promises or incongruence of expectations are key initiators and draw on psychological contract literature. A further difference is that Morrison and Robinson (1997) distinguish between breach and violation, suggesting that there are different degrees of felt grievances. Additionally for Morrison and Robinson (1997) the occurrence of violation is the end point of the model whereas Rousseau (1995) suggested that depending on the strength of the relationship there will be some extent of monitoring that may result in the increased potential of violation. As a result the model stresses monitoring of the psychological contract as a continuous process.

A limitation of both models is that the context of the situation is only viewed indirectly through individuals’ perceptions of the employment relationship; and wider contextual issues in the company, whether business or cultural related, are not taken into account. Furthermore Morrison and Robinson (1997) assume that breach will inevitably result with violation. This is part may relate back to the
specific aim of the model, the process of the violation development but the affects on the wider employment relationship are not emphasised, apart from Rousseau's (1995) suggestion that there may be increased monitoring.

**Contract Violation: Process And Variance Models**

The author proposes a framework that is unique in its construct providing both a holistic overview of the processes inherent in the dynamics of the psychological contract and the causal factors and outcomes that result from changes in the psychological contract. The model draws upon aspects of organisational justice as triggers of breach and violation proposed by Andersson (1996). Further advancement of knowledge in this field comes from expansion of the frameworks of Morrison and Robinson (1997) and concepts, including: trust (Wewicki and Bunker, 1996) and cynicism (Dean, Brandes and Dharwadkar, 1998). The model proposed by the author seeks to test the interactions of concepts drawn from trust, organisational justice and psychological contract violation literature to provide a unique interplay of such forces within a single construct. Additionally the construct is applied using two different methodological approaches: first, drawing on the qualitative paradigm through the processual model; second, the variance model derives from the quantitative school. The two models complement each other but represent different methodological approaches, variance and process perspectives (Mohr, 1982; Langley, 1999; Pentland, 1999). These different approaches can be seen in current psychological contract literature and are exemplified by the contrast

The following section outlines the methodological approaches of the process and variance models, before presenting firstly, the process model of psychological contract violation development and finally the variance model.

**Process And Variance Models**

The process model seeks to analyse the process of the development of psychological contract violation. Process theories draw on in-depth narrative data to explain sequences of events, activities and choices that direct a specific outcome (Langley, 1999; Pentland, 1999). Therefore the specific context of the research is crucial for the processual approach, due to the importance of time and the succession of event. Consequently the model aims to readdress the contextual issue which has been to date down played. Further the model aims to ascertain the extent to which an identification of 'misjustice' leads to a change in the nature of the employee-employer relationship.

The second model is based on the variance approach. Variance theory is founded on the traditional positivistic paradigm and strives to explain the relationship between independent and dependent variables, often defined as causes and outcomes. Variance models address the issues of generalisability by testing cause and effect by using probability sampling.
The issue of commensurability of paradigms is a crucial methodological consideration. The post-positivist tradition argues that potentially competing paradigms can be used within a single research project for the purposes of triangulation (Trochim, 1999; Tashakkori and Teddlie, 1998). Weick (1999) highlighted the relative merits of each approach and suggested that process theories were strong on accuracy but lacked generalisability, and in reality the level of complexity was problematic for action. In contrast Weick (1999) commented that variance theories were strong on generalisability and simplicity but suffered from depth and accuracy. As a result of the relative merits of each approach an eclectic position to data collection has been adopted, as embraced by post-positivists (Langley, 1999; Trochim, 1999; Tashakkori and Teddlie, 1998); the variance model assessing extent of opinion and process model examines individuals’ reactions to events. The following section outlines the process and variance models in more depth.

**Psychological Contract Violation: A Processual Model**

The model in Figure 7 embraces the processual approach and draws on organisational justice and psychological contract literature. The processual approach focuses on reactions to specific events, and therefore the model is applicable at the individual level; it seeks to analyse an individual’s reaction to a potential psychological contract violation situation. The processual model is outlined below:

The processual model considers the triggers of potential violation before examining outcomes and possible mediating factors, as illustrated in Figure 6. The elements of the models are considered more fully below:
Figure 6: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>TRIGGERS OF CONTRACT BREACH</th>
<th>MEDIATING FACTORS</th>
<th>EFFECT ON THE EMPLOYMENT RELATIONSHIP</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO LEVEL</td>
<td>Business conditions</td>
<td>Unaltered 'psychological contract' state</td>
<td>Lower job satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Labour market conditions</td>
<td></td>
<td>Lower organisational citizenship</td>
<td></td>
</tr>
<tr>
<td>MESO LEVEL</td>
<td>Company's strategy</td>
<td>Distributive justice issues</td>
<td>Relationship rupture</td>
<td>Lower effort</td>
</tr>
<tr>
<td></td>
<td>Functional systems</td>
<td>Procedural justice issues</td>
<td>Perceived violation</td>
<td>Lower organisational commitment</td>
</tr>
<tr>
<td></td>
<td>HR systems</td>
<td>Interactional justice issues</td>
<td>Relationship recalibration</td>
<td>Increasing cynicism</td>
</tr>
<tr>
<td>MICRO LEVEL</td>
<td>Prior experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social context</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

TRIGGERS OF CONTRACT BREACH
- Unaltered 'psychological contract' state
- Distributive justice issues
- Procedural justice issues
- Interactional justice issues

MEDIATING FACTORS
- Inter personal relationships
- Circumstances of breach
- Outcomes of breach

EFFECT ON THE EMPLOYMENT RELATIONSHIP
- Relationship restoration
- Relationship rupture
- Perceived violation
- Relationship recalibration

OUTCOMES
- Lower job satisfaction
- Lower organisational citizenship
- Lower effort
- Lower organisational commitment
- Increasing cynicism
Context

The importance of context has been highlighted earlier, as a crucial factor that shapes the psychological contract (Martin, Staines and Pate, 1998). Within the model, contextual factors have been divided into three elements: business and labour conditions at the macro level, workplace characteristics at the meso level, and finally individual micro level characteristics. Each category will be discussed in more depth in Figure 6.

'Psychological Contract State'

The psychological contract state refers a relatively stable base level from which changes in the nature of the employment relationship can be judged. Individuals' base level may vary, therefore the psychological contract is a relative and not an absolute state.

Triggers Of Contract Breach

Triggers of psychological breach may be rooted in an organisation's inability to meet obligations regarding distributive, procedural and interactional aspects of justice (Andersson, 1996). Distributive violation occurs when outcomes are perceived to be unfairly distributed for example, financial rewards. Procedural violation refers to the perception of the unfair application of procedures, such as promotion. Finally, interactional violation is linked to employees' perception of trust of superiors and the organisation as a whole and occurs if employees feel they have been treated badly. Such notions of fairness trigger assessment of the psychological contract.
Mediating Factors

Three main mediating factors have been identified: interpersonal interpretations, circumstances of breach, and outcomes of breach.

Strength Of The Employment Relationship

The strength the relationship between the employee and employer, to an extent determines whether the experience of a breach is treated as a violation. Trust is an important factor and influences the probability that contract breach will lead to violation (Robinson, 1996; Brockner et al 1997).

Wewick and Bunker (1996) suggested that three types of trust exist: firstly, calculus-based trust, which is an economic calculation of the costs of maintaining or severing the relationship; secondly knowledge based trust, which refers to the predictability of the other party’s behaviour; and finally, identification based trust where trust is based on congruence of values and intentions.

Circumstances Of Breach

The magnitude and the importance of the situation that has led to the breach plays an important part in governing the extent to which it will be perceived as a violation. The more important the situation the greater the potential of betrayal (Morrison and Robinson, 1997).

Outcomes Of Breach

The perceived costs of an unmet promise may differ among individuals, if the inequity of either distributive, procedural issues or interactional issues is great, it is more likely that an employee will feel a sense of violation.
Effects Of Breach On The Employment Relationship

Psychological contract breach refers to the cognitive identification that the organisation has not fulfilled one or more of its perceived obligations (Morrison and Robinson, 1997). Therefore it is a calculative identification and at this stage emotional responses are not engendered. The following section outlines the effects of psychological contract breach of the employment relationship.

Drawing from work on trust, Wewicki and Bunker (1996) three effects of breach on the employee-employer relationship have been identified: relationship restoration, relationship recalibration and relationship rupture.

Relationship Restoration

Relationship restoration refers to the situation where the relationship is strong enough to withstand the psychological contract breach and therefore the nature of the relationship remains unchanged. The effects of breach may have no effect on the relationship and the psychological contract returns to the relative psychological contract state, as demonstrated by line 1 on the processual model in Figure 6.

Relationship Recalibration

Alternatively, breach may result in an altering of the psychological contract state whereby the nature of the relationship becomes more transactional; therefore there is a recalculation. Relationship recalibration suggests that after perceived breach the relationship has altered, for example the relationship may have become more transactional. However, the relationship is still more or less intact
but the nature has been altered, as demonstrated by line 2 of the processual model in Figure 6.

*Relationship Rupture*

Finally, relationship rupture refers to a significant change in the nature of the relationship, leading to strong feelings of perceived violation. The concept of violation is an emotional and attitudinal state that follows when obligations are not fulfilled by the organisation (Morrison and Robinson, 1997). This state is often due to the feeling of being let down personally because promises have been broken.

*Outcomes Of Psychological Contract Violation*

Psychological contract violation may result in a number of attitudinal or behavioural responses. Attitudinal responses include reduced organisational commitment, job satisfaction and cynicism (Robinson and Morrison, 1995). In addition, individuals may become more cynical. Employee cynicism has been defined as a negative attitude and involves a belief that their organisation lacks integrity, negative emotions towards the organisation and a tendency for employees towards critical behaviour of their organisation (Dean, Brandes and Dharwadkar, 1998; Pate, Martin and Staines, 2000). The targets of such cynicism are usually senior executives, the organisation in general and corporate policies. Relationship rupture may also engender behavioural changes, in reduced effort and citizenship. Therefore breaking the psychological contract may have implications for employee and organisational performance. Relationship rupture
engenders a change in the psychological contract state as shown by line 3 of the processual model in figure 6.

**Psychological Contract Violation: A Variance Model**

The second new model explains psychological contract violation through a variance approach, which seeks to explore the relationship between independent and dependent variables. The model in Figure 8 aims to assess the relationship between triggers of breach and outcomes.

The elements of the variance model in many respects mirror the process model. However, instead of dealing with relative states, for example relative increase or decrease of job security, the model deals with defined and quantified variables. The approach is essentially deterministic as the aim is to assess the extent that the precursor (X) is a "necessary and sufficient condition" for the outcome (Y) (Mohr, 1982). The rationale behind the selection of the variables in the variance model has been explained in the previous section surrounding the process model. However, a potential trigger of breach or violation, as in the process model, are distributive, procedural or interactional justice. A breach of such organisational justice issues may lead to both attitudinal and behavioural outcomes. More specifically attitudinal outcomes have been defined in terms of commitment, job satisfaction and cynicism and behavioural outcomes as citizenship and effort. The model seeks to assess the extent to which justice issues are a 'necessary and sufficient condition for changes in attitudinal and behavioural outcomes.
Figure 7: A VARIANCE MODEL OF
THE DEVELOPMENT OF PSYCHOLOGICAL CONTRACT VIOLATION

- Distributive justice issues
- Procedural justice issues
- Interactional justice issues

→

- Lower job satisfaction
- Lower organisational citizenship
- Lower effort
- Lower organisational commitment
- Increasing cynicism
Conclusions

This chapter has addressed two principal questions relating to the nature of the psychological contract. These questions were:

1. What factors shape an individual’s psychological contract with an employer?
2. What are the implications of breaking a psychological contract?

The chapter reviewed the literature surrounding the psychological contract, including antecedents of the concept, content and implications. The psychological contract literature points to the distinction between the old, relational contract and ‘new, transactional’ contract. Such a distinction only identifies the nature of the relationship and does not point to the content of the psychological contract. In contrast process and content models are more helpful in identifying factors that shape the psychological contract. Three factors appear important: trust, fairness and context. Trust is key to effective negotiation of the employment relationship (Herriot and Pemberton, 1995b) and also social exchange. Similarly the concept of fairness and perceived equity is important as it shapes expectations and has implications for the overall state of the psychological contract. In the literature the importance of context is highlighted as companies face different pressures (Herriot and Pemberton, 1997; Guest and Conway, 1997), however, there seems to be a lack of empirical data.

In terms of identifying the implications of breach, the literature appears to be divided into two parts: models that identify the process of breach and literature that deals with outcomes. However, the two different strands of literature have
been synthesised to produce two models. The importance of theory generation has been stressed in order to avoid the notion of the psychological contract becoming merely empty rhetoric with little substance (Arnold, 1996; Guest, 1996; Herriot, 1996). Through synthesis of different strands of literature models have been generated which seek to address this concern and the analysis stresses the value of the psychological contract as an analytical construct.

Drawing on the literature, key propositions were formulated in order to evaluate the case study data, the implications of which have significant inferences for managing the employee-employer relationship. These are:

1. The psychological contract is dynamic, fluid and context dependent.
2. Trust is an important influence in shaping psychological contracts: calulative, institutional, knowledge-based and interpersonal forms of trust.
3. The extent to which an organisation is perceived to be fair directly impacts on the psychological contract; three facets being distributive, procedural and interactional justice.
4. The strength of breach or violation will be affected by the importance of the incident to the individual, the way the situation was handled and the strength of the employee-employer relationship.
5. Outcomes of breach may result in restoration, recalculation, or rupture of the employment relationship.
6. Relationship rupture will lead to behavioural outcomes of declining citizenship and reduced effort. Rupture will also lead to attitudinal changes: reduced commitment, reduced job satisfaction and an increase in cynicism.
The following chapter discusses the methodology selected to investigate the psychological contract. The chapter is divided into three parts: firstly it focuses on the discussion surrounding the philosophical underpinnings of the research; secondly case study research and the use of multiple methods will be analysed; and the final section focuses on the details of the research process.
Chapter 3

METHODOLOGY
CHAPTER 3
METHODOLOGY

Introduction

The preceding chapter critically analysed the different strands of literature associated with the psychological contract and offered a number of propositions arising from the questions of 'what factors shape an individual's psychological contract' and 'the implications of breaking such a contract'. This chapter presents the thesis methodology.

The traditional, purist distinction between positivism and constructivism and the notion of incommensurability of paradigms is rejected by the author. To make my position clear at the outset the philosophical underpinning of this thesis is post-positivism, which argues, perhaps pragmatically, that there can be commensurability of paradigms. The research is also based on a longitudinal, single case study organisation which draws on both qualitative and quantitative methodologies.

The methodological chapter is divided into three parts. The first part explores the philosophical underpinnings of research. The second part relates to the basis of the research, exploring issues relating to case study research and mixed methodology and their relative strengths and weaknesses. The final part focuses on the process and technicalities of conducting the research and outlines the advantages and limitations of using surveys and interviews before examining the process by which the data were analysed.
The Philosophical Rationale Of Research

Natural Science And Social Science Debate

“There is only one central methodological question about the social sciences, and that is whether they are sciences at all” (Ryan, 1981:8). The central tenet of this statement is concerned with where the social sciences, as an academic discipline, are placed. The position of social sciences is crucial because it affects the criteria by which research is judged and deemed legitimate (Hughes, 1976). The tradition of social science can be traced back to Comte and his argument of the ‘science of man’ (Hughes, 1976). This scientific perspective of social science falls within the positivistic epistemology, also inhabited by natural science. As such, the goals of natural science became the goals of social science. Therefore a key aim of the ‘scientific perspective’ was to produce universal laws which should be able to predict and control events (Ryan, 1981). In part this can be explained by the dominance of such a paradigm that became deemed legitimate within an academic community (Hughes, 1976). Even the term social science suggests a positivistic epistemology. However “to accept that man is part of the material universe is not necessarily to accept also that he can be studied with the same techniques used by the physical sciences” (Hughes, 1976:23).

For Hughes (1976) a key question is ‘is the explanation of social life scientific?’ The scientific paradigm emphasises the need for causal explanations. However, when studying humans, the notion of a self fulfilling prophecy or self refuting predictions, suggests research is open to bias (Ryan, 1981). The extent to which
'objective' research can be conducted has been questioned (Silverman, 1993). Furthermore it should be recognised that generalisations rarely explain all cases and are indeed fallible (Ryan, 1981). In part as a result of the limitations of the scientific paradigm, the last ten years has witnessed the 'increased status' of qualitative research (Bryman and Burgess, 1994), however, the traditional evaluative measures still centred around whether the 'positivist trinity' of reliability, validity and generalisability remain intact (Kvale, 1996).

Philosophical Underpinnings Of Research

The essence or meaning of research is to a large extent governed by its philosophical underpinnings (Jankowicz, 1995). Burrell and Morgan (1979) suggested that three sets of philosophical assumptions have direct implications for a methodological standpoint. The first are the ontological assumptions, which concern the very 'essence' of the phenomenon under study. The second are assumptions surrounding human nature which determine the nature and the relationship between human beings and their environment. The third are epistemological assumptions, which establish the grounds of knowledge. Each set of assumptions has important implications for the means of investigating a phenomenon and the way 'knowledge' is defined.

The Positivist And Subjectivist Dichotomy

Traditionally there have been two ideological stances in research, positivism and subjectivism, each with distinct perceptions of how the world should be studied (Burrell and Morgan, 1979) and are outlined in Table 2. Positivism has realist ontological assumptions (Burrell and Morgan, 1979). Realism assumes that the
social world is external, or detached from an individual’s conception. Thus the social world exists independently from human beings’ understanding or consciousness of it. Following from this notion is the view of human nature, the relationship between humans and their environment. The positivist position has a determinist ethos, which is largely mechanistic and argues that the environment control humans actions through sensory experiences (Burrell and Morgan, 1979).

The positivist notion of the separation between the social world and an individual’s cognition suggests that a single, external world exists that can be studied objectively. The aim of a positivist epistemology is to explain and predict elements of the social world via studying its regularities and casual relationships (Burrell and Morgan, 1979). This is achieved through research that is objective and free from the social influences of tradition and values (Slife and Williams, 1991). An underlying principle is that 'truth' exists in the external world. It also assumes that the expansion of knowledge is cumulative.
Table 2: Illustration Of Quantitative And Qualitative Paradigms

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontological</td>
<td>Reality is objective and singular, apart from the researcher (realist)</td>
<td>Realities are subjective, socially constructed and multiple as seen by participants in a study (nominalist)</td>
</tr>
<tr>
<td>Assumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epistemological</td>
<td>Researcher is independent from what is being researched.</td>
<td>Researcher interacts with which is being researched.</td>
</tr>
<tr>
<td>Assumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Axiological</td>
<td>Value-free and unbiased</td>
<td>Value-laden and biased.</td>
</tr>
<tr>
<td>Assumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhetorical</td>
<td>• Formal</td>
<td>• Informal</td>
</tr>
<tr>
<td>Assumption</td>
<td>• Based on set definitions</td>
<td>• Evolving decisions</td>
</tr>
<tr>
<td>Rhetorical</td>
<td>• Use of accepted quantitative words</td>
<td>• Personal voice</td>
</tr>
<tr>
<td>Assumption</td>
<td></td>
<td>• Accepted qualitative words</td>
</tr>
<tr>
<td>Methodological</td>
<td>• Deductive process</td>
<td>• Inductive process</td>
</tr>
<tr>
<td>Assumption</td>
<td>• Cause and effect</td>
<td>• Mutual simulations shaping of factors</td>
</tr>
<tr>
<td>Methodological</td>
<td>• Static design – categories isolated before study</td>
<td>• Emerging design – categories identified during research process</td>
</tr>
<tr>
<td>Assumption</td>
<td>• Context free</td>
<td>• Context bound</td>
</tr>
<tr>
<td>Methodological</td>
<td>• Generalizations leading to predictions, explanations and understanding</td>
<td>• Patterns, theories developed for understanding.</td>
</tr>
<tr>
<td>Assumption</td>
<td>• Accurate and reliable through validity and reliability</td>
<td>• Accurate and reliable through verification</td>
</tr>
</tbody>
</table>

Source: Adapted from Kvale (1996): 5
The alternative pole of the philosophical debate is subjectivism. Ontologically, subjectivists have a *nominalist* perception, which perceives the social world in a very different way from realism (Burrell and Morgan, 1979). Nominalism assumes that the social world cannot be separated from human beings perception of it. Therefore ‘reality’ is socially constructed; names and concepts are the means to which the world is described and understood. In terms of the human nature debate subjectivists are voluntarist (Burrell and Morgan, 1979). Therefore it is perceived that humans have a free will, and knowledge is generated via logical thinking or reasoning. Thus humans are not passive but have an inherent capacity for generating knowledge. Epistemologically, the subjectivist tradition presupposes that the social world can only be understood from the perception of the individuals who are undertaking the activities being studied (Burrell and Morgan, 1979). Unlike positivism it is based on the view that there is a discrepancy between the object of study and the way the researcher delineates it (Guba and Lincoln, 1994).

The key distinction between positivism and subjectivism is their perceptions of the social world. The positivist perspective makes a distinction between the external (social world) and the internal (individual cognition). Consequently ‘reality’ is perceived to be independent of humans’ appreciation of it. The subjectivists’ position, however, rejects the notion that there can be a separation between the two worlds of the inner subjective and the external objective and the focus is on explaining how individuals experience and describe the world.
Limitations Of The Distinction

The positivist - subjectivist dichotomy has been described as representing opposite ends of a continuum (Burrell and Morgan, 1979). The methodological debate largely surrounds the distinction and merits between these two traditions. The issue of commensurability of paradigms remains an important issue (Burrell, 1996). ‘Paradigm warriors’ argue that positivism and subjectivism are not merely opposites but stem from different philosophical perceptions of the world and how it should be studied. Consequently they argued that there is no real possibility of commensurability primarily due to fundamentally different ideological standpoints and perceptions of ‘reality’ (Carter and Jackson, 1997).

Coffey and Atkinson (1996) argued that the ‘traditional’ distinction between positivist and qualitative paradigms has been eroded with the ‘rediscovery of rhetoric’. The ‘rediscovery of rhetoric’ challenges the cherished distinctions of fact or logic and perception or opinion. Such a premise means that taken for granted assumptions of science may be challenged reinforcing the notion that 'scientific texts' have rhetorical qualities (Coffey and Atkinson, 1996). Furthermore Richard and Richard (1991) suggested that with increased computerisation a 'methodological revolution' has taken place, which has eroded the traditional divide between the two epistemologies, for example there has been an increasing trend for 'harder' analysis of 'soft' data.

An alternative perspective is to detach the research from the philosophical debate and focus the energy on the research problem. Swepson (1998) suggested that it is impossible to achieve philosophical ideals such as ‘truth’. Consequently these
‘purist’ ideals are for philosophical not necessarily practical debate. Pragmatists suggest that it is useful to avoid the positivist (quantitative) / subjectivist (qualitative) dichotomy. Instead there is a suspension of the philosophical debate which avoids the ‘search for metaphysical truths’ (Tashakkori and Teddlie, 1998). The focus is on the research question and the most appropriate means to answering that question. From a pragmatist perspective quantitative and qualitative methodologies are compatible and researchers maybe objective or subjective in epistemological inquiry (Tashakkori and Teddle, 1998). “The research process, then, is not a clear cut sequence of procedures following a neat pattern, but a messy interaction between the conceptual and empirical world, deduction and induction occurring at the same time” (Bryman and Burgess, 1994: 73).

Evolution Of Scientific Thought

The traditional positivist-subjectivist dichotomy does not highlight the complexity of each methodological approach. There are a number of approaches within each set of assumptions. For example, qualitative research is an umbrella term for a number of different approaches: post modern, hermeneutics, ethnomethodology, phenomenology and dialectics (Kvale, 1996). Each approach has a slightly different emphasis, for example the central concern for hermeneutical understanding is the interpretation of meaning while dialectics focus on contradictions of statement and their relations to the contradictions of the social world (Kvale, 1996).

Similarly the positivist – subjectivist distinction suggests that each approach is fixed and does not change over time. However, Malhotra (1994) suggested that
positivist 'scientific thought' has undergone an evolutionary process. He suggested that the first stage was logical positivism, popularised by Comte (cited in Malhotra, 1994), and refers to exacting empiricism and the idea of verification. The development was the move towards logical empiricism, which was increasingly inductive and confirmation of results by the accumulation of successful empirical test, and therefore universal statements are not necessarily verified. Popper (1968) also had distinct ideas about the nature of 'scientific' research with the notion of falsification. He suggested that by aiming to falsify a theory, the theory was being truly tested, a single experiment may falsify a theory but an experiment, which reinforces the theory, may only temporarily support it as a subsequent negative outcome may yet overthrow it.

Such changes of scientific thought or 'scientific revolutions' (Kuhn, 1970) questions the traditional view that scientific knowledge is (a) objective and (b) developed through incremental stages in linear process. Kuhn (1970) suggested that a 'scientific revolution' occurs as "those non-cumulative developmental episodes in which an older paradigm is replaced in whole or in part by an incompatible one" (Kuhn, 1970: 92). Therefore it is a revolution in the sense that a subdivision of the scientific community argues that the existing paradigm is inadequate and replaces it with another paradigm.

Kuhn's (1970) notion of 'scientific revolutions' and changes in paradigms suggests that the 'old' paradigm is no longer credible or in use. However, paradigms may be concurrent, for example positivism and post-positivism. Malhotra (1994) suggests that post-positivism is the final stage of the evolution
of scientific thought. The term 'evolution' suggests development; however it could be argued that they are merely different paradigms and that one is not necessarily 'better' than another.

**Post-Positivism**

In the last 50 years developments away from positivism have occurred in the form of post-positivism (Trochim, 1999). However post-positivism is not merely an extension of positivism but is a distinct methodology in its own right, which rejects many of the central tenets of positivism (Trochim, 1999). The differing underlying assumptions behind positivism, post-positivism and constructivism are summarised in Table 3.

From an epistemological standpoint, post-positivists are realists in the same way as positivists. Consequently it is believed that a single reality exists independently of social actors (Tashakkori and Teddlie, 1998; Ackroyd and Fleetwood, 2000). Furthermore it is believed that empiricism is the basis of research; that phenomena can be directly observed and measured, usually deterministic in nature and based on monotonic cause and effects (Guba and Lincoln, 1994; May, 1994; Tashakkori and Teddlie, 1998; Trochim, 1999; Ackroyd and Fleetwood, 2000).
<table>
<thead>
<tr>
<th>Issue</th>
<th>Positivism</th>
<th>Post-positivism</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontological Position</strong></td>
<td>• Single reality, absolute truth</td>
<td>• Critical realists, so no absolute truth but probabilistic truth</td>
<td>• Multiple realities; individual's own reality</td>
</tr>
<tr>
<td></td>
<td>• Separation of reality and individual's view of it; does not accept different interpretations</td>
<td>• Separation of reality and individual's view of it but accepts different views of reality</td>
<td>• Assumes that reality and an individual's view of it cannot be separated; reality is socially constructed</td>
</tr>
<tr>
<td></td>
<td>• Incommensurability of paradigms</td>
<td>• Commensurability of paradigms</td>
<td>• Incommensurability of paradigms</td>
</tr>
<tr>
<td><strong>Epistemological Position</strong></td>
<td>• Aims to predict 'grand theories'</td>
<td>• Aims to predict in a probabilistic sense</td>
<td>• Does not aim to predict</td>
</tr>
<tr>
<td></td>
<td>• Research is objective and value free</td>
<td>• Research is value laden and therefore observations are open to interpretation.</td>
<td>• Research is value laden</td>
</tr>
<tr>
<td></td>
<td>• Researcher is detached from the research data</td>
<td>• Accepts researcher's biases impacts on the research data but not in the sense of creating the data</td>
<td>• Researcher is part of the data creation process and is not detached</td>
</tr>
<tr>
<td><strong>Methodological Position</strong></td>
<td>• Deductive</td>
<td>• Both deductive &amp; inductive</td>
<td>• Inductive</td>
</tr>
<tr>
<td></td>
<td>• Based on large, probability samples and statistical testing</td>
<td>• Multiple methodology and triangulation to reduce the fallibility of measurement</td>
<td>• Based on small, non-probability samples or in-depth single cases</td>
</tr>
</tbody>
</table>

(Sources: Adapted from Burrell, 1996; Gill & Johnson, 1997; Lincoln & Guba, 1994; Tashakkori & Teddlie, 1998; Sayer, 2000; Ackroyd & Fleetwood, 2000).
Although post-positivists embrace the same paradigm as positivists they are critical of it on a number of dimensions (Guba and Lincoln, 1994). Firstly, quantitative methods decontextualise information through controls or randomisation. This may increase the internal rigor, but detracts from its applicability and relevance (Guba and Lincoln, 1994). Secondly, human behaviour and attitudes cannot be understood without reference to meaning and interpretation (Guba and Lincoln, 1994). Thirdly, 'grand theories' may have little or no meaning to individuals within a local context, therefore they may be seen as imposing inappropriate meaning to a situation (Guba and Lincoln, 1994). Fourthly, generalisations, although statistically meaningful, may not be applicable to an individual case; there is always margin for error. Finally by, using a priori hypotheses the source and discovery process is lost (Guba and Lincoln, 1994).

Despite both positivism and post-positivism embracing realist ontology, the concept of realism may be subdivided. Positivism has an ontology of absolute realism whereas the ontology of critical realism is central to post-positivism (Guba and Lincoln, 1994; Trochim, 1999; Tashakkori and Teddlie, 1998; Ackroyd and Fleetwood, 2000). Where positivism and post-positivism depart is that the former automatically assumes that unbiased and objective techniques expose the 'truth'. Whilst post-positivists, as critical realists, are sceptical about the ability to discover the 'truth' with any certainty, as observations and theories are open to error (Trochim, 1999). This view stems from a distinction between 'intransitive dimension', (the object of study) and the 'transitive dimension', the theories surrounding study (Bhaskar, 1975; Ackroyd and Fleetwood, 2000)
Consequently, researchers may support different theories but the intransitive dimension, the world, remains the same. In essence “observability may make us more confident about what we think exists, but existence itself is not dependent on it” (Sayer, 2000:12). The concept of ‘truth’ has been described as a situation of ‘practical adequacy’ of meaning at the time and by consensus of a community; it is not absolute, it has the potential for change as argued by Kuhn (1970). With this concern of the fallibility of measurement, triangulation is often used to reduce the probability of error; however, it will not eliminate it (Sayer, 2000). The research process as a whole is progressive; therefore, through the replicability of results and convergence of pieces of evidence an inherent bias will be at the mercy of natural selection (Smith, 1998).

Another key area of departure between positivism and post-positivism is how research is conducted. Like positivism, post-positivism assumes that the interviewer is objective (Tashakkori and Teddlie, 1998). However, post-positivists believe that researchers are inherently biased by culture and personal experiences: as a result clinical objectivity and a value free axiology is not possible (Trochim, 1999; Tashakkori and Teddlie, 1998; Ackroyd and Fleetwood, 2000). All inquiry and research is value laden and consequently to an extent socially constructed (Guba and Lincoln, 1994; Trochim, 1999; Tashakkori and Teddlie, 1998). Consequently critical realists acknowledge the importance of meaning (Sayer, 2000). Interpretation and meaning are dependent on context of communication and interaction (Sayer, 2000). Therefore critical realism shares the interpretative philosophy of subjectivists; nevertheless unlike constructivists, post-positivists reject the relativist notion of incommensurability of different
perspectives (Trochim, 1999). Furthermore transcendental realists suggest that stable relationships exist and can be measured in a probabilistic sense (Miles and Huberman, 1994) and meanings are not as unstable as post-modernists would suggest (Sayer, 2000); consistency exists to an extent and therefore there may be predictability albeit in a limited way. Critical realists reject the positivist 'successionist view' of causation, where there is such regularity that cause and effect can be determined in an absolute sense. Such regularity would only occur in a 'closed' system where the intrinsic state of the object and extrinsic conditions are inherently stable; conditions which are unachievable in a social setting (Sayer, 2000; Ackroyd and Fleetwood, 2000). In contrast critical realists suggest that structures have internal elements or 'potential' and it is a specific condition or set of conditions that release the 'potential' or 'power' and causes an effect or event (Sayer, 2000).

Thus, while post-positivists believe that our understanding of reality will always be unique to the individual (epistemological relativism), reality itself is independent, and an external reality does exist (ontological relativism)(Smith, 1998). This is in contrast to positivists who are ontologically and epistemologically absolutist (Smith, 1998). Consequently post-positivists are transcendental realists in that there is belief that some reasonably stable relationships exist among social phenomena and causal links can be made in a probabilistic sense (Tashakkori and Teddlie, 1998; Miles and Huberman, 1994). An example is useful for clarifying the post-positivist stance. If research was conducted and the results indicated that training and development was linked with increased organisational performance, purist positivists would take the link
as a ‘truth’. In the spirit of a ‘grand theory’ they would predict that increased training and development would lead to increases in organisational performance. In contrast post-positivists would question if the link between training and development and increased organisational performance was a ‘truth’. Post-positivists, as transcendental realists, would suggest that in certain cases training and development would increase organisational performance but not necessarily in all cases. This is because of the contextual nature of reality. This example illustrates the post-positivist notion that causal links exist but in a probabilistic sense. More specifically, causal links may not necessarily occur in every situation or case but are dependent of context. A further issue for post-positivists would be the measurement of the association of training and organisational performance: the accuracy of first increased organisational performance and second the link between training and development and organisational performance would be questioned, again turning back to the issue of the fallibility of measurement. Finally, the understanding of why there is a link between training and development and increased organisational performance may differ. For example the chief executive may have a different view from the shop floor employee and again this stresses the interpretative element of post-positivism.

The psychological contract literature stresses that each contract is subjective and therefore open to different interpretations. Consequently such views would lead us to the subjectivist and interpretative approach. However such an approach would suggest that not only are psychological contract’s individual but that there are no similarities or overlaps. The post-positivist stance adopts a critical realist
philosophy thereby allowing a degree of generalisation and common
interpretation of the 'independent world', nonetheless individual or group
differences are not overlooked due to the emphasis on context and the notion that
perceptions of reality vary among groups.

The previous section has debated the philosophical underpinning of post-
postivism. The following section applies the notion of post-postivism
specifically to issue of measuring attitudes.

**Measurement Of Attitudes**

The aim of the research is to explore the content and nature of the psychological
contract, consequently the issue of measuring attitudes is crucial. There are a
number of problems inherent in measuring attitudes regardless of the
methodological approach. For example, individuals may hide their attitude or be
under social pressure to conform to a particular view and furthermore attitudes
change over time making assessing attitudes difficult (Thurstone, 1928; Brown,
1986).

There is considerable debate about the methods through which attitude can be
interpreted and this usually mirrors the positivist and subjectivist distinction
(Burrell and Morgan, 1979). Those from a realist ontology, in particular,
psychologists suggest that through attitude scales (Thurstone, 1928) opinions and
beliefs may be brought to light and measured. Such a methodology rests on the
assumption that respondents have a sufficiently common vocabulary, that
questions can be formulated which have the same meaning to all respondents (Denzin, 1971). However, those with nominalist ontology deny those attitudes can be quantified through a survey mechanism, but that attitudes are complex phenomenon and consequently must be presented through language and interaction (Denzin, 1971; 1989). For example, symbolic interactionism places each interview or interaction in terms of space and time and assumes each individual case is unique (Denzin, 1989).

When researching the social phenomena of individuals' attitudes, there is a strong argument for advocating the subjectivist paradigm (Silverman, 1993). Due to the importance of the interaction between the interviewer and interviewee both parties become part of the research, whereas in positivism the emphasis is only on the interviewee and their responses (Tashakorri and Teddlie, 1998; Silverman, 1993). As a result, the interview becomes embedded in the context and consequently has high ecological validity as research does not take place in a contrived 'scientific' environment but in its natural setting, in the case of management research, in the place of work (Easterby-Smith et al, 1991).

The 'humanistic' perspective, where interviews are seen as an interaction between two human beings, is seductive (Silverman, 1993), particularly in the research of attitudes to an organisation. However, Silverman suggested that there are three limitations to interactionism. Firstly, the aim of using open-ended questions is to avoid bias and to allow the interviewee to speak unprompted. However Hammersley and Atkinson (1983 cited in Silverman, 1993) suggested that this notion is naive and that open-ended questions are themselves a form of
control which affects interviewee responses. With non-directive questioning it may be difficult for the interviewee to interpret what is relevant, moreover it may actually inhibit individuals from speaking (Silverman, 1993). Secondly, it is argued that an attempt to gather ‘real experiences’ may actually result in ‘familiar tales’ based on cultural experiences. A key question is ‘where do these experiences come from?’ (Silverman, 1993), a question often asked by and of sociologists. Finally, personal accounts are not merely representations or descriptions of the world, as individuals are also part of that world and cultural norms and interpretations may differ (Silverman, 1993). This may lead to misunderstandings and different interpretations between interviewee and interviewer. Such problems have long since been identified as limitations of interviews (Denzin and Lincoln, 1994; Anderson and Shackleton, 1993; Mullins, 1996). However, these are also pitfalls in every social interaction and are not confined to the interview situation and Sayer (2000) has argued that the inability to interpret others discourse is exaggerated.

The preceding section has discussed the philosophical underpinning of the methodology. The following section seeks to present the basis of the research by examining case study research and the mixed methodological approach.

**Basis of The Research**

The second part of this chapter explores the underlying basis of the research. Issues relating to the unit of analysis, a single case study, are explored. Further discussions surround the implications of adopting a mixed methodology.
Unit Of Analysis: A Case Study Approach

The aim of the research is to use both process and variance approaches to explore organisational change. To achieve sufficient depth, a single case has been selected as the unit of analysis, thus making it possible to apply Pettigrew and Whipp's (1991) contextualist and processual framework.

The research seeks to investigate the psychological contract in a single company. Stake (1994) argued that a case study is not a methodological choice in itself but defines the boundaries and the focus of the research. Case studies have been used in both the positivist and subjectivist traditions (Leonard-Barton, 1995). The principal aim of single case studies is to understand the dynamics present within a single setting (Leonard-Barton, 1995; Easton, 2000). It is suggested that case studies are useful when "a 'how' or 'why' question is being asked about a contemporary set of events over which the investigator has little or no control" (Yin, 1994:9).

Single case study research offers the opportunity of in-depth study (Yin, 1994) and provides the opportunity to create 'novel' theory in as much as the creative process may be stimulated by the depth of data or its paradoxical nature (Eisenhardt, 1989). Further theory deriving from case study research is likely to have high validity both because of close ties between theory and data (Leonard-Barton, 1995). Additionally, through contextualisation, complex dynamics of an organisation maybe incorporated thus giving a holistic picture.
However, the limitations of case studies must be acknowledged. Three traditional ‘prejudices’ are often levelled against case study research (Yin, 1994).

1. The major criticism of single case studies is the extent to which generalisations can be made. However, it is argued that despite the limitations of statistical generalisability, case studies may contribute to wider research via analytic generalisability which means the ability to use a case to illustrate or represent a theory (Yin, 1998).

2. A traditional concern about case studies is the level of validity and rigor. Tactics and protocol may overcome such criticism, for example the use of multiple sources of evidence and involving key informants in reviewing a draft of the case study report, thus increasing construct validity (Yin, 1998).

3. A third criticism aimed at case study research is the sheer volume of data which often results in a ‘massive, unreadable document’ (Yin, 1994). This problem has been reduced with increased computerisation, which has eased the data management problem (Kelle, 1997; Richards and Richards, 1994).

However, despite criticisms of case study research, on balance, it was felt that the strengths outweighed the weaknesses. The use of a case study approach allowed for in-depth examination of the psychological contract and its change over time.

**Longitudinal Methodology**

A longitudinal approach to a case study illustrates change over time, avoiding the single ‘snap shot’ view (Miller and Friesen, 1982). Real time longitudinal research is a process which is a more reliable means of assessing change than by retrospective questioning (Leonard-Barton, 1995). The timescale used to assess change is fundamental (Goldstein, 1979), and a key question is ‘how much time
needs to elapse to define longitudinality? Within this case, change was assessed periodically over a four year period. Therefore perhaps the notion of ‘episodes’ is a more appropriate description which vary methodologically and empirically simply through the constraints of accessibility to data. Furthermore the notion of episodes acknowledges the difference between making do with the access that was granted and what could have been done had there been unlimited access.

The two research questions draw on the findings collected during these ‘episodes’ in different ways. The first research question, ‘what factors shape the psychological contract’, uses the episodes to analyse thematic changes over time using both quantitative and qualitative methodologies. The second research question, ‘what are the implications of breaking the psychological contract, uses the findings differently. The research question does not aim to assess change over time and draws principally from qualitative data, collected between 1997-1999 and the 2000 survey findings. Although the findings were from two different ‘episodes’ the aim was to adopt the post-positivist notion of triangulation, although this is acknowledged as a limitation access was not available for conducting a survey before 2000.

Processual And Variance Approaches

Van de Ven and Huber (1990) have argued that processual studies contribute to a wider understanding of organisational dynamics. To further elaborate on the nature of processual theories it is useful to contrast process and variance theories (Mohr, 1982; Langley, 1999). Variance theory focuses on the extent to which independent variables statistically explain dependent variables. Consequently the
focus is on variables which are operationalised and relationships are measured on the basis of statistical tests such as correlations and t-tests. In contrast process theories provide explanations based on the temporal order and sequences of events and activities that lead to an outcome. Therefore the processual approach sets research in a time and contextual frame (Petrigrew, 1990). Consequently, in contrast to variance theory which tends to embrace positivism, the processual approach is based on narratives that reflect a rationalisation of events (Czarniawska, 1997).

Mohr’s (1982) distinction between variance and process theories in many ways mirror Langley’s (1999) categories of processualists. Langley (1999) suggested that two types of processualists exist. Firstly, a group who formulate a priori theories and test them over time using longitudinal time series. There are similarities with Mohr’s (1982) view of variance theory in that the focus is on the changing nature of variables. Monge (1990) highlighted this approach suggesting that dimensions of continuity, magnitude, trend and periodicity are a few variables of dynamic behaviour. Secondly, Langley’s (1999) second group can be aligned to Mohr’s (1982) process group where the focus are on processes themselves and is based on collecting fine grained qualitative data. In highlighting Mohr’s (1982) typology there may be a tendency to focus on the duality of variance and processual and view variance as representing a positivistic single snap shot of an organisation and processual as longitudinal. However Langley's (1999) typology adds the concept of differing approaches to longitudinally and change over time. Nonetheless, the essence of the approaches are very different, variables versus events.
In summary, Pettrigrew (1990) suggested four key points of contextualism and processualism. First, the importance of embedding the study in the context, highlighting the interconnectedness of vertical levels of analysis. Second, the importance of temporal, horizontal interconnectedness. Third, to explore how context affects action within an organisation and vice versa. Finally, to stress the complexity of change and that causation is neither linear nor has a singular trigger but is multi-faceted. This view is congruent with critical realism in as much as the ‘trigger’ of change will vary between contexts (Sayer, 2000). In contrast, the variance approach does not place such importance on context but focuses on the relationship between measured variables.

Part two analysed the advantages and disadvantages of using case study research before examining the issue of longitudinality and finally processual and variance approaches. The following section presents the detail of the research process.

**Conducting The Research**

**Mixed Methodology And Triangulation**

The post-positivist standpoint, as discussed earlier, has implications for research design. Congruent with the post-positivist concern of the fallibility of measurement, methodological triangulation has been adopted. The rationale behind triangulation is that it is acknowledged that no observation or interpretation can be perfectly replicated, therefore by using a number of sources meanings can be clarified (Stake, 1994). Nonetheless, it may be argued that
triangulation masks differences by only focusing on the factors and issues that converge (Stake, 1994). However may be it is naïve to think that an aggregate of different sources of data will be convergent and produce a more complete picture as it often raises more questions (Hammersley and Atkinson, 1983).

**The Survey**

To address the post-positivist concern for discrepancies in measurement, a mixed methodology has been adopted. By using a mixed methodology the shortcomings from either technique can be compensated. A descriptive survey (Bulmer, 1984) was undertaken to portray attitudes of the workforce. The advantages of using the survey method is that it may incorporate the whole population (Jankowicz, 1995), in this case, the whole workforce of the company.

Survey methods have been criticised on a number of grounds, however Marsh (1984) suggested that problems with surveys stem more from technical problems rather than intrinsic philosophical problems. Firstly, it has been argued that surveys ignore individual’s ‘uniqueness’ (Silverman, 1993). This limitation is acknowledged, however, it is also important to extend research to focus on understanding phenomenon beyond that of a single person, to groups such as organisation’s workforce (Ragan, 1994). A further criticism is that surveys are deterministic in nature (Slife and Williams, 1991), seeking to ‘prove’ causal inferences when there are unknown factors causing that change. However, “those who think that there is an automatic way of deciding on the substantive causal significance of a finding through doing a test of significance on a correlation coefficient are certainly open to the charge of overt positivism. The
question is whether survey research can be used by those who believe that there are processes at work in reality but not obvious to the observer, to be uncovered by him by means of theory construction and test” (Marsh, 1984:89). Lastly, surveys are criticised for their standardised questions which may be open to different interpretations (Denzin, 1971). However this is partly an issue of technique and focusing on problems of language. But misinterpretation is also an issue every researcher faces whether conducting surveys or interviews (Marsh, 1984). She suggested that the survey method is useful if technical difficulties are highlighted and minimised.

The Process Of Conducting The 1996 And 2000 Surveys

The case study company which this thesis is based commissioned a consultancy company to conduct an attitude survey in 1994. The company’s strategy was to have such a survey conducted every two years to track changes in perceptions and attitudes. As such, researchers from the University of Abertay Dundee were asked to conduct the subsequent survey in 1996. The company’s input to the questionnaire has the potential of biasing the questionnaire itself. The organisation indicated some specific areas in which they were interested, relating to policies and teamworking that had been implemented in recent years. The company, however, did not specify the exact questions of the survey; and although management did examine the questionnaire before it was distributed, few alterations occurred from this process. The potential for management bias was also reduced with the creation of a steering group which was consulted about the survey. The steering group was composed of 14 randomly selected employees from different levels and departments within the organisation. This
group also was used to pilot the questionnaires. Thus it was felt that despite company sponsorship academic independence was maintained.

The involvement of the company in the research proved to be an advantage in the distribution of the survey. Employees were given time within working hours to complete the 1996 survey. For logistical reasons employees were grouped in the training room where the purpose of the survey was explained and any questions answered. The completed surveys were collected once everyone had completed the questionnaire. The corresponding response rate was 80% (from a total population of approximately 660), high for any survey (Miller, 1991).

In the year 2000, due to pressures of work, the company was not prepared to allow all members of the organisation to complete the survey in worktime as they had in 1996. As a result an alternative mechanism for distribution was adopted. The year 2000 survey was sent to a stratified sample (structured to reflect the proportion within each site) of employees and replies were returned directly to the researcher in pre-paid envelopes. The response rate was again high at 52%.

**Interviews**

The second element of the mixed methodology is in the form of interviews and was used to gain further insight into individual attitudes and to investigate the process of change.
Interview Sampling -1997

The organisation was made up of five distinct sites of different sizes, the number of interviewed employees are shown in brackets; Claypotts (153); Huntly (63); Newark (190); Niddry (96) and Stirling (141). The aim of the sampling was to gain a representative group from each site. A random sample was taken according to Kvale (1996) +/- 15 rule, and key informants such as shop steward and site manager were interviewed. One hundred and five interviews were conducted in total. In general there were few problems in gaining access to the sample group as the company gave them time during working hours to participate. The interviews lasted from forty-five minutes to one and a half hours. Five interviews were also conducted with members of the senior management team, respondents included the chief executive, finance director and human resource manager.

Interview Sampling -1999

In 1999 the company agreed to follow up interviews with employees, however to interview 105 employees (as in 1997) was not suitable due to pressures of work. Consequently 50 employees were re-interviewed, 10 from each site and they were selected randomly from those interviewed in 1997.

Interview schedule

Post-positivists assume that cultural and social environments affect perceptions more than positivists would allow (Trochim, 1999), consequently a semi-structured interview (Denzin, 1970) was adopted. The strength of such an approach is that it indicates that there should be an awareness that questions must
be formulated in words familiar to those interviewed (Denzin, 1970).

Furthermore it assumes that the most effective question sequence is determined by the respondents readiness and willingness to take up the topic which facilities rapport and empathy (Denzin, 1970). In addition it provides more flexibility to the interviewer, allowing expansion of interesting areas. However there are a number of disadvantages: firstly control of the interview is reduced; secondly, the interview itself takes longer to carry out; and finally, data gathered is more difficult to analyse.

To increase reliability the interviews were audiotape recorded (Perakyla, 1997). There is a potential problem that by being taped it heightens the awareness of being studied therefore there may be a problem of participant reactivity (Tashakorri and Teddlie, 1998). However, the interviewee was asked before the interview if they objected to being taped and two people preferred not to be recorded. However there was value in not writing while the interview was being conducted as it helped the development of rapport.

Retrospective Accounting

Through the interview the respondents were asked to give accounts of present attitudes but also to reflect over the previous two years. Golden (1992) has highlighted the problems associated with retrospective accounting, nonetheless such a method can still be a useful means of gathering data which should not be 'rejected' (Miller and Glassner, 1997).
Golden’s (1992) concerns surrounding retrospective accounting arise from his study of the accuracy of reporting by chief executives, although Miller and Glassner (1997) questioned the measure used to gain these results. Golden (1992) outlines two principal concerns: first, that informants may not be able to recall past events accurately; and second, informants may try to present a socially desirable image of themselves. To address such concerns Miller and Glassner (1997) offer criteria in order to improve the validity of retrospective accounts. The use of multiple knowledgeable informants is suggested to allow a checking of information. With respect to the thesis, at least ten people were interviewed per site and four directors were interviewed strengthening validity.

Miller and Glassner (1997) also suggested that the researcher should ask about simple facts or events rather than past opinion. In addition informants should not be asked to recall events in the distant past. Again, relating to the thesis, interviewees were asked about events and facts. However, due to the nature of the study attitudes and beliefs were also explored at times. Nonetheless the majority of questioning was in real time and they were asked to express their present attitudes as opposed to retrospective accounting of their opinions.

**Analysis of Quantitative Data And Data Analysis Techniques**

**Statistical Tests Used To Examine Research Question 1**

In many survey-based case studies, data collected from a large number of respondents are represented by a summary statistic. Calculating these summary
statistics can be time consuming (Diamond and Jefferies, 2001) and so the statistic package Minitab was used to analyse the data collected for this thesis.

A summary statistic to represent a ‘typical’ respondent is the (arithmetic) mean, usually denoted by $\bar{x}$ (x bar). The mean of a sample is defined as

$$\text{the total of the observations} \quad \text{the number of the observations} = \frac{\sum x}{N}$$

where the Greek letter $\Sigma$ stands for “the sum of”, $x$ is the measure of interest and $N$ is the sample size.

For example, consider the data set consisting of the values 9, 18, 7, 5, 11. Using the notation above $\Sigma x = 9 + 18 + 7 + 5 + 11 = 50$ and $N = 5$. Hence the value of the mean is $\frac{\sum x}{N} = \frac{50}{5} = 10$.

Within this thesis, the mean value has been used to summarise a set of responses to a Likert scale where the categories strongly agree, agree, neutral, disagree and strongly disagree are replaced with the numbers 1 to 5 respectively. Summarising these values in this way assumes that the Likert categories form an integer scale where the “distances” between successive numerical codes are equal.

Another useful summary statistic is the standard deviation, a measure of the spread of a data set. The standard deviation of a sample, $s$ is defined as

$$\sqrt{\frac{\sum (x - \bar{x})^2}{(N-1)}}$$

where $\sum (x - \bar{x})^2$ is called the sum of squares. A data set without
much variation will have all its values close to the mean, \( \bar{x} \), and so all the values of \( (x - \bar{x})^2 \) and their sum (the sum of squares) and hence the standard deviation will be small. As an example, we calculate the standard deviation for the above data set 9, 18, 7, 5, 11. As found above the value of the sample mean is 10.

Hence the sum of squares is \( \sum (x - \bar{x})^2 = (9-10)^2 + (18-10)^2 + (7-10)^2 + (5-10)^2 + (11-10)^2 = 100. \) The value of the standard deviation is

\[
\sqrt{\frac{\sum (x - \bar{x})^2}{N-1}} = \sqrt{\frac{100}{5-1}} = \sqrt{25} = 5
\]

In many surveys it is important to test whether two populations have the same mean. Examples include comparing male and female respondents’ agreement with a Likert scale and longitudinal surveys conducted at two points in time (e.g. common questions in the 1996 and 2000 employee attitude surveys). Providing certain assumptions are satisfied (see below) the two-sample t test could be used for such tests.

The two-sample t test is an example of a statistical hypothesis test. For such tests a null hypothesis and a contradictory alternative hypothesis are proposed. Data are then collected and summarised by a test statistic. Assuming the null hypothesis is correct, the behaviour of the value of the test statistic is known and a range of typical values determined. The value of the test statistic based on the data from the survey can then be compared to this range of typical values. If the observed test statistic is not in the range of typical values then this is regarded as
evidence against the null hypothesis. Hence, in this case the null hypothesis is rejected and the alternative hypothesis is accepted.

To conduct a two-sample t test, independent random samples are drawn from the two populations under investigation and the sample mean and standard deviation calculated separately for each sample. As an example imagine that we draw a random sample from two sites (A and B) from within the company used for the case study. Each respondent is asked for their agreement with a Likert scale which is then converted to a 1 (strongly agree) to 5 (strongly disagree) scale. The sample values and summary statistics are shown below.

<table>
<thead>
<tr>
<th>Sample values</th>
<th>Site A</th>
<th>Site B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample size</th>
<th>N₁ = 6</th>
<th>N₂ = 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample mean</td>
<td>(\bar{x}_1 = 1.50)</td>
<td>(\bar{x}_2 = 3.40)</td>
</tr>
<tr>
<td>Sample standard deviation</td>
<td>(s_1 = 0.837)</td>
<td>(s_2 = 1.141)</td>
</tr>
</tbody>
</table>

The null hypothesis is that the mean (\(\mu_1\)) of all employees in site A and the mean (\(\mu_2\)) of all employees in site B are equal. This is usually expressed as \(H_0: \mu_1 = \mu_2\). If this is not true then a reasonable alternative hypothesis is that the two population means are not equal expressed as \(H_0: \mu_1 \neq \mu_2\).

If the null hypothesis is true, i.e. the two populations have the same mean value then we would expect the difference in their sample means to be small. So a
numerically small value of \((\bar{x}_1 - \bar{x}_2)\) supports the null hypothesis. The value of \((\bar{x}_1 - \bar{x}_2)\) from this study is equal to \((1.50 - 3.40) = -1.90\). To determine whether this is a 'small' value and hence that the data support the null hypothesis we need to also include information about the sample sizes and the amount of spread expected in samples of these sizes. The test statistic, \(t\), defined as

\[
\frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\left(\frac{1}{N_1} + \frac{1}{N_2}\right)} \left(\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{(N_1 + N_2 - 2)}\right)}
\]

incorporates this information.

If the null hypothesis is true then we would expect \((\bar{x}_1 - \bar{x}_2)\) and hence \(t\) to be numerically small. Statistical tables are used to determine the range of values of \(t\) which are small. For the two-sample \(t\) test we use the student’s \(t\) distribution with \((n_1 + n_2 - 2)\) degrees of freedom. The most common definition of 'small' is the range that contains the smallest 95% of numerical values of \(t\), assuming the null hypothesis is true. This set of values is called the acceptance region at the 5% significance level, whilst those outside the acceptance region are called the critical region. The cut off value between the acceptance and critical regions is called the critical value. These are shown on the diagram below.
For the above example, \( N_1 = 6 \) and \( N_2 = 5 \) so we need to find the critical value of the \( t \) distribution with degrees of freedom equal to \( N_1 + N_2 - 2 = 6 + 5 - 2 = 9 \). The value found from statistical tables (Murdoch and Barnes, 1986) 2.262. Hence we would accept the null hypothesis (and conclude the average strength of agreement is equal for both sites) if the value of \( t \) from the survey were between \(-2.262\) and \(+2.262\). However if this is not the case we reject the null hypothesis and conclude that the average strength of agreement is not equal for both sites.

The value of \( t \) for this survey is

\[
\frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{1}{N_1} + \frac{1}{N_2}}} \sqrt{\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{(N_1 + N_2 - 2)}} = \]

\[
\frac{(1.50 - 3.40)}{\sqrt{\frac{1}{6} + \frac{1}{5}}} \sqrt{\frac{(6-1)0.837^2 + (5-1)1.414^2}{(6+5-2)}} = -1.90\sqrt{\frac{11}{30}}\sqrt{\frac{8.714}{9}} =
\]

\[
-1.90 \frac{0.6055(0.9839)}{\text{(0.6055)(0.9839)}} = -3.189.
\]
This value is outside the range \(-2.262\) to \(+2.262\) so we conclude that the sites do not have, on average, the same strength of agreement with the statement.

For large samples (with more than 30 degrees of freedom) the critical values are \(\pm 1.96\). This means that there are a total of 5\% of observations from a t distribution with values outside the range \(-1.96\) to \(+1.96\). Hence if we were to conduct a survey and calculate the value of the resulting t test statistic to be outside the range \(-1.96\) to \(+1.96\) we would conclude that this value was unlikely. We would then infer that the null hypothesis was not supported by the data and hence we would reject the null hypothesis \((H_0: \mu_1 = \mu_2)\) and instead accept the alternative hypothesis \((H_0: \mu_1 \neq \mu_2)\). This means that, by chance, 5\% of such sized samples drawn from the populations with a common mean would produce a value of t outside this range. In such a case we would erroneously reject the null hypothesis when it were true. Rejecting a true null hypothesis is called making a type 1 error. The probability of making a type 1 error is called the p value, which can be calculated by many computer packages (for example MINITAB, SPSS and Excel). Using the critical values of \(\pm 1.96\) (for large samples) is equivalent to a p value less than 0.05. In this thesis we report the p value to be in one of four ranges: \(p > 0.05\) when the null hypothesis is accepted or \(p < 0.001\), \(p < 0.01\) or \(p < 0.05\) as appropriate when the null hypothesis is rejected. A smaller p value range provides stronger evidence in favour of rejecting the null hypothesis as this means that the probability of falsely rejecting a true null hypothesis is smaller.
The two-sample test depends on three assumptions. Firstly it assumes that the samples are drawn independently and at random from the two populations, the sample means are normally distributed (see below) and that the standard deviation of each population is equal. We consider each in turn. The first assumption is that the samples are drawn independently and at random from within each population. Independent samples are those for which choosing the subjects from one population has no influence on who is chosen from the second population. Random samples are those for which each item in the population has the same probability of being selected in the sample. Both of these are under the control of the investigator. The next assumption is that the sample means are normally distributed. A normal distribution is described as having a bell shaped histogram. Then a histogram is constructed:

The histogram is closely approximated by the normal distribution that has a maximum at its mean and decays exponentially for values away from the mean.

Determining whether a data set is consistent with having been drawn from a normal distribution requires many observations, which are not available when we
conduct just one survey. However, the central limit theorem (Devore and Peck, 1990) states that the mean of samples larger than 30 follow a normal distribution irrespective of the parent population. All uses of the two-sample t test in this thesis involve samples with at least 30 items from each population and hence this assumption is not violated.

The third assumption is that the samples are drawn from populations with the same standard deviation. This can be tested with the F test (Bluman, 2001). The null hypothesis is that the standard deviation from each population ($\sigma_1$ and $\sigma_2$ respectively) are equal. The test statistic used is

$$ F = \frac{s_A^2}{s_B^2} $$

where $s_A$ is the greater standard deviation. If the null hypothesis is true then $F$ follows an F distribution with $(N_A - 1)$ and $(N_B - 1)$ degrees of freedom.

In the above example $s_A = 1.414$ and $s_B = 0.837$ so $F = \frac{1.414^2}{0.837^2} = 1.85714$. In addition, $(N_A - 1) = (5-1) = 4$ and $(N_B - 1) = 5$.

The null hypothesis is rejected if the greater standard deviation is much larger than the smaller standard deviation, i.e. if $F$ is a large number. The value from the F distribution with 4 and 5 degrees of freedom exceeded by 5% of values is 5.19. Hence the test statistic is not atypically large and hence the null hypothesis is accepted. We therefore conclude that the two populations have the same standard deviation and hence this assumption is satisfied. It should be noted that the F test assumes that the underlying populations are both normally distributed which can be tested using standard goodness of fit tests such as the Kolmogorov-Smirnov
test and the Anderson-Darling test (D’Agostino and Stephens, 1986). However these tests are not very powerful for small samples. An alternative is to use Levene’s test which does not assume normality. The MINITAB output showing the results of these two tests is shown below for the above survey.

Note that the test statistic reported for the F-test is 1.857, consistent with that reported above and that the associated p value is greater than 0.05, consistent with accepting the null hypothesis. The p value for Levene’s test is different from that of the F test because the test statistic is different.

The two-sample t test can be extended to more than two groups by conducting a one way analysis of variance. In this thesis one way analysis of variance (ANOVA) has been used to compare the responses from the six sites that make up the company used for this case study.

The assumptions of one way ANOVA are natural extensions to those used in the two-sample t test.
1. The samples are random and independent of each other
2. Each sample mean is normally distributed
3. Each population has the same standard deviation

As with the two sample t-test the investigator can ensure that the samples from each population are independent and random. As each site provided more than 30 respondents the normality assumption of the sample means is not violated for applications in this thesis. The third assumption (that the samples must have the same standard deviation) can be tested using either Bartlett’s or Levene’s test. The former is equivalent to the F test explained above when there are two populations. Levene’s test does not assume that each population is normally distributed.

The derivation of F for the one way analysis of variance is described in many statistics books (for example Bluman, 2001). In this section the focus is on explanation of the output produced by the statistical package MINITAB, used in chapter four and examining the assumptions inherent in using one way ANOVA. As an example of a one way ANOVA imagine that there were three sites (A and B as used before plus site C). The data and summary statistics are shown below.

<table>
<thead>
<tr>
<th>Sample values</th>
<th>Site A</th>
<th>Site B</th>
<th>Site C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample size</th>
<th>N₁ = 6</th>
<th>N₂ = 5</th>
<th>N₃ = 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample mean</td>
<td>( \bar{x}_1 = 1.50 )</td>
<td>( \bar{x}_2 = 3.40 )</td>
<td>( \bar{x}_3 = 1.40 )</td>
</tr>
</tbody>
</table>
The output produced by MINITAB when testing if the mean score for respondents from three sites are equal is shown below.

Example of output produced by MINITAB when conducting One-way Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>2</td>
<td>13.037</td>
<td>6.519</td>
<td>8.56</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>13</td>
<td>9.900</td>
<td>0.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>22.938</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Individual 95% CIs For Mean Based on Pooled StDev

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>1.5000</td>
<td>0.8367</td>
<td>(-------*-------)</td>
<td>(-------*-------)</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>3.4000</td>
<td>1.1402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>1.4000</td>
<td>0.5477</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We now consider the first part of the output, termed the ANOVA table, as shown below.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>2</td>
<td>13.037</td>
<td>6.519</td>
<td>8.56</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>13</td>
<td>9.900</td>
<td>0.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>22.938</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each column is considered in turn. The column headed source indicates the source of variation among student scores. Some of the variation can be explained because a respondent works in a different site. However, the scores for each employee within each group also vary. This natural variation cannot be explained by knowing in which site the respondent works and is termed error. The sum of these two sources is summed to give the total variation.
The column headed DF indicates the degrees of freedom. In general, if there are a total of N observations \( N = N_1 + N_2 + N_3 = 6 + 5 + 5 = 16 \) in the above example, then the total degrees of freedom is equal to \( N-1 \) (15 in this example). The degrees of freedom associated with the factor is one less than the number of populations \( (3-1 = 2) \) in this example because there are three sites. The degrees of freedom associated with error is found by subtraction \( (15 - 2 = 13) \) in this example.

The column headed SS shows the sum of squares. The error sum of squares is found by adding the sum of squares for each subgroup. The total sum of squares is found by combining the three. The site sum of squares is found by subtraction.

The column headed MS shows the mean square, defined as the sum of squares divided by the degrees of freedom. So, for example, the mean square for error is 9.90 divided by 13 = 0.762.

The column F shows the values of the test statistic, defined as the mean square of the factor divided by the mean square for error \( (6.519 \text{ divided by } 0.762 = 8.560) \). In later sections this will be abbreviated to \( F(2, 13) = 8.560 \) where \( F(2,13) \) shows that an F test is being performed, which has degrees of freedom for the factor and error equal to 2 and 13 respectively.

A decision needs to be made if this value of F is small, and hence whether the null hypothesis should be accepted and a conclusion reached that the two
populations have the same mean. Alternatively, if this value of F is large then the
null hypothesis should be rejected, concluding that the two populations do not
have the same mean. Statistical tables show that the 5% critical value for an F
distribution with 2 and 13 degrees of freedom is 3.81. The value of the test
statistic from this survey is 8.560, more than the critical value of 3.81. Hence we
reject the null hypothesis, consistent with a p value (0.004) less than 0.05. We
conclude that the mean values from the three populations are not equal.

Considering the second part of the output aids interpretation:

Second part of ANOVA output

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th>Individual 95% CIs For Mean Based on Pooled StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>1.5000</td>
<td>0.8367</td>
<td>--------*--------</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>3.4000</td>
<td>1.1402</td>
<td>* -----</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>1.4000</td>
<td>0.5477</td>
<td>--------*---------</td>
</tr>
</tbody>
</table>

The left-hand part of this output shows the summary statistics found above. For
example, there are 6 observations from site A group, which have a mean of 1.5
and a standard deviation of 0.8357. The output on the right hand side shows the
95% confidence interval; the values between which the mean of 95% of random
samples of the same size of employees from that site is expected to lie. Non­
overlapping confidence intervals are indicative of two populations that do not
have a common mean and are hence unequal.

It appears from the above output that sites A and C have the same mean and that
site B has a different mean value from these sites. Using Tukey’s pairwise
comparison test can test this formally. This is similar to performing three two-
sample t tests (A vs B, A vs C and B vs C) ensuring that the overall significance level (false positive error) not each paired comparison is 5%.

The output from MINITAB is shown below.

<table>
<thead>
<tr>
<th>Intervals for (column level mean) - (row level mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Consider the figures in bold above. This shows the difference between the means of sites A and C lies between -1.2937 and +1.4937. This interval includes 0, so 0 is a reasonable value for the difference to take. If the difference between the means could be zero then we conclude that the two means are the same. Hence we would conclude that sites A and C have the same level of agreement with the statement. Similar analysis shows that A and B and B and C are significantly different.

In Appendix 2, this would be summarised as

<table>
<thead>
<tr>
<th>Site</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.50a</td>
</tr>
<tr>
<td>B</td>
<td>3.40b</td>
</tr>
<tr>
<td>C</td>
<td>1.40a</td>
</tr>
</tbody>
</table>

Sites with the same superscript are not significantly different

We now consider the ANOVA assumptions. The first (independent random samples) is under the control of the investigator. The second (each population is normally distributed) is not performed for this example as in all applications of the one way ANOVA in this thesis the sample sizes from within each group were large enough to invoke the central limit theorem. We now show the results of
testing the third assumption (each population has the same standard deviation).

The MINITAB output is shown below.

The top part of the output shows that the 95% confidence intervals for the values of sigma (the standard deviation of each population) overlap considerably. This is consistent with three populations with a common standard deviation. The result is confirmed by the p values from both Bartlett's and Levene's test statistic which are greater than 0.05.

Similar tests of the ANOVA assumptions were performed for all applications of one way ANOVA in this thesis.

Statistical Tests Used To Examine Research Question 2

In many attitude surveys it is impossible to ask the respondent directly about a particular topic such as job satisfaction which may be immeasurable or have many facets. However, it is sometimes possible to ask respondents about related topics through a combination of (Likert) scale. In this thesis it was useful to identify interrelationships among a large number of variables by defining a set of
common underlying dimensions, called factors. **Factor analysis** (Hair et. al, 1998), is a statistical technique used to explore complex data set to identify and order latent (invisible) factors and then determine the extent each factor is related to particular questions on the questionnaire. The calculations involved in factor analysis are very involved therefore the statistical package Minitab was used for such analysis.

Consider the following example, employees were asked to rate elements of their company's mission statement according to how they thought the company put them into practice. A four point scale was used, it was important, quite important, of minor importance and not at all important. There 105 respondents.

Elements of the mission statement are listed below:

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Mission Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>C11</td>
<td>To provide the highest level of customer service</td>
</tr>
<tr>
<td>C12</td>
<td>To conduct all business with honesty</td>
</tr>
<tr>
<td>C13</td>
<td>To maintain a safe working environment</td>
</tr>
<tr>
<td>C14</td>
<td>To give people more responsibility for their own work</td>
</tr>
<tr>
<td>C15</td>
<td>To provide challenging work</td>
</tr>
<tr>
<td>C16</td>
<td>To provide individuals with opportunities for personal development</td>
</tr>
<tr>
<td>C17</td>
<td>To provide a fair system of financial and non-financial rewards</td>
</tr>
<tr>
<td>C18</td>
<td>To provide open communications</td>
</tr>
<tr>
<td>C19</td>
<td>To be environmentally aware and socially responsible</td>
</tr>
<tr>
<td>C20</td>
<td>To provide a fair return to the shareholder</td>
</tr>
</tbody>
</table>

The total number of factors is equal to the total number of variables used (10 in the above example). However, not all factors are equally important. The first step in factor analysis is to determine the number of important factors. The Minitab output is shown below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor1</th>
<th>Factor2</th>
<th>Factor3</th>
<th>Factor4</th>
<th>Factor5</th>
<th>Factor6</th>
</tr>
</thead>
<tbody>
<tr>
<td>C11</td>
<td>-0.545</td>
<td>-0.620</td>
<td>0.289</td>
<td>0.107</td>
<td>-0.150</td>
<td>0.072</td>
</tr>
<tr>
<td>C12</td>
<td>-0.660</td>
<td>-0.146</td>
<td>0.398</td>
<td>-0.308</td>
<td>0.314</td>
<td>0.397</td>
</tr>
</tbody>
</table>
At this stage of factor analysis attention is restricted to the two rows at the bottom of each factor, headed Variance and % variance. The variance associated with a factor is a measure of the amount of variation explained by the factor.

Important factors explain a large amount of variance so the factors are ordered in decreasing order of the variance they explain. It is customary to retain only those factors with a variance greater than one. In this example we would retain the first two are retained. The total variance explained is equal to the number of variables used. The final row shows the percentage of this total variance explained by each factor. He first two factors explain a total of 61.8% (0.449 + 0.169) of the total variance. In practice investigators would be sceptical of a factor analysis that explained less than 50% of the total variation.

The next step was to perform separate factor analyses with only the retained factors (two in this example). To aid interpretation, the factors are rotated and the

<table>
<thead>
<tr>
<th>Variable</th>
<th>C13</th>
<th>C14</th>
<th>C15</th>
<th>C16</th>
<th>C17</th>
<th>C18</th>
<th>C19</th>
<th>C20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.563</td>
<td>-0.649</td>
<td>-0.795</td>
<td>-0.790</td>
<td>-0.750</td>
<td>-0.803</td>
<td>-0.632</td>
<td>-0.403</td>
</tr>
<tr>
<td></td>
<td>-0.516</td>
<td>-0.281</td>
<td>0.201</td>
<td>0.428</td>
<td>0.504</td>
<td>0.444</td>
<td>-0.214</td>
<td>-0.473</td>
</tr>
<tr>
<td></td>
<td>0.340</td>
<td>-0.538</td>
<td>-0.034</td>
<td>0.087</td>
<td>0.106</td>
<td>-0.077</td>
<td>-0.317</td>
<td>-0.305</td>
</tr>
<tr>
<td></td>
<td>0.278</td>
<td>0.171</td>
<td>0.098</td>
<td>-0.081</td>
<td>-0.123</td>
<td>0.064</td>
<td>0.283</td>
<td>-0.680</td>
</tr>
<tr>
<td></td>
<td>-0.105</td>
<td>-0.246</td>
<td>-0.271</td>
<td>-0.207</td>
<td>-0.071</td>
<td>0.087</td>
<td>-0.582</td>
<td>-0.047</td>
</tr>
<tr>
<td></td>
<td>-0.348</td>
<td>0.237</td>
<td>0.163</td>
<td>-0.016</td>
<td>-0.216</td>
<td>-0.105</td>
<td>-0.064</td>
<td>-0.223</td>
</tr>
<tr>
<td>Variance</td>
<td>4.4938</td>
<td>1.6948</td>
<td>0.8665</td>
<td>0.7902</td>
<td>0.6625</td>
<td>0.4782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Var</td>
<td>0.449</td>
<td>0.169</td>
<td>0.087</td>
<td>0.079</td>
<td>0.066</td>
<td>0.048</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor7</th>
<th>Factor8</th>
<th>Factor9</th>
<th>Factor10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.374</td>
<td>-0.234</td>
<td>-0.025</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>0.144</td>
<td>0.056</td>
<td>0.001</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>0.227</td>
<td>0.199</td>
<td>0.141</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>0.057</td>
<td>0.193</td>
<td>0.127</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>0.348</td>
<td>0.298</td>
<td>0.018</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>0.087</td>
<td>0.162</td>
<td>0.306</td>
<td>0.087</td>
</tr>
<tr>
<td></td>
<td>0.070</td>
<td>0.141</td>
<td>0.200</td>
<td>0.204</td>
</tr>
<tr>
<td></td>
<td>0.187</td>
<td>0.116</td>
<td>0.092</td>
<td>0.269</td>
</tr>
<tr>
<td></td>
<td>0.038</td>
<td>0.3128</td>
<td>0.1824</td>
<td>0.1420</td>
</tr>
<tr>
<td>% Var</td>
<td>0.038</td>
<td>0.031</td>
<td>0.018</td>
<td>0.014</td>
</tr>
</tbody>
</table>
variables ordered in decreasing contribution to the factor. Those with a small
ccontribution to the factor are scored as zero to aid interpretation.

The Minitab output is shown below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor1</th>
<th>Factor2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C18</td>
<td>0.906</td>
<td>0.000</td>
</tr>
<tr>
<td>C17</td>
<td>0.901</td>
<td>0.000</td>
</tr>
<tr>
<td>C16</td>
<td>0.886</td>
<td>0.000</td>
</tr>
<tr>
<td>C15</td>
<td>0.749</td>
<td>0.000</td>
</tr>
<tr>
<td>C11</td>
<td>0.000</td>
<td>0.825</td>
</tr>
<tr>
<td>C13</td>
<td>0.000</td>
<td>0.753</td>
</tr>
<tr>
<td>C14</td>
<td>0.000</td>
<td>0.621</td>
</tr>
<tr>
<td>C20</td>
<td>0.000</td>
<td>0.621</td>
</tr>
<tr>
<td>C19</td>
<td>0.000</td>
<td>0.558</td>
</tr>
<tr>
<td>C12</td>
<td>0.000</td>
<td>0.522</td>
</tr>
<tr>
<td>Variance</td>
<td>3.4256</td>
<td>2.7630</td>
</tr>
<tr>
<td>% Var</td>
<td>0.343</td>
<td>0.276</td>
</tr>
</tbody>
</table>

Note that the total variance explained by the two (rotated) factors is equal to that
explained by the first two unrotated factors but their individual values have
changed. The variables contributing substantially to the first factor are (in
decreasing order of importance) C18, C17, C16 and C15. The variables
contributing substantially to the second factor are (in decreasing order of
importance) C11, C13, C14, C20, C19 and C12. In particular, the first invisible
factor is equal to

$$0.906C_{18} + 0.901C_{17} + 0.886C_{16} + 0.749C_{15}$$

plus insubstantial contribution from the other variables. The value for the factor
for each observation is called the factor scores. In this thesis factor scores are
used to related aspects of the variance model (see page 102).

We now turn our attention to interpreting these factors. The variables
contributing substantially to each factor are given in full below.
Interpretation of the factors is subjective and only tentative conclusions can be drawn. Broadly factor one can be interpreted as internal missions and human resource management issues and factor two external missions and issues for stakeholders.

The latter is accomplished by using stepwise regression. However before outlining the main uses and rationale for stepwise regression we first define the simple linear regression model.

Often in attitude surveys the investigator wished to determine if two quantitative variables (X and Y) are related. For example consider the table below showing the value of three variables Y and two possibly related variables X1 and X2.

<table>
<thead>
<tr>
<th>Y</th>
<th>X1</th>
<th>X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>38</td>
<td>71</td>
</tr>
<tr>
<td>6</td>
<td>36</td>
<td>8</td>
</tr>
</tbody>
</table>
A plot of $Y$ against $X_1$ is shown below:

This suggests that $X_1$ and $Y$ are related linearly, i.e. a reasonable model would be $Y = \beta_0 + \beta_1 X_1$, where $\beta_0$ is the y intercept and $\beta_1$ is the gradient. Values of $\beta_0$ and $\beta_1$ can be found for a particular data set by using calculus techniques to minimise the sum of the squares of the observed and fitted values to produce the least squares regression line (Draper and Smith, 1998). The ‘least squares’ regression line fitted to these points is shown below.
The corresponding regression line for predicting $Y$ from $X_2$ shown below shows that the relationship between $Y$ and $X_2$ is not as strong as that between $Y$ and $X_1$. 

Regression Plot

$y = -1.34625 + 0.169781 x_1$

Regression Plot

$y = 5.44925 - 0.0217286 x_2$
The product moment or Pearson correlation coefficient, abbreviated by $r$, measures how well a straight line $Y = \beta_0 + \beta_1X$ fits observed data. The value of $r$ is from $-1$ to $+1$ inclusive and the sign of $r$ is the same as the gradient of the regression line. Hence $r$ is positive if $Y$ increases with increasing $X$ and negative if $Y$ decreases as $X$ increases. The numerical value of $r$ is large for lines that fit the data well. The value of $r$ for $Y$ and $X_1$ is 0.938, a large positive value consistent with a line that has a positive gradient and fits the data well. In contrast, the value of $r$ for $Y$ and $X_2$ is $-0.516$, a negative value corresponding to the negative gradient and with a smaller numerical value. In this thesis the product-moment correlation coefficient is used to measure the strength of association between factor scores from different parts of the variance model.

A more formal approach to decide if a straight line adequately fits a data set is to find the $t$ value, the value of the gradient divided by its standard deviation. A variable that predicts well will have a ratio with magnitude greater than 2. For example, the $t$ values for $X_1$ and $X_2$ when used to predict $Y$ are 7.68 and $-1.70$ respectively. This is used extensively in stepwise regression below.

A natural extension of the simple linear regression model is to predict $Y$ from more than one variable. For example, we might wish to predict $Y$ using both $X_1$ and $X_2$ in the above example. The resulting multiple regression model is $Y = \beta_0 + \beta_1X_1 + \beta_2X_2$. However, this model may include redundant variables resulting in an unnecessarily complicated model and one with less predictive precision. In this thesis we have used stepwise regression to select efficiently a
subset of variables to relate a factor score from the variance model to factor
scores from the preceding part.

Imagine that you believe $Y$ might be related to some of the $k$ variables $X_1, X_2$ to
$X_K$. The resulting multiple regression model from fitting all $k$ variables would be
$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots \beta_k X_K$. An efficient algorithm to determine which
combination should be retained in the multiple regression model is to follow the
procedure below.

Step 1: Find the variable chosen from $X_1$ to $X_k$ with the largest correlation with
$Y$: suppose this is $X_1$.

Step 2: Include $X_1$ in the model if its $t$ value has magnitude greater than 2.

Step 3 Find which of the remaining variables provides the best model when
fitted with $X_1$: suppose this variable is $X_H$.

Step 4: Fit the model with $X_1$ and $X_H$

Step 5: Only retain those variables with $t$ values with magnitude greater than 2.

Step 6: Continue to add the best remaining variable to those currently in the
model

Step 7: Go to step 5

The cycle from step 5 to step 7 continues until no variable entering the model has
a $t$ value with magnitude greater than 2. This approach ensures that only the
'best' variables are included in the model at any one time and that only important
variables are retained in the model.

The MINITAB output from applying the stepwise regression algorithm to the
above example is shown below.
The output above shows that at step 1, X1 is the 'best' variable (consistent with comparing the correlation coefficients above) and that X1 has a t-value of 7.68. The p value underneath this figure is the probability of falsely concluding the gradient is zero (i.e. that X1 is not a good predictor of Y). The very low p value indicates that we should be very confident concluding that X1 is a good predictor of Y. MINITAB also produces the value of r² of 0.8806, consistent with a value of r of 0.938, as found above.

The output above concludes at step 1. This means that the t value of X2 when it is included with X1 in the multiple regression model does not have a magnitude greater than 2. Hence, including X2 in a model that already includes X1 does not produce a significantly better model.

To ascertain if violation of the psychological contract is associated with employee behaviour the percentage hours each site lost through absenteeism per month was found over the period January 1996 to December 1999. The histogram showing these values is shown below with a normal curve superimposed showing that these figures appear to follow a normal distributed.
It can be shown that approximately 99% of the values from a normal distribution with mean $\mu$ and standard deviation $\sigma$ variable lie in the interval $\mu - 3\sigma$ to $\mu + 3\sigma$, called the 99% confidence interval. The mean and standard deviation of the above data were 3.635 and 0.999 respectively. Hence we would expect 99% of such values to lie in the interval $3.635 - 3(0.999)$ to $3.635 + 3(0.999)$, i.e. from 0.638 to 6.632. An value outside this range would be regarded as unusual and reasons sought why such a figure should arise.

To help identify such unusual values and other possible pattern such as trends or alternating values, an $\bar{X}$ control chart was constructed showing the time plot of the monthly values and their 99% confidence interval (called the action lines). This is shown below.
The control chart shows that all the sample values are within the action lines and no other patterns have been detected. Hence the monthly percentage hours total hours production in Claypotts show only random variation and are not associated with violations of the psychological contract.

A similar analysis of the figures for Newark shows a value ‘out of control’ in November 1998.
Such occurrences were related to Company actions and their possible impact on the psychological contract. Conclusions from this analysis are outlined in Chapter 8, Section C.

**Analysing Qualitative Data**

A computer software package, Nud*ist (Non-numerical unstructured data* indexing searching and theorising) was used to aid analysis of the interview data. The use of computers in qualitative research is a trend that is growing (Coffey et al, 1996). The purpose of code and retrieval packages is firstly to aid coding segments of data and secondly to retrieve relevant data to a particular codes. The underlying logic is the same as using the manual technique of storage and retrieval not to be confused with 'data analysis' (Kelle, 1997).

Content analysis via Nud*ist (coding units of text), quantifies qualitative data. A number of problems with content analysis have been identified. Firstly, the theoretical basis has been questioned (Silverman, 1993). In addition due to the volume of data, the data reduction process begins at early stages of the research and important information may be discarded.

The computer is associated with rigour and objectivity. Thus it has been suggested that this would enhance the reputation of qualitative research which has been criticised for being 'impressionistic' (Kelle, 1997). However Coffey et al (1996) highlighted the importance not to see computer assisted qualitative data analysis software (CAQDAS) as a means of putting a 'scientific gloss' on
qualitative studies and that the qualitative paradigm has its own standards (Coffey et al, 1996). Indeed different software packages have been developed on different epistemological assumptions (Kelle, 1997).

A number of concerns have been raised about using computers in qualitative research. Firstly, it has been suggested that computers may alienate the researcher from the data (Kelle, 1997; Seidel, 1991). The fear is that the computer controls the research process (Buston, 1997). Secondly Coffey et al (1996) suggested that there has been a trend of homogenisation and the development of a new orthodoxy, especially in data management. It may foster strategies which are incongruent with methodological and theoretical tradition (Kelle, 1997) thus imposing a chronology (data collection, coding and analysis) more like that of a survey. However a number of types of software exist, namely text retrievers, code-and-retrieve, and theory-building software (Fielding, 1994). Thirdly, the method threatens rigidity with excessive coding (Richards and Richards, 1994). Lastly, due to the coding and documentation process, such computer programmes do not take temporal sequencing into account (Richards and Richards, 1994) although the researcher may return to the full set of data at any time. It is suggested that this results in a snapshot approach as a result of focusing on segments of data (Catterall and Maclaran, 1997).

Overall the advantages of using computer packages in qualitative research outweighs the disadvantages. Due to the sheer volume of information, the computer is invaluable for data management. Furthermore software packages
such as nud*ist facilitates analysis and there is no question of the role of the researcher being made redundant.

**The Process Of Data Analysis Using Nud*ist**

The first stage of using Nud*ist to as a tool for qualitative data analysis is to set up the project by importing documents containing the interview transcripts. Each interview transcript was saved separately in a Microsoft Word document and imported into Nud*ist to form a document system. The process of analysing the qualitative data began with systematically going through the transcripts and coding phrases. The index system stores the nodes and are organised in a ‘tree’ diagram. The first level of coding was principally determined by themes of the research, for example trust. Subsequent divisions of these themes were generated from the qualitative data. An important part of qualitative research is reflection (Kvale, 1996) and Nudist allowed for the development of ideas through the attachment of memons to both documents and codes.

**The Role Of The Researcher**

The emphasised placed on the social interaction between interviewer and interviewee is dependent on methodological approach. Reinharz (1997) suggested that researchers both ‘bring’ and ‘create’ a ‘self’ in the research field. A researcher will ‘bring’ certain expectations and social background to the study, which is congruent with a post-positivist epistemology. The researcher will also ‘create’ a self in the sense that it is a product of the norms of the social setting and the way in which the ‘research subjects’ interact with the researcher
(Reinharz, 1997). This is an issue which is crucial in symbolic interactionism (Denzin, 1971), however the detail of such interactions is not central for post-positivists.

The issue of how the interviewee responds to the interviewer is important (Miller and Glassner, 1997). It has been suggested factors such as gender, personal experience, age and social status affects the immediate impression of the researcher (Burgess, 1984; Pollert, 1981). Furthermore interactions may have been affected due to perceptions about the “rather threatening x-ray eyes of the ‘professional’ social scientist, but at the same time an academic ignoramus about the ‘real’ world” (Pollert, 1981:8). It is difficult to evaluate the effects of such factors. However the tacit feeling was that there was a good rapport with most of the interviewees as indicated by the ease which interviewees were prepared to answer questions.

The Issue Of Bias In Research

Hammersley and Gomm (1997) suggested that the issue of bias is a recurring theme in social science. However, the precise meaning of the term bias is often problematic, two meanings are suggested (Hammersley and Gomm, 1997).

Firstly, bias in terms of a “deviation from a true score” (Hammersley and Gomm, 1997:1), which refers to the technicalities of valid measurement. In terms of the questionnaire, using attitude scales that had already been tested for validity and reliability strengthened content validity. The concept of bias through measurement is more difficult to conceptualise in the execution of interviews. Post-positivists are relativist in the sense that individuals may have different
perceptions of reality. However the base line is still that one external reality exists, therefore perhaps a picture of ‘reality’ is given by identifying common themes between interviews.

The second definition refers to “a conscious or unconscious tendency on the part of a researcher to produce data, from/ or to interpret them, in a way that inclines towards erroneous conclusions (Hammersley and Gomm, 1997:1). However they suggested that bias should be able to be recognised and minimised as judged by the researcher or by colleagues, thereby stressing the importance of reflection of the research process.

The final part of the methodology chapter examined the detail of the research process of this thesis. The following chapter presents the contextual background of the case study organisation.
Chapter 4

CONTEXTUAL BACKGROUND
CHAPTER 4

CONTEXTUAL BACKGROUND

Introduction

The importance of contextual issues has been highlighted in the foregoing discussion of methodology. In adopting a processual and longitudinal approach, it is important to outline 'temporal interconnectedness' and explore the way in which context impinges on action and vice versa (Pettigrew, 1999). The aim of this chapter is to present the contextual background to the thesis and emphasis events that may shape psychological contracts. The name of the company and its individual sites have been changed to ensure confidentiality.

Background To The Organisation

The research is based on a single case study, Dunnotar, a medium-sized industrial textile company employing approximately 600 people in 2000. The case study company was based in a small rural town in Tayside where is has operated for over 200 years. The organisation was originally a family-owned firm and had built up a reputation as a good employer with progressive human resource management policies. In May 1986 the firm became a wholly owned subsidiary of a multinational holding organisation which enabled the company to take advantage of the technical resources within the holding company to encourage further product development.
The product line had changed over the years, from linen and jute to polypropylene products. Four lines of commodities were produced: industrial yarns, floor-coverings, industrial textiles and geo-textiles. In industrial yarns, the company had gained a good reputation with manufacturers of curtain heading tape in the year 2000 and they were market leaders in telecommunication cable identification tapes with their influence spreading across Europe, Middle East and Australasia. The more traditional side of the business was floorcoverings providing primary and secondary backing to the tufted carpet industry. The industrial textile’s side of the business was diverse with their product applications ranging from electric blankets to training shoes to mail bags. In recent years geotextiles had increased in popularity being used in road building, coastal protection and drainage systems.

Until 1996, Niddry (non wovens part of the business), remained a distinct company in its own right, however it had been integrated into the company group and is an illustration of the company’s commitment to research and development of new fabrics. The Niddry had created a good reputation for the manufacturing of spunlaid textiles. This thermal bonded fabric had a number of uses such as protective apparel and has the advantage of being microporous and breathable. The company continued to develop innovative products and has recently received accreditation by the British Board of Agreement for an insulation wrap for the construction industry, which is waterproof yet breathable. The company was a major player in the European and world markets and dominates the UK market in geo-textiles, claiming 70% market share.

Mission Statement.
The current mission statement of the company, written in 1998, focuses on profitability, quality, customer relations and a commitment to providing for its employees through human resource management policies. It is reproduced below in Figure 8:

Figure 8: "To be the most profitable European Polyolefin Industrial Textile Manufacturer.

- To be world class in health, safety and environmental management,
- To satisfy customers expectations by consistently manufacturing products exceeding competitors quality standards.
- To provide a long term return on capital employed of a minimum of 15% after tax to our shareholders.
- To achieve our mission by focusing sales development on revenue growth and having the lowest cost base in our industry.
- To secure future investment that improves the long-term profitable growth of the business.
- To continually raise horizons by setting more demanding goals with employees committed to achieving company objectives.
- To be a company that quality people wish to work for because of stimulating employment, good rewards, a safe working environment and positive training and personal development.
- To assess managers by the quality of their business decisions.
- To play an active and positive leading role in the local community."

(Source: Employee Handbook: 3)
The company was also committed to a ‘quality culture’, and a policy was written in 1993 that stresses commitment to an open style management and open communications. The policy also outlines a ‘no blame culture’ and the concept of continuous improvement. The key elements of the policy are outlined below:

"Within Dunnotar we believe in an open style of management. Employees are encouraged to be honest and truthful in their dealings with colleagues.

Our aim is to develop a positive attitude culture throughout the organisation and encourage employees to share knowledge and information.

The process of continuous improvement will encourage healthy discussion and constructive debate. It is also likely to mean mistakes may be made by us all as we strive to achieve even higher standards. Such mistakes should be seen as a learning experience and the lessons learned shared with colleagues. This does not reduce our responsibility to deal firmly and fairly with those who may behave in a way which is contrary to Company standards.

Encouragement, support, enthusiasm and teamwork will help ensure everyone becomes totally involved in developing the business and building for the future."

The company policy outlines not only its commitment to profit and the shareholders but also to its employees through progressive human resource strategies such as training and development, a challenging job and a positive
employee focused culture. Outwith the immediate boundaries of the company, there is also a commitment to the local community and environmental issues.

**History Of The Company**

The company has enjoyed an excess of 200 year association with the area, its relative fortunes reflecting wider industry and social trends (Whately, 1992).

1792-1845

The company was founded in 1792 and initially were commission merchants, marketing osnaburgs (coarse linen cloth) and stelitz (fine linen cloth) which were woven by home workers in the domestic system. After 5 years the company moved towards achieving merchant-manufacturer status with a greater degree of centralisation such as bleaching and dyeing. The company prided itself on producing cloth of the best quality and although it was more expensive, it was felt that it gave them an edge in the market. Further changes included the expansion of target markets with links in Latin America, Spain, North America and South Africa.

1845-1904

The period 1845-1904 witnessed a considerable expansion, the company moved from a local merchant-manufacturing operation to a large, profitable business with works in both Forfar and Dundee. There was major investment during this period, and the building of Stirling site in 1865 reflected this, mirroring the 'industrial revolution' that was gaining momentum in the country at the time.
The magnitude of the change can be illustrated by the increase in machines. Previously they employed handloom weavers and had approximately six powerlooms, while the new site Stirling had 310 powerlooms.

It was during this period that a partnership was formed with a Dundee textile manufacturer and the company was renamed. This enabled a further increase in production; expansion continued in 1867 when Ward Mill was built in Dundee, which was estimated to be able to spin 180,000 miles of yarn a week. Station Works in Arbroath was also bought from a local family and again increased the powerloom capacity. Despite steady expansion, the company was not sheltered from the global changes in markets, with boom times during the American Civil War but more difficult times in the post-war depression.

The company was based on a paternalist philosophy and provided a company works school and small payments for sick, injured and aged workers, acts that are reported to have engendered some level of loyalty and gratitude. However, the company was not without its labour relations problems with the ‘great strike and lock out of 1889’. This occurred in the backdrop of increased unionism and industrial disturbances in the country. A local factory workers union was formed and aimed to reduce the wage differential between employees working in Forfar and those in Dundee and Arbroath. The company however did not recognise this union and refused to bargain, resulting in a two month long strike, which ended in arbitration and an increase in the workers’ wages.
1919-1960

The inter-war years witnessed a period of depression with the company suffering declining profit margins due to the return to peacetime production. The period also saw the decline of linen as a result of flax supply problems. The company felt that change was required and in 1929 they invested in new machinery which was located in Strang Street in Forfar. The new machinery enabled the production of ‘clean, high coloured goods or regular appearance and weight’, from which success was built. Non standard goods were also developed supplying carpet yarns, bookbinding and wall covering to manufacturers. To further increase efficiency the Bedaux system of labour measurement was introduced despite the resistance of the labour force. Additionally during the period there was an increased concentration on Forfar with the head office moving to Stirling site in 1954 and the closure of the Dundee factory, Ward Mills, in 1958.

1960-1986

The period 1960-1986 was characterised by a diversification of the business. In 1960 the company merged with a family jute merchant business, and was renamed. The jute industry was becoming more competitive due to government controls being lifted and the company aimed to expand and diversify. Expansion was demonstrated by the acquisition of a Forfar textile manufacturing firm and a small company in Brechin, which was experimenting with new fabrics. Further diversification included involvement in the electronics industry. However this was never core business although it signalled that the company was searching for a new product. The new product came in the form of polypropylene, a derivative
of petroleum; and in 1966 extensive commitment to the new fibre was made by investing in new machinery to weave the polypropylene tape.

In terms of extrusion of the polypropylene, the company dealt with a US firm, who eventually located an extrusion plant in one of the company’s factories, Claypotts, in 1968. This particular company did not remain in the area long and was sold to TCC (name withheld to ensure confidentiality) in 1969, who subsequently developed a greenfield site at Newark in Forfar. The sales of polypropylene grew steadily, although in 1973 jute was still making a more significant contribution to profits than polypropylene. The company eventually bought TCC in 1977 giving them complete control over the whole production process of polypropylene. However, the company was not complacent. A research and development laboratory was also installed in Claypotts at this time, developing new lines such as geotextiles. The production of polypropylene demanded twenty four hour working and the workforce was resistant to such changes. The company responded by improving employees’ benefits with increased pay rates and changes to pensions.

1986-1999

The company profits continued to rise (£4.5 million in 1984-85) and during the mid 1980s the contribution of polypropylene exceeded jute. Success can be illustrated by the company’s 60% share of the UK domestic market in polypropylene carpet backing and Dunnotar grew to be the largest UK polypropylene extrusion and weaving unit in Western Europe and the second most profitable.
Boardroom difficulties surrounding the retirement of the chairman/chief executive allowed a take-over by the multi-national company, Shell. The directors felt that the company would benefit from gaining access to Shell’s oil supply, research and development and investment. The workforce met the prospect of the take-over with ‘outright hostility’. Nevertheless the deal went ahead and was finalised in May 1986.

As a result of the take-over a new chief executive was appointed. During this period (late 1980s) the market for polypropylene was still relatively buoyant and this, combined with Shell’s desire not to attract negative publicity, shaped the initial choice of an investment strategy for the company. The investment strategy took the form of firstly, investment in new machinery, particularly in extrusion. This was then combined with further investment in product development. The spirit of innovation was also demonstrated by the launch of Niddry in 1988 with the investment of £6 million. The new plant was not without its problems, with high production costs and only minimal profits.

Shell, again due to the fear of negative publicity, also imposed a stronger safety strategy. The company had always seen safety as an important objective, but Shell pushed for ‘zero accidents’. This stimulated a review of both machinery and training. The only rationalisation to take place during this initial period was the closure of the Dundee sales office, a department run and controlled by one of the three families that had owned the company previously.
In the early 1990s the polypropylene market started to become more difficult for the company with the increase of the price of polymer and mounting competition. This was coupled with the loss of the Belgian market, which had contributed significantly to the profitability of the company's woven business. These factors led the company to adopt a rationalisation of the product line in the form of reducing the product range and as a result the 'big bag' business (big bag refers to woven cloth bags that store 0.5 - 1 ton), was sold, as was the jute business in Strang Street. Centralisation and control were also central themes during this period; and in order to reduce transport costs the Brechin factory was closed in 1992 and the Perth factory in 1994. Production was then wholly based in Forfar. Such reductions resulted in changing work practices such as teamworking. Furthermore, in conjunction with rationalisation the company introduced more stringent management accounting and TQM systems. The need to rationalise also affected workforce numbers and this signalled the steady reduction of the number of employees, which was to continue throughout the 1990s. The table below (table 4) highlights the decline of absolute numbers:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>1,500</td>
</tr>
<tr>
<td>1991</td>
<td>800</td>
</tr>
<tr>
<td>1996</td>
<td>660</td>
</tr>
<tr>
<td>1999</td>
<td>600</td>
</tr>
</tbody>
</table>

A new chief executive brought a number of ideas to the company, one of which was the importance he placed on 'positive thinking' and the value of having a
workforce with a 'positive outlook'. As a result of this philosophy, a group of consultants was brought into the company in 1992 for a three-year period to build positive attitudes. The 1994 company wide attitude survey produced mixed results and this was reaffirmed in the second attitude survey in 1996. However, the outcomes of the 1996 survey resulted in increased communications through quarterly business briefings and more targeted training strategy.

Another major strategy adopted by the chief executive was the vision and subsequent move to a single operating site. A feasibility study was conducted in 1994 and fulfilment of the plans was made possible by the sale of two town centre factories, one of which was sold to a supermarket chain for £4 million. Construction work commenced in 1997 and the new greenfield site was due to be operational by the end of 2000.

The 1997 period witnessed further decline in the market, as the pound sterling became stronger. This had serious implications as over 50% of production was exported and profits were significantly down. This was coupled to problems with quality and the loss of major customers. These events resulted in the employment of consultants to address cost, productivity, development and margin issues. Such aims were achieved through a number of small projects each with specific aims, targets and deadlines.

In 1998 the oil industry experienced a difficult time and Shell adapted a strategy of selling off downstream companies, so Dunnotar found themselves on the market. At first there was a potential management buyout but as the months of
1999 unfolded it became obvious that it was not a viable option. TP, a Greek family company, eventually bought the company buying 80% of shares with Shell retaining 20% for the short term. The deal was concluded in the autumn 1999.

The company has undergone a remarkable amount of change in the last decade; the process of change is illustrated diagrammatically below in Figure 9. The diagram highlights changes from 1986 - 2000 as show by the time line. The diagram is also divided into sections, thereby illustrating changes in the external environment, the drivers of the shareholders, the strategy of the company and the resulting changes for the 5 sites during the time period.

**The Implications Of Context**

Pettigrew (1990) has emphasised the importance of ‘horizontal interconnectedness’ and the way that past events influence current perceptions. Two key features from the past appeared significant to the study of the psychological contract. First, despite being a small, rural company with paternalist practices, the organisation had experienced a number of labour problems from discontent to strikes. Second, the impact of a steady declining workforce through the 1980s and 1990s and the implications for perceptions of job security and trust in the company.
Figure 9: Timeline of Organisational Events

- **Trend of MNEs**: Market buoyant
  - **Shell**: Buys the company
  - **New CEO**
  - **Investment Strategy**: Increased product innovation
  - **Safety & Environmental strategy**: New machinery
  - **Rationalisation Strategy**: Reduced product range
    - Tay Textiles sold
    - Jute business sold
  - **Rationalisation**: Reduced in workforce
  - **Brechin factory closes**
  - **Perth factory closes**
  - **Team working**
  - **Problems**: Increased communications and training

- **Market deteriorating**:
  - Increased competition
  - Prices of polymer increasing
  - Loss of Belgium market

- **EXTERNAL ENVIRONMENT**
  - **SHAREHOLDERS INFLUENCE**
    - New CEO
    - Increased product innovation
    - Shell does not want negative publicity

- **CLAYPOTTS**
  - Investment in new business
  - Problems: High cost of production, Short product runs
  - New finance manager

- **STIRLING**
  - Investment in machinery

- **NEWARK**
  - Investment in machinery

- **NIDDRY**
  - Investment in machinery

- **HUNTLY**
  - Investment in machinery

Announcement of feasibility study of greenfield site

Strong pound, export profits hit
Loss of customers

Evaluation: attitude survey
Increased communications (quarterly briefings)
Announcement of feasibility study of greenfield site

Consultants aim to;
• reduce costs
• increase productivity
• increase development
• increased margins

Problems with quality
Increased training
Training linked to VQs

Redundancies

Oil industry in difficult times
Shell put the company on the market
Bought by TP

Aims:
• growth
• profit

Evaluation: attitude survey

Evaluation: attitude survey

New management

New management

New management

New management

New management

New management

New management

New policy & strategy

Loss of major customer

Problems with machines

Head office moves to Newark site

Redundancies:
5 voluntary
7 compulsory

Profile Of The Sites

The company is made up of five distinct sites; each site has a distinct culture and history that may shape 'psychological contracts'. The micro level context and the specific timings of the interviews are of crucial importance as changes unfold and are illustrated below in Figure 10:

Figure 10: Interview Timeframe

1997

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
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<tbody>
<tr>
<td>Niddry</td>
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<tr>
<td>Claypotts.</td>
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<td>Newark.</td>
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</table>

1999 – 2000

<table>
<thead>
<tr>
<th>Jan</th>
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<td>Niddry</td>
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<td>Newark</td>
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</tbody>
</table>

To expand on the diagrams, the context of each site is illustrated in table below:
Site 1: Claypotts

The site was located in the centre of the town and since its purchase had been used for diverse purposes. Claypotts was bought in 1935 and was initially used as a warehouse. It was first brought into use for production in 1949 where it housed 42 weaving looms. In 1968 an alliance with a US firm, Grace, meant the function of the site was to change yet again, where it became the location for polypropylene extrusion and research and development laboratories. This alliance was short lived and in 1969 TCC took over extrusion from Grace. Due to the limitations of space, TCC moved to a greenfield site in 1971 and the site was to return to a weaving shed.

The workforce was predominantly male, with a 60:40 gender split. The average age of employees was 42 although 25% of employees working on the site are over 50. A significant proportion of the workforce had a long tenure with the company, with 57% having worked there for over ten years. Many of these employees had not always worked in the particular site, but had come from nearby plants which had been closed down during the declining fortunes of the more traditional products of the company.

The timeframe in which phase 1 interviews took place was just before and after the announcement of unexpected redundancies. In addition the factory was not working at full capacity with some machines laid off. The second interview stage coincided with the announcement of that the company had been bought by a Greek textiles company. Furthermore their present site had been sold and they were due to move to the greenfield site the following year.
Site 2: Huntly

Huntly was the head office of the company, the location of which was connected to Stirling site from 1954 and subsequently moved to Newark site. Employees worked in functional areas, for example finance and marketing. The senior management team was also located in the head office and most employees in this site had more contact with them. The average age of current employees was 41 and there was about a 50:50 split between men and women. The majority of employees, 54%, had worked for the company for over 10 years.

The immediate context of the first phase of interviews saw the aftermath of the redundancies which had taken place five months previously. In the case of the head office, twelve voluntary redundancies had been asked for but only 5 volunteered. Compulsory redundancies followed, head office being the only site where compulsory redundancies took place. While the interviews were being conducted, profits were down and there was increased pressure, particularly on the marketing and sales staff, to generate more customers. The second stage of interviews took place just after the announcement that the company had been bought by a Greek textile company. They were also in the midst of their new computer system going ‘live’, a job, which had taken a year and a half to plan. Further, the greenfield investment outside their door continued to rise.

Site 3: Newark

Newark was a relatively new factory that originally had been a subsidiary of an American firm and was built as a greenfield site in 1971. The company bought the factory in 1977 for £5.3 million. The factory located the polypropylene
extrusion system and also spun the tape. The current workforce was predominantly male, (88%), and of a fairly young age, with 32% being 31 - 40 age group. Nonetheless many had a significant relationship with the company with 58% having over ten years service.

The context of the first phase of interviews was one where the factory had experienced voluntary redundancies 5 months previously. The second stage of interviews was conducted just after the sale of the company was completed.

Site 4: Niddry

Niddry was a relatively new venture that focused on new product development and manufactured chemically based non-woven fabric, and was launched in 1988 with £6 million of investment. Although it was part of the group in name, it was essentially run as a separate company. After about 1995 the strategy changed and it was integrated into the rest of the company.

The average age of the current workforce was 36 and had a high proportion of employees in the 31-40 age group. The workforce was predominantly male (88%). The average length of service was 7 years, which reflects the relative age of the site. The factory had faced a number of major changes, particularly in respect of the senior management, where there had been 4 factory managers in 6 years. This has had a marked impact on employee attitudes.

The immediate context of the interviews was one of a recent decline in demand and the factory running at two-thirds capacity. The second phase of interviews...
was conducted during a busy period where all the machines were running. Further, the company has been on the market for over 6 months but they had not had any word of a buyer.

Site 5: Stirling

Stirling was traditional textiles factory, which was built in 1865 and formed the main manufacturing base of the company. The site had remained a weaving plant since this time and is located in the centre of the town. There was an approximate 60:40 split men to women and the average is 41. The majority of the workforce, 58%, had worked for the company for over 10 years.

The context in which the first phase of interviews was one where 3 months previously voluntary redundancies had taken place. The consequence of such events was that the number of weaving machines employees were expected to cover had increased from 15 –22. The feeling was that they were understaffed because more people wanted voluntary redundancy than expected, and all those who applied gained their redundancy packages. Furthermore the company had not experienced the traditional slack period during the summer months. Another consequence of the rationalisation of staff was that the two weaving sites were amalgamated in name under one manager. It was the manager of Claypotts, the other weaving plant, which gained the job of managing the whole weaving unit. The context of the second stage of interviews was when the sale of the company had been confirmed. Further the sale of site 5 had been confirmed and they were due to move to the greenfield site the following year.
Chapter 5

RESEARCH QUESTION 1: RESULTS
CHAPTER 5
RESEARCH QUESTION 1: RESULTS

What factors that shape the psychological contract?

Introduction

The aim of Chapter 5 is to present the findings of research question 1, ‘what factors that shape the psychological contract?’ From my review of the literature, certain key propositions were formulated:

1. The psychological contract is dynamic, fluid and context dependent.
2. Trust is an important influence in shaping psychological contracts: calculative, institutional, knowledge-based and interpersonal forms of trust.
3. The extent to which an organisation is perceived to be fair directly impacts on the psychological contract; three facets being distributive, procedural and interactional.

The chapter traces the changing nature of the psychological contract at both the organisational and site levels, and is organised by time periods: 1996, 1997-1999 and 2000. Each time period is subsequently subdivided by level of analysis: organisational and site levels. The structure of the chapter is summarised in the table below.
The above table presents the structure of the chapter, further details of the time periods are presented below:

**Time 1: 1996**

Section A focuses on the 1996 time period. The section firstly presents the organisational context outlining both strategic and operational issues to embed the psychological contract within a specific setting. Subsequently, section B explores the findings of the 1996 questionnaire at an organisational level, focusing principally on measures of content and outcomes of the psychological contract. Finally, the organisational level results are disaggregated and the site level statistics are examined to ascertain if the state of the psychological contract differs among sites.

**Time 2: 1997-1999**

Time 2 analyses the findings gathered in 1997 and 1999. The first part of this section provides an overview of the organisational context, as defined by the directors, outlining both continuities and changes. Subsequent analysis draws on qualitative data from each site gathered in 1997 and 1999.
**Time 3: 2000**

Time period 3 focuses upon findings gathered in the year 2000, the organisational context is again presented initially, highlighting the evolving organisation's situation. Section B presents the results of the 2000 questionnaire at the organisational level and subsequently by site, thereby illustrating differences among them.

**Time Period 1: 1996**

The following section presents the findings for the time period 1996. The organisational context and strategy defined by the directors will be outlined initially. Statistics from the 1996 survey will subsequently be presented and analysed at both the organisational and site levels. In 1994, management consultants were commissioned to conduct an attitude survey. The 1996 survey retained a few of the questions from the 1994 survey to enable longitudinal comparisons.

In order to clarify time frame and level of analysis a highlighted route map has been inserted at the beginning of each section.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Quantitative data</strong></td>
<td><strong>Qualitative data</strong></td>
<td><strong>Quantitative data</strong></td>
</tr>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level 'stories'</td>
<td>(B) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
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<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>
Section A - Organisational Context: 1996

The following section provides an overview of the organisational context and draws on interviews conducted with several directors, which centred on strategic issues and challenges facing the company are presented.

*The Influence of the Shareholder*

Until the mid 1980s Dunnotar was a family owned company, but in May 1986 the company was bought by the multi-national company Shell. Shell influenced the company in a number of ways through the 1990s, particularly in the areas of safety, quality and environmental issues. The marketing director of the company explained:

> Shell’s philosophy on safety was zero accidents, they gave a very high profile on safety…it was all linked to their public image, they didn’t want to do anything where products were seen to damage the environment, looking at product life cycle, looking at recycling options, minimum energy use.

As the above statement suggests, the company was experiencing demands to increase safety, quality and become more environmentally minded due to the importance of public image for the shareholder. The company also experienced pressure from the external market and competition was fierce, particularly in the European market. It was commented by the chief executive:

> Going on to the continent in a bigger way meant we had to be better at cost, control, better at productivity, have even higher quality standards,
ensure we could meet customer needs in every way, and that again drove a lot of the change ideas in the business.

In 1996 the company experienced pressure from competitors and also shareholders. It was crucial for the company to strive for change and to continually improve products and services while controlling costs. It was during this period that the notion of creating a greenfield site was born.

*Plans For A Greenfield Site*

As a result of increased market competition, the chief executive announced a commitment to building a greenfield site, which meant that all wovens production would be under one roof. This was a direct consequence of the drive to be more cost effective and competitive. The chief executive explained:

I said to the organisation that (the greenfield site) was the vision and don't think I am mad but recognise if we don’t do it we won’t survive and together we have to find a way, that would be in the early 90s, 1993ish.

The big break through came when we managed to secure Tesco as a buyer for a factory because instead of getting £300, 000 for housing, which we normally expected, we got nearly £4 million for a supermarket and that made it possible.

The greenfield site signalled long term investment in the company and aimed to increase efficiency in the wovens business. On a shorter term basis, pressure to increase effectiveness fostered changes to the organisational structure.
Changes In Organisational Structure

A further bid to increase efficiency was made through changes in the organisational structure by removing layers of supervisors and replacing them with a team structure. The HR director explained:

We also looked at the concept of supervision and managing the factories allied to the technological improvements that were taking place and we came to the conclusion that we didn’t need supervisors; they weren’t doing anything. If you want to give ‘empowerment’, it is probably a maligned phrase now, but if you want to give people more control over their own destiny they have the opportunity to make their own decisions.

It was recognised that there were problems associated with the change of structure. In retrospect, problems with team working stemmed from a lack of preparation, training and communications, the implications of which were poor teamworking, discontent and low morale. It was commented by the HR director:

I think we had a period where we put teamleaders and took supervisors out. We felt we had made a mistake and we nearly went back to supervisors, which would have been a huge mistake. We probably hit a crisis in the first few years -1994 - because we weren’t sure we had done the right thing and our teamleaders were saying I don’t know what we are doing we are doing… with team leaders and we probably chucked them in at the deep end and we probably didn’t tell them what we expected from them.
Competitive pressures in the mid 1990s had forced the company to redefine the organisation and job demarcations. The company also expressed commitment to human resource management and the importance of its employees.

*Positive Thinking Initiative*

A further investment was made in the form of consultants whose contribution was to focus on "positive attitudes and thinking". The value of positive thinking stemmed from a belief of the chief executive:

> I've all my working life formed the view that the most important thing you can have in an employee is a positive attitude, more important than education or intelligence. Someone with a positive attitude is likely to maximise their education and I think you can actually improve their intelligence in various ways if they have the right attitude. So when Dale Carnegie came along and said that he thought that he could help people to be more positive in their approach to life that seemed interesting. I don't think however in the three years they were here; they made many negative people positive. I think what they did was to marginalise the negative people, quite a lot of people went as a result of the exercise and that wasn't what we anticipated.

A consultancy group was commissioned in 1994 for an attitude survey to assess the extent of positive attitudes among the workforce. The results were mixed but in line with directors' expectations there was a feeling among directors of a need to 'give and take':

194
I think if you are asking people to be positive then you’ve got to face the fact that if you, as an employer, are not being positive to the employee’s, if it is words and no action then positive people will very quickly think I’m going to work somewhere else. So to keep good people I think you’ve got to be improving their lot in every way, all the time and that is pay, benefits, its attitude to safety.

The 1994 – 1996 period was characterised by ongoing change due to pressures from the shareholder and the market. Change came in a number of forms with the onset of new projects, an altered organisational structure and programmes in positive thinking. November 1996 marked the second attitude survey conducted by the University of Abertay Dundee. These contextual factors are crucial in understanding the dynamics of the psychological contract. For the majority of employees the move from a supervisory to a team working structure was the most significant change within the period and it affected morale due to the poor implementation. This section has presented contextual issues during 1996; the following section presents the results of the 1996 survey and highlights organisational level trends in the psychological contract.
Section B - 1996 Survey: Organisational Level Results

The previous section highlighted the internal and external pressures and challenges faced by the company. The following section outlines the state of the psychological contract, at an organisational level, drawing on results from the 1996 survey as illustrated by the route map below.

<table>
<thead>
<tr>
<th>Time 1 1996 Quantitative data</th>
<th>Time 2 1997-1999 Qualitative data</th>
<th>Time 3 2000 Quantitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
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</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>

The following section reports on findings that were collected in 1996. The aim was to establish the nature of the psychological contract and thereby establish a base from which to assess change over time. The section is organised by outlining expectations of work, content and outcome factors, adapted from Guest and Conway (1997). As the 1996 survey was commissioned by the organisation, survey assessed organisational programmes and initiatives and not designed to operationalise the Guest and Conway model (1997), therefore it was not possible to measure all the variables. Nonetheless, the model provides a useful framework from which to consider the nature of the psychological contract. The diagram below presents the factors that were measured by the 1996 survey and which will be explored through the following section.
1. Causes

*Expectations Of Work*

In order to assess the nature of the psychological contract, it is necessary to establish employees’ expectations of work and aspects of work employees’ value. To capture the significance of the results, it was useful to examine the absolute ranking of issues and how they have changed over time.

The table below illustrates aspects of work and reports issues employees’ value and how they had changed between 1994-1996, where 1 = strongly agree and 5 = strongly disagree.

Table 5: A Comparison of Employees’ Expectations of Work between 1994 and 1996

<table>
<thead>
<tr>
<th>Statement</th>
<th>1994 mean</th>
<th>Rank</th>
<th>1996 mean</th>
<th>Rank</th>
<th>2 sample t-test (df&gt;150)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I have job security</td>
<td>1.50</td>
<td>1</td>
<td>1.28</td>
<td>1</td>
<td>-9.38</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.70</td>
<td>2</td>
<td>1.34</td>
<td>2</td>
<td>-14.72</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.70</td>
<td>2</td>
<td>1.41</td>
<td>3</td>
<td>-2.03</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>
The above table indicates that job security and pay were issues that were consistently important to employees with an unchanged ranking between 1994 and 1996. The ranking for most other issues remained relatively stable, with the notable exceptions of enjoyment of the job and training & development. It appeared that the importance of job satisfaction, as rated against other issues, had declined whereas receiving training and development has become significantly more important to employees.

2. Content

In the Guest and Conway (1997) model, trust is a constituent of the content of the psychological contract. The trust literature highlights a number of dimensions: calculative, knowledge-based, institutional and personal trust. The notion of fairness was also defined as part of the content in the Guest and Conway (1997) model. The organisational justice literature, again, stresses that there are different aspects to the concept, which are: distributive, procedural and interactional.

There are a number of overlaps in conceptualisations of trust and fairness,
particularly institutional trust and distributive/procedural justice, as both refer to faith in procedures. The following section reports the findings and dimensions of trust and fairness by firstly outlining the results relating to calculative trust, then knowledge based trust. Subsequently the notion of institutional trust will be assessed through measuring distributive and procedural justice. Finally the findings relating to personal trust and interpersonal justice will be presented. As a result of the volume of the data, some of the statistical tables are presented in Appendix 1.

**Calculative Trust: Rational Assessment Of The Employment Situation**

Calculative trust refers to an individual’s rational assessment of the employment situation with the goal of maximising returns and is therefore based in self-interest and opportunism. Employees were asked to assess the value of staying with their present employers and the results are presented below.

Table 6: Table of Results Relating to Calculative Trust From the 1996 Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>3.13</td>
<td>7.82</td>
<td>25.00</td>
<td>25.57</td>
<td>29.39</td>
<td>12.21</td>
</tr>
<tr>
<td>Give an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.59</td>
<td>14.85</td>
<td>34.21</td>
<td>34.02</td>
<td>11.09</td>
<td>5.83</td>
</tr>
</tbody>
</table>

The findings suggested that employees, on balance, chose to remain with the organisation if the same opportunities were open to them in another company. Therefore in terms of calculative trust, employees rational assessment of their
employment situations meant that individuals chose to stay with the organisation, this may be due to either potential job prospects within the company or lack of alternative opportunities elsewhere.

Knowledge Based Trust: Delivery Of Elements Of The Mission Statements

A further dimension of trust is knowledge based trust, which refers to the predictability of behaviour. To assess the extent to which the ‘company’s behaviour’ was predictable, employees were asked to rate retrospectively the extent to which the company put aspects of its mission statement into practice, the mission statement of the company being used to operationalise what the company actually promised. Below is a summary table of the results of the 1996 survey, a four point scale was used with 1 = unimportant and 4 = important (n = 539).

Table 7: Employees Perceptions Of The Extent The Organisation Puts Aspects Of The Mission Statement Into Practice.

<table>
<thead>
<tr>
<th>Key dimensions of the missions statement</th>
<th>Extent company puts the mission statement into practice (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.69</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.66</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.63</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.39</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.23</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.14</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>2.85</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>2.80</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>2.69</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>2.65</td>
</tr>
</tbody>
</table>

These data above indicate that certain issues of the mission statement that were implemented more effectively than others, from the perception of employees.
Good customer service and fair return to shareholders were perceived as the matters that were most important to the company. In contrast, personal development and providing fair reward system were perceived as being the least well put into practice. Therefore personal development and rewards were potentially areas of psychological contract breach or violation as these two aspects were important to employees, as shown in table 5.

Institutional Trust: Faith In Systems And Procedures

Another dimension of trust is institutional trust; the faith placed in systems and procedures of the company. To operationalise this construct, two categories from the justice literature were drawn on; these are distributive justice (fair distribution of resources) and procedural justice (fair application of procedures).

- Distributive Justice

Perceptions of justice and fairness are content elements of the psychological contract. Employees were asked questions relating to the distribution of resources, in particular pay and fringe benefits, the results are shown in the table below.

Table 8: Distributive Justice Results From the 1996 Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies I know</td>
<td>2.95</td>
<td>4.31</td>
<td>35.96</td>
<td>29.03</td>
<td>21.91</td>
<td>8.80</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.82</td>
<td>6.18</td>
<td>37.27</td>
<td>32.58</td>
<td>16.10</td>
<td>7.87</td>
</tr>
</tbody>
</table>
The results showed weak agreement that distributive justice existed within the company although there was stronger agreement concerning fringe benefits than level of pay.

- **Procedural Justice**

Employees were asked several questions relating to procedural justice, particularly the extent to which procedures and the decision making process is seen to be fair. The table below illustrates the results where 1 = strongly agree and 5 = strongly disagree:

**Table 9: Procedural Justice Results From the 1996 Survey**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>2.56</td>
<td>8.57</td>
<td>49.91</td>
<td>21.42</td>
<td>16.76</td>
<td>3.35</td>
</tr>
<tr>
<td>I have been given plenty of opportunity for career development beyond my immediate job</td>
<td>3.40</td>
<td>2.06</td>
<td>14.23</td>
<td>36.52</td>
<td>35.77</td>
<td>11.42</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>3.41</td>
<td>1.70</td>
<td>13.77</td>
<td>37.55</td>
<td>36.04</td>
<td>10.94</td>
</tr>
<tr>
<td>The basis of which I am paid is fair</td>
<td>3.00</td>
<td>3.74</td>
<td>33.27</td>
<td>31.59</td>
<td>21.50</td>
<td>9.91</td>
</tr>
</tbody>
</table>

The results indicated that employees were neutral about the basis by which they were paid. Employees felt more strongly about human resource development issues and were especially critical of training, career development and promotion.
Personal Trust: Common Values And Norms.

Personal trust is the final category of trust defined by the literature and refers to the extent to which employees and the organisation share common norms and values. In order to assess the extent to which there were common values, employees were asked to rate aspects of the mission statement according to how important they personally regarded them. The results are demonstrated below, a four point scale was used with 1 = unimportant and 4 = important:

Table 10: Personal Trust Results From The 1996 Survey

<table>
<thead>
<tr>
<th>Key dimensions of the mission statement</th>
<th>Value to individual (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain safe working environment</td>
<td>3.73</td>
</tr>
<tr>
<td>High levels of customer service</td>
<td>3.68</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.60</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>3.50</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>3.49</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.45</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.34</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.30</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>3.23</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>3.17</td>
</tr>
</tbody>
</table>

The results above indicate that all aspects of the mission statement were rated important by employees, which suggested that there was a degree of commonality of norms and values. However, the maintenance of a safe working environment, high levels of customer service and conducting business with honesty were rated the most important aspects, while employee driven aspects, such as challenging work and personal development were rated relatively less important.
**Interactional Justice**

Interactional justice refers to extent to which employees feel that have been treated fairly by members of the organisation, consequently respect and dignity are key elements. Employees were asked several questions relating to interactional justice and the results are set out below where 1 = strongly agree and 5 = strongly disagree and n = 539:

Table 11: Interactional Justice Results From The 1996 Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things go wrong with respect to safety in my site manager normally blame employees</td>
<td>2.82</td>
<td>10.67</td>
<td>25.09</td>
<td>38.95</td>
<td>22.10</td>
<td>3.18</td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.52</td>
<td>7.56</td>
<td>63.69</td>
<td>22.12</td>
<td>12.67</td>
<td>3.97</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which they have made</td>
<td>3.18</td>
<td>2.08</td>
<td>25.14</td>
<td>22.27</td>
<td>31.57</td>
<td>7.94</td>
</tr>
<tr>
<td>In Dunnotar employees are encouraged to share knowledge and information</td>
<td>2.69</td>
<td>6.86</td>
<td>44.19</td>
<td>25.71</td>
<td>19.24</td>
<td>4.00</td>
</tr>
</tbody>
</table>

The results were paradoxical, employees agreed that they were dealt with firmly but fairly. However, employees also indicated that when things go wrong with respect to safety, managers normally blamed employees. This negative view was concurrent with weak disagreement with the statement that the culture is such that people readily owned up to mistakes which they had made.
3. Outcomes

In the literature, job satisfaction and organisational commitment were outcomes of a positive psychological contract, employees were asked questions referring to both these factors, the results are demonstrated below.

**Job Satisfaction**

Employees were asked several questions relating to job satisfaction (see Table 8 in Appendix 1). The results indicated that overall employees were fairly satisfied with their jobs.

**Organisational Commitment**

Organisational commitment is a further important dimension of outcomes of psychological contracts. Several questions were asked relating to this issue; the results are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.32</td>
<td>15.28</td>
<td>45.66</td>
<td>32.26</td>
<td>5.47</td>
<td>1.32</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.45</td>
<td>9.07</td>
<td>49.15</td>
<td>31.19</td>
<td>8.51</td>
<td>2.08</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.43</td>
<td>4.91</td>
<td>13.40</td>
<td>29.06</td>
<td>38.68</td>
<td>13.96</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.74</td>
<td>37.03</td>
<td>52.07</td>
<td>10.53</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself,</td>
<td>1.99</td>
<td>19.77</td>
<td>63.65</td>
<td>14.88</td>
<td>1.32</td>
<td>0.38</td>
</tr>
</tbody>
</table>
but for the organisation as well

<table>
<thead>
<tr>
<th>Construct</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would feel bad if I performed my job poorly</td>
<td>1.90  28.38  57.52  9.96  3.38  0.75</td>
</tr>
<tr>
<td>I feel a great sense of personal satisfaction when I do my job well</td>
<td>1.86  29.03  58.24  11.24  0.94  0.56</td>
</tr>
</tbody>
</table>

The results suggested that employees were committed to the organisation therefore in terms of psychological contract outcomes; there appeared to be a positive psychological contract with positive levels of job satisfaction and commitment.

State Of The Contract And Issues From The 1996 Survey

In general the findings suggested that in 1996 the overall health of the psychological contract was fairly good. The findings are summarised below:

Table 13: State Of The Psychological Contract In 1996

<table>
<thead>
<tr>
<th>Construct</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculative trust</td>
<td>On balance, employees chose by choice to remain with the organisation</td>
</tr>
<tr>
<td>Knowledge based trust</td>
<td>Overall, company puts policy into practice. However employees were relatively less satisfied with provision of personal development and fair rewards</td>
</tr>
<tr>
<td>Institutional trust:</td>
<td></td>
</tr>
<tr>
<td>• Distributive justice</td>
<td>Weak agreement that resources, pay and benefits, were distributed evenly.</td>
</tr>
<tr>
<td>• Procedural justice</td>
<td>Employees were fairly neutral about procedures, however, employees were less satisfied with career development.</td>
</tr>
<tr>
<td>Personal trust</td>
<td>Employees identified with elements of the mission statement</td>
</tr>
<tr>
<td>Interactional justice</td>
<td>The results were mixed; employees felt that they were treated firmly but fairly although they also felt there were</td>
</tr>
</tbody>
</table>
aspects of blame and a lack of sharing of information.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Employees had a high level of job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>A high level of organisational commitment existed</td>
</tr>
<tr>
<td>commitment</td>
<td></td>
</tr>
</tbody>
</table>

In terms of policy and practice, the largest gaps related to rewards, communications and personal development. The issue of personal development was again highlighted through questions on distributive, procedural and interactional justice, where employees were dissatisfied with levels of career development and promotion. Nonetheless, career development appeared to be one of the few issues with which employees were dissatisfied. Further indicators pointed to a positive psychological contract, as illustrated by the findings on job satisfaction and organisational commitment, which appeared to be fairly positive and healthy.

The previous section has summarised the state of the psychological contract by drawing on the findings from the 1996 survey at the organisational level. The importance of context is highlighted through the thesis and demonstrated clearly in the following section which outlines the state of the psychological contract within each of the five sites.

**Section C - 1996 Survey: Site Level Results**

The previous section summarised the 1996 statistics at the organisational level. Significant differences were found amongst sites thereby stressing the importance of studying specific organisational contexts. The following section
presents site level statistics from the 1996 survey, as illustrated by the route map below.

<table>
<thead>
<tr>
<th>Time 1 1996 Quantitative data</th>
<th>Time 2 1997-1999 Qualitative data</th>
<th>Time 3 2000 Quantitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(C) Organisational context, as defined by the directors</td>
<td>(D) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level 'stories'</td>
<td>(E) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(F) Site level statistics</td>
</tr>
</tbody>
</table>

Again the findings are organised by causes, context and outcomes of the psychological contract. Respondents were asked to indicate their strength of feeling with a set of statements using one of 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree. The table also includes the p value from One Way Analysis of Variance (ANOVA) test undertaken to assess differences in the mean values among the sites.

To highlight the importance of analysing the data at the site level the example of expectations of work is presented below. The table below illustrates issues which employees’ value and how they had changed between 1994-1996.

Table 14: Expectations Of Work Among Sites

<table>
<thead>
<tr>
<th>Statement</th>
<th>Claypotts Mean</th>
<th>Huntly Mean</th>
<th>Newark Mean</th>
<th>Niddry Mean</th>
<th>Stirling Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I work for a caring company</td>
<td>1.67</td>
<td>1.77</td>
<td>1.71</td>
<td>1.65</td>
<td>1.64</td>
<td>0.72</td>
</tr>
<tr>
<td>It is very important that I enjoy my job</td>
<td>1.72</td>
<td>1.51</td>
<td>1.63</td>
<td>1.46</td>
<td>1.56</td>
<td>0.04</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.69</td>
<td>1.71</td>
<td>1.64</td>
<td>1.65</td>
<td>1.55</td>
<td>0.45</td>
</tr>
</tbody>
</table>
It is very important that I know what the customer thinks of my work | 1.81 | 1.68 | 1.97 | 2.07 | 1.83 | 0.01 
It is very important that I have job security | 1.21 | 1.57 | 1.35 | 1.29 | 1.21 | 0.00 
It is very important that I am paid well | 1.28 | 1.64 | 1.27 | 1.48 | 1.34 | 0.00 
It is very important that I receive suitable training and development for my job | 1.46 | 1.46 | 1.46 | 1.27 | 1.38 | 0.07 
It is very important that I know what is going on and why in my site | 1.49 | 1.48 | 1.68 | 1.42 | 1.39 | 0.00 
It is very important that I have good working conditions and facilities | 1.42 | 1.67 | 1.49 | 1.51 | 1.41 | 0.12 
There are several aspects about my job I don’t like | 2.64 | 3.16 | 2.67 | 2.67 | 2.75 | 0.06 

Considering the first statement "It is very important that I work for a caring company", the one way analysis of variance showed that there were no significant differences between sites (F(4,526)=0.52; p.0.05). A significant difference among sites was shown in the strength of agreement for the statement "It is very important that I enjoy my job", (F(4,526)=2.53; p<0.05). Tukey’s pairwise comparisons showed relatively that Niddrys showed more agreement with the statement than Claypotts, the other three sites occupying the intermediary position.

The above analysis was conducted for all questions and the results are discussed below. The results demonstrate that sites have similar expectations relating to working for a caring company, good working conditions and good working relations with colleagues. However expectations differ in the extent to which employees expect to enjoy their job, Niddrys has relatively higher expectations than other sites and Claypotts had relatively lower expectations. Customer feedback was another issue on which sites had different expectations; with
Huntly being relatively more concerned and Niddryns relatively less concerned.

Job security was also an important issue but relatively more so in Claypotts and Stirling than in the Huntly. The importance of pay was also an area where there was significant differences between the sites with it being more important in Claypotts and Newark and relatively less important in Huntly. The final area where there were significant differences between sites was communications with relatively higher expectations in Stirling and relatively less in Newark.

Due to the volume of results as summary table is presented below outlining the key trends. For full statistical analysis see Appendix 2. The table below highlights the site level results, indicating relative statistical differences between sites.
### Table 15: Differences Among Sites From The 1996 Survey

<table>
<thead>
<tr>
<th>Construct</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculative trust</td>
<td>On balance, employees chose to remain with the organisation. However, Claypotts felt more inclined to stay relative to other sites.</td>
</tr>
<tr>
<td>Knowledge based trust</td>
<td>Overall, company puts policy into practice. However, employees were relatively less happy with provision of personal development and fair rewards. On balance, Claypotts and Huntly were more positive about the delivery than Niddrys.</td>
</tr>
<tr>
<td>Institutional trust:</td>
<td>* Distributive justice* Weak agreement that resources, pay and benefits, were distributed evenly. Significant differences existed; on balance Huntly and Niddrys were more positive and Stirling relatively more negative.</td>
</tr>
<tr>
<td></td>
<td>* Procedural justice* Employees were fairly neutral about procedures; however, employees were less satisfied with career development. Significant differences existed, Claypotts and Huntly were relatively more positive and Niddrys relatively more negative.</td>
</tr>
<tr>
<td>Personal trust</td>
<td>Employees had an association with elements of the mission statement. There were no statistical differences among sites with the exception of the issues relating to personal development, challenging work and rewards where Huntly was relatively more positive than Stirling and Newark.</td>
</tr>
<tr>
<td>Interactional justice</td>
<td>The results were mixed, employees felt that they were treated firmly but fairly, however they also felt there were aspects of blame and a lack of sharing of information. On balance Claypotts was relatively more positive and Niddrys more negative.</td>
</tr>
</tbody>
</table>
Outcomes

- Job satisfaction
  Employees had a good level of job satisfaction. Significant differences existed, Claypotts and Huntly were relatively more positive and Niddrys more negative.

- Organisational commitment
  A good level of organisational commitment existed. There were no significant differences amongst sites with the exception of the degree to which employees felt part of the company as a whole where Claypotts and Stirling were more positive than Niddrys

The results demonstrated that significant differences among sites existed, consequently it would appear that psychological contracts can vary even within a single company; Claypotts was the most positive of the groups and Niddrys were relatively more negative. Such negativity from Claypotts largely stemmed from lack of job security and the uncertainty of the future with the recent announcement of the closure of the factory and the move to a greenfield site.

Summary Of The Storyline

The 1996 period was characterised by flux and change that was fuelled by the need for increased efficiency and cost effectiveness. With the exception of the plans for the greenfield site, 1996 marked a period of assessment of the change initiatives that were implemented two years previously. Further, the findings suggested that despite a remarkable amount of change in the organisation, the psychological contract had remained relatively positive. Despite positive psychological contracts, employees were critical of rewards, communications and career development. Overall the state of the psychological contract was positive, however, the degree varied with site; Claypotts was relatively more positive and Niddrys relatively more negative.
**Time Period 2: 1997-1999**

The previous section summarised the findings for 1996. The following section progresses to time period 2, 1997-1999. Initially, contextual issues are presented, highlighting both continuities and changes from 1996. The second part outlines the qualitative results, based on interviews conducted between 1997-1999. Qualitative methodology places great importance on context in which interviews took place, due to the different site contexts the findings are analysed at only the site level and not the organisation as a whole.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative data</td>
<td>Qualitative data</td>
<td>Quantitative data</td>
</tr>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level 'stories'</td>
<td>(B) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>

**Section A - Organisational Context: 1997 – 1999**

The following section outlines the organisational context, as defined by the directors, for the period 1997 - 1999. Rich contextual background is necessary in order to place changes in the psychological contract within an altered organisation situation.

**Market Context**

The pressures from competitors, which was highlighted in the 1996 timeframe had not disappeared. The period 1997 - 1999 witnessed a difficult time for the
company due to the strength of the pound and operating in a mature market. The CEO explained the context:

We are all competing with each other fiercely and are all aware that if we could make and sell more that, that would help compensate for lower prices so we are all trying make and sell more which increases the over capacity and drives the prices down further. From time to time we and others put in a few extra looms to increase our output, you just hope that at sometime someone will take their ball and go home. On top of that we have had the pound appreciating against the Euro, and Deutchmark very considerably - it is over 30% in the last few years. We export more than half of what we produce to Western Europe and we sell in local currency our prices have dropped by 30% in the last few years and that's hard.

The company experienced problems due to the strength of the pound, which had a knock on effect for exports. To exacerbate tensions, the company was also experiencing operational problems, particularly relating to the quality of their product.

*Reactions to Problems of Quality*

Difficulties arising from the strength of the pound were exacerbated in 1997 with problems concerning quality and had implications for their customer base. As one senior manager commented:

In the quality area we have had times when things seemed to have gone wrong all at once, with the number of customer complaints across the product spectrum… So you have go back as we did 2 or 3 years ago with
a re-training programme of people in terms of what is acceptable and what is not acceptable, what is good quality and what is not good quality.

The company responded to quality problems in two ways, first consultants were commissioned to assess the situation. The consultants’ remit was to achieve and sustain increased profitability. To achieve such aims the following plan was created:

1. Two strategies were devised to improve quality, one for each business (wovens and non wovens),
2. Implementation of 68 independent projects that would fit together like a jigsaw to fulfil the strategy

More specifically, there were essentially four types of projects:

1. To reduce cost, for example waste
2. To increase productivity, for example to reduce down time
3. To increase continuous improvement, for example establish development systems and approaches
4. To increase margins of sales/revenues, for example key account management

Overall the projects had been very successful, saving the company £2 million. However, problems that were encountered were usually attributed to people, therefore the consultant felt it was important to win people’s support. Many people had the ‘why bother’ view, so it was decided that it was important to have ‘quick wins’ and tangible outcomes in order to win employee’s support.
The second approach to improve quality was through training employees. In the past employees had gone through the same basic training programme, but it was felt at this point a more focused approach to training was required. The HR director commented:

We are now trying to focus training on need rather than for the sake of training. But I think that is one of the biggest areas that the company has ever wrestled with because it soaks up a lot of resources of money and time and when you are working a shift operation like this time is difficult and we don’t want to have to pay them over time because of the cost.

Training had also become an issue because of the decline of the textile industry in the area; consequently skilled workers were not readily available. The HR manager commented:

The nature of industrial textiles is quite specialised. Many of the skills we require in our business are not readily available elsewhere, so we don’t have the ability to say we need to recruit 10 weaving specialists so we just have to advertise for them. So one of the things we’ve looked at is to try and develop our own skills in house, not only developing the people we currently have but to put in systems which will allow us to bring people in and train them up in our ways of doing things quickly and in a well organised way.

Although 1997 marked a difficult period in the company’s history, management were proactive and systematically tried to solve operational problems through project teams and training. The company also recognised the need for
investment and innovation if they were to be profitable in the medium to long term.

**Investment Strategies**

With the approach of the year 2000 the company recognised the necessity to update the computer system within the organisation. The directors decided that it would be advantageous to completely replace the existing system. Such a decision was fuelled by the need to gain further information to measure the extent of improvements. The financial director explained:

> We have introduced a new computer system, 2 million pound spend and, ok, there was an element of that due to the millennium but at the end of the day the objective is to get better information so manage the business. It is only by having information are you are able to make the right decisions.

Further investment came in the form of the building the greenfield site, one director explained:

> If we can produce 100 tonnes with 5 less people than we did last year it means it will cost us less and we are going to be more competitive. That is why we are building this brand new factory here, it will mean 60 or 70 jobs go.

The drive for lower labour costs was achieved by downsizing, illustrated by the 47 redundancies in 1997 and the anticipated 60 further redundancies in 2000. The reduction of the workforce had implications for workload, although one director justified the increased workload by:
In the past if they kept 8 machines working to a grade production standard, they would have done a good job. Nowadays we are talking about an operator looking after 30 - 40 and some of the machines are going considerably faster. The reason that has happened is not because we employ bionic people; it's because the workload content is no greater. The reason why they look after 30 - 40 machines is that the machines are more sophisticated and do more work.

With new technology being used by the industry, the skills of employees have changed. One director explained:

So the technology available now, the operator’s job is becoming less of a brawn job and more of a brain job and that is a feature of the industry as well. You need to employ people with a reasonable amount of academic ability, they don’t have to be PhDs or degrees but they need to have a reasonable amount of intelligence to be able to interact with the technology we use. They all have to be computer literate, they all have to be able to use bar codes, swipe type equipment in the warehouses.

The company was investing in the future by installing a new computer and information system and building the greenfield site. There was, however, a change during the 1997-1999 period that had not been foreseen and that was the sale of the company.

Sale of the Company

Autumn of 1998 saw a major change for the company as they found themselves on the market. In the 1980s there was a trend where multi-national companies
were diversifying and buying downstream companies. However the trend had been reversed in the late 1990s. The background to the sale was explained by the chief executive:

Times got hard in the oil industry and times got hard and the management changed, when the management changes the new management says what the previous management says was a lot of bloody nonsense, we'll show them. So the policy now is to divest of everything except their core business. We found ourselves, although we were part of the most profitable part of Shell chemicals, we found ourselves on the market.

With the company on the market a management buy out was considered during the autumn of 1998 through to the springtime in 1999, one director commented:

I don't think Montell (a company which is part of Shell) were keen on a management buy out, I think Montell did nothing to encourage it but they weren't completely against it, they didn't actually stop us. But if they had been keen on a management buy out they could have sold the company in the back end of 1998. Once Thrace came along then they became the favourite buyers and a management buy out became less and less likely.

The period 1997 - 1999 witnessed significant change in the company with a more focused quality strategy and investment in technology and training. Employees were critical of the delivery of training and development consequently further attention and investment in training had the potential to fulfil individuals’ expectations. Notwithstanding the major event of a change in ownership, such change had occurred despite a more competitive environment and problems
associated with the strength of the pound. The uncertainty associated with the sale of the company had implications for perceptions of job security and morale.

Section B: Qualitative Data From Between 1997-1999: Site Level Results

The previous section highlighted the challenges facing the company between 1997-1999. The following section summarises the findings from interviews that were conducted with employees at all levels of the organisation between 1997-1999. In this section only site level results will be shown not at the organisational level due to the influential nature of the individual site contexts.

<table>
<thead>
<tr>
<th>Time 1 1996 Quantitative data</th>
<th>Time 2 1997-1999 Qualitative data</th>
<th>Time 3 2000 Quantitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level 'stories'</td>
<td>(B) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>

By adopting a processual approach as part of the research, it is important to highlight the role context plays in shaping perceptions and attitudes. It was clear from spending two years in the company, 1997 and 1999, that the company had both initiated and experienced substantial changes. In studying the five sites that make up the company, temporal change is crucial for understanding the psychological contract, for example immediate reactions and the after affects of redundancies were witnessed as were the effects of the company take over. Consequently at the site level it was important to embed psychological contracts
within the immediate contexts as changing circumstances impact upon individuals' reactions and perceptions.

The following section reports the findings from the qualitative phase of the research, due to the volume of data, the interview results have been summarised in the diagram below. The diagrams below present relative changes to the psychological contract in relation to changing contexts of each site, the relative size of the arrow indicates approximately the degree of change.
The above diagram highlights changes to the psychological contract between 1997 and 1999 in Niddry. Perceptions of training, career development, consultation and fairness had not altered substantially over the time period. Expectations of job security, however, had declined although this was not surprising due to the uncertainty of the sale of the company. Perceptions of the workload had also increased during the time period, although the workload was relatively light due to low production in 1997. Consequently in spite of increased workload during the two years, it was still at an acceptable level. The extent to which employees trusted the company had changed over time, the majority of employees expressed that they trusted the organisation more in 1999, albeit at the local management level. Similarly the perceptions were that communications had improved and it was suggested that this contributed to the improved trust levels.
The above diagram highlights changes in the psychological contract between 1997 and 1999 in Claypotts. Perceptions of training, career development, consultation, trust and fairness had not changed over the time period. Other aspects had changed, job security had declined although the 1999 period was characterised by uncertainty due to the pending closure of Claypotts and relocation to the greenfield site, in addition to the sale of the company. The perception was that workload had also increased and employees expressed that it had now reached an unacceptable level. Communications was perceived to have also improved, however this had not had any bearing on perceptions of trust.
The diagram above presents the relative changes experienced by employees in Stirling. The following factors have remained relatively stable; training, career development, fairness, trust and consultation. As with many of the other sites, perceived job security had declined and like Claypotts, Stirling employees had the uncertainty of moving to the greenfield site. Workload was perceived to have also changed and employees were responsible for a greater number of weaving machines, it was felt that the workload had reached an unacceptable level. The perception of communications had also changed between 1997 and 1999; employees had expressed an improvement.
The diagram demonstrates relative changes of aspects of the psychological contract in Newark. Perceptions of career development, fairness and consultation had not changed significantly over the two year period. Unlike other sites, perceived job security had increased during the time period, this was a result of particularly low levels of security in 1997 due to of recent redundancies. Perceived workload had also increased although was still at an acceptable level. Perceptions of training had also altered, employees were relatively less satisfied with their skill development. In contrast employees expressed that communications had improved although the level of trust in the organisation had decreased, which questions the link between communications and trust.
The diagram above highlights changes in aspects of the psychological contract between 1997-1999 in Huntly. Perceptions of training, career development, fairness, trust and communications were unchanged over the time period. Perceived job security over the time period had increased, although the 1997 interviews were conducted during a redundancy period when morale was particularly low. Work levels were perceived to have also increased between 1997 and 1999, although employees expressed that it was still at an acceptable level. Perceptions of consultation had changed over the two year period with the degree of involvement declining.
The above results highlight the dynamic and fluid nature of the psychological contract. Perceptions of issues such as workload and job security had changed over time. Nonetheless there were elements that appeared to be relatively stable over the time period, for example perceptions of fairness. The diagrams also illustrated that each site had a slightly different perspective on certain issues, for example Huntly were positive about training while Stirling, Claypotts and Niddryns were critical of the type and value of training.

The diagrams above highlight the changing character of the psychological contract and the site-specific trends. The following table aims to summarise the state of the psychological contract within each of the sites.
<table>
<thead>
<tr>
<th>SITE</th>
<th>TRAINING &amp; DEVELOPMENT</th>
<th>PROMOTION</th>
<th>COMMUNICATION &amp; CONSULTATION</th>
<th>PERCEPTION OF FAIRNESS</th>
<th>PERCEIVED TRUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIDDRY</td>
<td>• Expect training</td>
<td>• Few opportunities</td>
<td>• High expectations for communications but low for consultation</td>
<td>• Company is perceived to be fair in all areas</td>
<td>• Trust local management but not directors</td>
</tr>
<tr>
<td></td>
<td>• Company viewed as being pro-training</td>
<td>• Promotion is not promised</td>
<td>• Perceptions are that company has open policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Poor delivery of training</td>
<td>• Most want promotion</td>
<td>• Delivery is good</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion is merit based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLAY-POTTS</td>
<td>• Expect training</td>
<td>• Few opportunities</td>
<td>• High expectations for communications but low for consultation</td>
<td>• Company is perceived to be fair with the exception of pay</td>
<td>• Majority do not trust the management or the directors</td>
</tr>
<tr>
<td></td>
<td>• Company viewed as being pro-training</td>
<td>• Promotion is not promised</td>
<td>• Perceptions are that company has open policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Good delivery of training although some is view as irrelevant</td>
<td>• Most do not want promotion</td>
<td>• Poor communications and consultation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion is not viewed as merit based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STIRLING</td>
<td>• Expect training</td>
<td>• Few opportunities</td>
<td>• High expectations for communications but low for consultation</td>
<td>• Company is perceived to be fair with the exception of pay</td>
<td>• Majority do not trust the management or the directors</td>
</tr>
<tr>
<td></td>
<td>• Company viewed as being pro-training</td>
<td>• Promotion is not promised</td>
<td>• Perceptions are that company has open policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Good delivery of training</td>
<td>• Most want promotion</td>
<td>• Delivery is good</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion is merit based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEWARK</td>
<td>• Expect training</td>
<td>• opportunities</td>
<td>• High expectations for communications but low for consultation</td>
<td>• Company is perceived to be fair in all areas</td>
<td>• Majority do not trust the management or the directors</td>
</tr>
<tr>
<td></td>
<td>• Company viewed as being pro-training</td>
<td>• Promotion is not promised</td>
<td>• Perceptions are that company has open policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Poor delivery of training</td>
<td>• Most do not want promotion</td>
<td>• Delivery is good</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion is not viewed as merit based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUNTLY</td>
<td>• Expect training</td>
<td>• Few opportunities</td>
<td>• High expectations for communications and consultation</td>
<td>• Company is perceived to be fair with the exception of pay</td>
<td>• Majority do not trust the management or the directors</td>
</tr>
<tr>
<td></td>
<td>• Company viewed as being pro-training</td>
<td>• Promotion is not promised</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Good provision of training</td>
<td>• Most want promotion</td>
<td>• Communications are good but poor consultation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion is merit based</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The above table highlights the state of the psychological contract between 1997 – 1999 in each site. The strength of qualitative research is that it not only highlights the relative strength of the psychological contract but also the rationale behind such views. A key assumption behind post-positivism is the notion of fallibility of measurement and the lack of faith in any one method. Therefore a mixed methodology was adopted; the qualitative results aided clarification and expands on the 1996 results. The following section explores the extent to which the trends from the quantitative data are borne out in the qualitative results. Furthermore the qualitative data provides a rationale behind the trends, thereby answering the 'why' question.

The 1996 Findings

The 1996 findings suggested that there was a relatively positive psychological contract although employees were less satisfied with training, pay and career development. Furthermore, there were mixed results pertaining to interactional justice and underlying personal trust of management with perceptions that employees were 'blamed' and the lack of impetus to share information. Additionally the results indicated that Claypotts tended to be relatively more positive than other sites and Niddrys were relatively more negative than other sites.

1997-1999 Findings

Training

The 1997 - 1999 results suggested that employees were less critical of training than in 1996. Although individuals had high expectations of training the
company appeared to be delivering appropriate training. The exception of this
trend was Newark, employees indicated that training provision did not meet their
expectations or their needs.

Pay

In 1996 employees were dissatisfied with earnings, this issue reappeared in the
1997-1999 results. Claypotts, Stirling and Huntly raised the issue of pay inequity
within the company. Claypotts and Stirling felt that there was a basic injustice.
One employee explained:

If you worked at Newark on the beaming, they get £50 more than us a
week and they work the same shifts. They get an extra £50 for running
beams! All the running about and all the machines we have! But I don't
know when we move to the greenfield site if everyone will be on the
same wages, if we're not there will be something said!

The reasons behind dissatisfaction within Huntly were slightly different although
it also related to internal equity. There was dissatisfaction concerning the
banding system so a 'subordinate' may be on a higher level of pay. However
such views were based on 'guess work' as employees did not know each other
precise bandings.

Career Development

Discontent with career development appeared to be a recurring theme in 1996
and 1997-1999. The overall view was that "there is nowhere to go" as a result of
a 'flat' structure and the 'reality' of the situation guided expectations, one
employee stated:
Promotion, it's not like a carrot and if you do this, you'll get that, it's the real world!

The degree of dissatisfaction was in part tied to the extent to which employees actually expected and desired promotion; those in Claypotts and Stirling, in general, did not have any career aspirations. Nonetheless, despite the limitations of the career development in the company the majority of employees would not relocate to gain promotion, it appeared to be a quality of life issue. The balance between work and life outside work is shown by the following illustrative quote:

I suppose it’s convenient, I have a young son, as well, that’s how I shifted on to shifts, so I could get a bitty more time with him.

The employability thesis is based on the premise that individuals have mobility, the above quote suggested that there are other priorities to life and individuals are always driven to maximise returns. As a result employees are not necessarily concerned with external employability but internal employability. Many employees wanted to be multi-skilled either for promotion or to become ‘more indispensable’ in times of redundancies.

**Interactional Justice and Personal Trust**

The 1996 findings suggested that there was mistrust between employees and management. Such views bring us back to the notion of interactional justice and personal trust. The quote below highlights the ‘typical’ relationship between employees and directors:
When you see directors you draw back a bit, if (a director) came around I wouldn’t stop and ask him something, yet he says ask me anything anytime. But you wouldn’t do it; you say hello on the passing.

The low level of trust was in part derived from the number of redundancies episodes in the previous five years; cases or stories had become almost ‘folklore’, one employee recounted such a story:

The last maintenance manager had been here 25 years and was a company man, loyal to the company, he got paid off just there and then…that has enlightened me to the company and opened my eyes to the company.

In the sites, with relatively high perceptions of job security, these views were derived not from security or trust from the company but the reduced workforce. One employee commented:

Basically the job I am doing, there where three people doing it before so in that situation I see myself as more indispensable.

The exception to this view was in Niddrys, where employees in time came to trust the local management. One employee explained:

It’s a lot friendlier than some factories; there is not the same distinction between managing director and the guy on the shop floor. The managing director has made a point of knowing everyone.
Consequently the results suggested that interpersonal justice and contact is important in building trust between management and other employees. This is again reinforced by the following illustrative comment:

I don’t trust the directors as much as the managers because to me the managers are people you work with. I work with managers; I don’t work with directors.

This section has summarised the results from the period 1997-1999, drawing on qualitative data collected during the time period. The following section progresses to the final time frame, 2000.

Summary Of The Storyline

The 1996 period witnessed a number of changes, with initiatives aiming to increase efficiency and effectiveness in the organisations operations. During the period 1997-1999 the company experienced a number of problems. In part these related to the external pressures of competition and strength of the pound, but also internal problems of quality. Furthermore the period saw further investment with a new company wide computer system and greenfield site, however, perhaps the most significant change was the sale of the company. Despite uncertainty of the period, the psychological contract was remarkably resilient and there did not appear to be a significant change in the nature of the psychological contract. However, the previous section highlighted the effect of context on the psychological contract and emphasised that employees in different sites had different cultures and psychological contracts despite working for the same company; the degree and nature of changes differed.
Time Period 3: 2000

The previous section outlined the 1997-1999 results. The following section summarises the findings for the year 2000. Initially the organisational context is highlighted before reporting organisational and site level findings from the 2000 survey.

<table>
<thead>
<tr>
<th>Time 1 1996 Quantitative data</th>
<th>Time 2 1997-1999 Qualitative data</th>
<th>Time 3 2000 Quantitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level ‘stories’</td>
<td>(B) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>

Section A - Organisational Context: 2000

The following section highlights the situation in the organisation in 2000 and embeds the nature of the psychological contract in context. Contextual issues in 2000 were dominated by two events, first the implications of the new owners and second the preparations for the opening of the greenfield site.

Implications of the New Owners

The new millennium marked a number of changes in the company. First, the effects of the new owners became evident and signalled a new phase in the company’s history. One director reflected on the change:
A multi-national with a subsidiary like Dunnotar tends to employ professional managers to run the business. So it tends to be very hands off having dealt with the budget, the capital budget and the revenue budget, that is all agreed and then it is left to the management to deliver. Now in a family, families do as they have always done, just what they feel like doing. So in a company like Dunnotar, a subsidiary of TP you could find a senior member of the family could be deciding in some detail of what we are doing here but without even being on our board.

Although TP had only been at the helm for a short period of time, their priorities seemed to be evident. The Finance Director commented:

I think their priorities are growth. I think they want the company to continue growing, the combined company. They also want to make money because they are publicly quoted in Greece so our performance will reflect their share price and that is very important for us to understand that. When we were part of Montell, if we didn't perform it was a private issue within Montell, it didn't it didn't at all affect their share price so it could be sorted out within the confines of the relationship of Montell and ourselves.

As the year 2000 progressed the influence and effects of the new owners became more evident with increased intervention as compared to Shell. The second important event in 2000 was the impending opening of the greenfield site.
Greenfield Site

The second important change came in relocation to the single greenfield site. Some strains were anticipated and many were anxious about moving to a new site and the tensions relating to pay levels:

The big challenge now is that we are moving a lot of people from established, cosy environment into a brand new factory. Work methods are going to be different, there will be a lot more sharing of tasks, the supervision is going to be different, we have much more of a team leader philosophy, people who are currently in supervisory type roles will disappear.

Managers anticipated that there were be problems relating to equity of pay. The HR Director commented:

I think there will be some stresses. Traditionally the weavers have been less well paid than the extruders... We will try to equalise that but the cost of doing that overnight is pretty significant and times are fairly hard in the textile business.

The greenfield site also had implications for organisational structure and management were taking the opportunity to appoint shift leaders as well as team leaders, the HR Director explained:

Shift leaders are not first among equals, they are not just a glorified operator, they are there to manage the shift and they are paid accordingly and the training we will be given them reflects that. The team leaders that report to them will have less supervisor management issues to deal with.
and they will be more seen as technical specialists, they will be seen as to
support, in a technical sense, the shift leader.

The year 2000 was a marked period for the company that was symbolised by the
closing of the traditional weaving sheds, which had been in operation for over
100 years and the opening of a new factory. The greenfield site factory had
implications for both organisational structure and management of the wovens
business. Dunnotar in many respects had entered a new era with both the new
organisational structure and the opportunities posed by the new owners and their
ambitions for the company.

In summary, this section highlighted the pressures facing the organisation during
the 2000 period. The pressure from competitors and the drive for efficiency
appears to be a constant issue for the company. The year 2000 saw the opening
of the greenfield site and the closing of two weaving factories which had been
part of the company for over 100 years. The year 2000 also marked a new phase
in the company’s history with new owners. The following section examines the
state of the psychological contract drawing on quantitative data from the 2000
survey.

Section B – 2000 Survey: Organisational Level Results

The previous section outlined the contextual background to the time period. The
following section summarises the findings from the 2000 survey firstly at the
organisational level before examining the site level results.
Section B - 2000 Survey: Organisational Level

The following section, as with the 1996 survey findings, is organised by outlining causes, content and outcomes of psychological contract, as illustrated in the diagram below:

<table>
<thead>
<tr>
<th>Causes</th>
<th>Content</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectations of work</td>
<td>Calculative trust</td>
<td>Job satisfaction</td>
</tr>
<tr>
<td></td>
<td>Knowledge based trust</td>
<td>Organisational commitment</td>
</tr>
<tr>
<td></td>
<td>Institutional trust</td>
<td>Cynicism</td>
</tr>
<tr>
<td></td>
<td>• Distributive justice</td>
<td>Citizenship</td>
</tr>
<tr>
<td></td>
<td>• Procedural justice</td>
<td>Effort</td>
</tr>
<tr>
<td></td>
<td>Personal trust</td>
<td>Job security</td>
</tr>
<tr>
<td></td>
<td>Interpersonal justice</td>
<td></td>
</tr>
</tbody>
</table>

1. Causes

*Expectations Of Work*

Employees were asked questions relating to expectations of work in order to establish aspects of work employees’ value. To highlight the significance of the results it was necessary to analyse the absolute ranking of issues and how they
had changed over time. A 2 sample t-test was conducted to establish if there was a statistically significant difference of mean between 1996 and 2000.

The table below illustrates issues which employees’ value and how they have changed between 1996-2000, where 1 = strongly agree and 5 = strongly disagree.

Table 17: A Comparison of Employees’ Expectations of Work between 1996 and 2000

<table>
<thead>
<tr>
<th>Issue</th>
<th>1996 mean</th>
<th>Rank</th>
<th>2000 mean</th>
<th>Rank</th>
<th>2 sample t-test (df&gt;150)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I have job security</td>
<td>1.28</td>
<td>1</td>
<td>1.33</td>
<td>1</td>
<td>0.70</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.34</td>
<td>2</td>
<td>1.46</td>
<td>4</td>
<td>1.29</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.41</td>
<td>3=</td>
<td>1.55</td>
<td>6</td>
<td>-1.47</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I receive suitable training and development for my job</td>
<td>1.41</td>
<td>3=</td>
<td>1.44</td>
<td>2</td>
<td>0.32</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good working conditions and facilities</td>
<td>1.47</td>
<td>5</td>
<td>1.45</td>
<td>3</td>
<td>2.08</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what is going on and why in my site</td>
<td>1.51</td>
<td>6</td>
<td>1.50</td>
<td>5</td>
<td>0.70</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I enjoy my job</td>
<td>1.60</td>
<td>7</td>
<td>1.70</td>
<td>8</td>
<td>0.45</td>
<td>0.66</td>
</tr>
<tr>
<td>It is very important that I work for a caring company</td>
<td>1.67</td>
<td>8</td>
<td>1.69</td>
<td>7</td>
<td>-0.22</td>
<td>0.83</td>
</tr>
<tr>
<td>It is very important that I know what the customer thinks of my work</td>
<td>1.90</td>
<td>9</td>
<td>1.93</td>
<td>9</td>
<td>-0.17</td>
<td>0.86</td>
</tr>
</tbody>
</table>

The above table demonstrated the extent to which there had been a statistical change between 1996 and 2000. Further, by examining the ranking of each
factor, the relatively weighting given to issues can be assessed. First, absolute change between 1996 and 2000, the results suggested that there had been little change in the strength of feeling associated with each issue as most of the p values exceed 0.05. The issue of good working conditions was the exception to this and employees placed more importance on this issue. If we turn to relative rankings of issues there had been more change. Job security was still ranked as the most important aspect of work. However, training and development had become relatively more important and ranked second, while pay has gone down to rank fourth. Job satisfaction and feedback from the customer appear to be consistently ranked lower.

2. Content

The issues of trust and fairness are crucial to the study of the psychological contract. As with the 1996 findings, dimensions of trust (calculative, knowledge based, institutional and personal trust) are examined. Similarly aspects of fairness or organisational justice (distributive, procedural and interpersonal) are analysed.

*Calculative Trust: Rational Assessment Of The Employment Situation*

Employees were asked questions relating to the value of staying with the company and a rational assessment of the employment situation against the alternatives that were available. The results are presented below:

Table 18: Table of Results Relating to Calculative Trust From the 2000 Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>2.95</td>
<td>8.0</td>
<td>32.0</td>
<td>24.0</td>
<td>25.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>
The above results indicated that employees value their job with the company due to the cost of leaving and also the scarcity of the alternatives in the area.

Furthermore it was evident that financial rewards were good and there would be difficulty gaining the same level elsewhere. Two questions were retained from the 1996 survey enabling an indication of change, albeit limited, see Table 3 in
Appendix 3. The results indicated there has not been a significant change in the sense of remaining with the company.

Knowledge based Trust: Delivery of Elements of the Mission Statement and Promises

Knowledge based trust refers to the predictability of behaviour, in order to assess the company's predictability two measures were used, first the extent to which employees felt that the company delivers its mission statement. Second the extent to which employees felt that promises made by the company were delivered.

- Mission Statement: Policy And Practice

In order to assess the state of the psychological contract between employees and an employer it was important to ascertain the extent to which employees feel that the company actually delivers and its promises. The mission statement of the company was used to operationalise company promises. Employees were asked to rate retrospectively the extent to which the company had put them into practice. Table 4 in Appendix 3 demonstrates the results from both the 1996 and 2000 surveys, a two sample t-test was calculated to determine the extent of change. The findings demonstrated that employees had become much more positive of the company's fulfilment of elements of the mission statement, with the exception of provision of a fair reward system where views had not changed over the period.
• Promises And Fulfilment Of Promises

To expand on the notion of the company's obligations, employees were asked in the 2000 survey to what extent had they felt that the company had first promised to execute certain issues and second the degree to which they had fulfilled them. A two sample t-test was conducted to establish the link between promise and fulfilment and the results are shown in Table 5 in Appendix 3. The results indicated that there were no statistically significant gaps between promise and fulfilment, as the p value of the 2 sample t-tests were greater than 0.05. Therefore from these results it was concluded that the employees perceive the company to fulfil its obligations.

Institutional Trust: Faith In Systems And Procedures

• Distributive Justice

Distributive justice is an important issue in establishing the state of the psychological contract. See Table 6 in Appendix 3 for details of the statistics. The results indicated that employees were weakly positive about distributive justice issues. There were two questions in the 1996 survey that related to distributive justice and these were retained for longitudinal comparisons, these results are presented below (where 1 = strongly agree and 5 = strongly disagree).

Table 19: A Comparison Of Employee Perceptions Of Distributive Justice Between 1996 And 2000

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt; 130 )</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies that I know</td>
<td>2.95</td>
<td>2.54</td>
<td>-3.78</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.82</td>
<td>2.49</td>
<td>-3.18</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>
The above results indicated that perceptions of pay and benefits had become more positive, as the p values of the 2 sample t-tests were less than 0.05. Therefore employees had become more satisfied with aspects of distributive justice.

- Procedural Justice

Employees were asked to rate the extent to which they perceived procedural justice in the company. The results of the 2000 survey are below (1 = strongly agree and 5 = strongly disagree and n=105):

Table 20: Procedural Justice Results From the 1996 Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>3.23</td>
<td>2.91</td>
<td>23.30</td>
<td>34.95</td>
<td>25.24</td>
<td>13.59</td>
</tr>
<tr>
<td>I have been given plenty opportunity for career development beyond my immediate job</td>
<td>2.03</td>
<td>25.24</td>
<td>54.37</td>
<td>12.62</td>
<td>7.77</td>
<td>0</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>2.88</td>
<td>4.0</td>
<td>27.0</td>
<td>47.0</td>
<td>15.0</td>
<td>4.0</td>
</tr>
<tr>
<td>The basis of which I am paid is fair</td>
<td>2.48</td>
<td>8.74</td>
<td>53.40</td>
<td>23.30</td>
<td>9.71</td>
<td>4.85</td>
</tr>
<tr>
<td>I feel procedures are designed to collect accurate information necessary for making decisions</td>
<td>3.01</td>
<td>2.94</td>
<td>35.29</td>
<td>26.47</td>
<td>28.43</td>
<td>6.86</td>
</tr>
<tr>
<td>I feel procedures are designed to provide opportunities to appeal or challenge the decision</td>
<td>2.96</td>
<td>3.0</td>
<td>36.0</td>
<td>25.0</td>
<td>27.0</td>
<td>6.0</td>
</tr>
<tr>
<td>I feel procedures are designed to have all sides affected by the decision represented</td>
<td>3.02</td>
<td>4.90</td>
<td>32.35</td>
<td>32.35</td>
<td>16.67</td>
<td>13.73</td>
</tr>
</tbody>
</table>
I feel procedures are designed to generate standards so that decisions could be made with consistency

<table>
<thead>
<tr>
<th></th>
<th>2.97</th>
<th>3.92</th>
<th>34.31</th>
<th>34.31</th>
<th>15.69</th>
<th>11.76</th>
</tr>
</thead>
</table>

I feel procedures are designed to hear the concerns of all those affected by the decision

<table>
<thead>
<tr>
<th></th>
<th>3.18</th>
<th>2.0</th>
<th>30.0</th>
<th>25.0</th>
<th>29.0</th>
<th>12.0</th>
</tr>
</thead>
</table>

I feel procedures are designed to provide useful feedback regarding the decision and its implementation

<table>
<thead>
<tr>
<th></th>
<th>2.89</th>
<th>5.83</th>
<th>34.95</th>
<th>35.92</th>
<th>10.68</th>
<th>12.62</th>
</tr>
</thead>
</table>

I feel procedures are designed to allow for requests for clarification or additional information about the decision

<table>
<thead>
<tr>
<th></th>
<th>2.87</th>
<th>4.85</th>
<th>34.95</th>
<th>38.83</th>
<th>10.68</th>
<th>10.68</th>
</tr>
</thead>
</table>

The above results indicated that employee responses spanned from fairly indifferent to weakly positive at best on issues relating to procedural justice. The only striking issue was training and development where employees felt they had not been given opportunity to acquire relevant skills. A few questions were retained from the 1996 survey for the purposes of comparison see Table 9 in Appendix 3. The results suggested that there had been no significant change in attitudes towards procedural justice issues during the period 1996 and 2000, as shown by the results of the 2 sample t-test.

**Personal Trust: Common Values And Norms**

Personal trust refers to the extent to which employees share common values and norms with the organisation. In order to assess the extent of common value employees were asked to rate the how important aspects of the mission statement were to them personally. The table below illustrates issues which employee’s value and how they have changed between 1996-2000. Table 10 in Appendix 3 reveals the degree of change from 1996 – 2000. The results indicated that
employees felt that all aspects of the mission statement were important to them personally. Furthermore employees’ feelings had become more positive between 1996 and 2000 with reference to all issues.

**Interactional Justice**

Employees were asked several questions relating to their relationship with managers and colleagues. See Table 11 in Appendix 3 for details. The results for interactional justice as defined by the relationship between employees and management were relatively positive. The only negative element referred to the question ‘management at my firm is sincere in its attempt to meet the workers point of view’, which was negative and suggested low trust.

Questions were retained to ascertain if attitudes had changed over the 1996-2000 period, see Table 12 in Appendix 3. There were few changes in attitude from 1996 – 2000 with the exception of encouragement to share knowledge and information, which went from being negative to neutral.

3. Outcomes

The literature has suggested psychological contract outcomes exist, more specifically job satisfaction, organisational commitment, cynicism, citizenship and effort. The results are presented in the following section.

**Job Satisfaction**

Employees were asked to rate the degree of their job satisfaction. A 2 sample t-test was conducted to establish change between 1996 and 2000, see Table 13 in Appendix 3 for details.
The results of the 2000 survey indicated that employees were, on balance, positive about their jobs. The results of the 2 sample t-test suggested that there had not been any significant change in the level of overall job satisfaction between 1996 and 2000.

Organisational Commitment

Organisational commitment can be divided into two categories, affective commitment, which refers to association and loyalty to the organisation. Second, continuance commitment, which focuses on the extent to which employees intend to remain with the company, see Table 14 in Appendix 3 for details. The results concerning affective commitment were fairly positive; consequently there appeared to be commitment to the organisation. The results relating to continuance commitment were also positive; employees calculatively need to remain with the organisation.

The table below highlights the comparative results of the 1996 and 2000 surveys, where 1 = strongly agree and 5 = strongly disagree:

Table 21: A Comparison Of Organisational Commitment Between 1996 And 2000

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt;130 )</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.32</td>
<td>2.50</td>
<td>2.01</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.45</td>
<td>2.66</td>
<td>0.93</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.43</td>
<td>3.39</td>
<td>-0.37</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.74</td>
<td>1.94</td>
<td>2.75</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.99</td>
<td>1.94</td>
<td>-0.64</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>3.13</td>
<td>2.95</td>
<td>-1.45</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I would feel bad if I performed my job poorly</td>
<td>1.91</td>
<td>2.04</td>
<td>1.41</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel a great sense of personal satisfaction when I do my job well</td>
<td>1.86</td>
<td>1.86</td>
<td>0.08</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.59</td>
<td>2.40</td>
<td>-1.71</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

The above results indicated that there were few signs of any real change between 1996 and 2000 except for two items. The first item was ‘I am proud to be able to tell people that I work for Dunnotar’. The second item referred to ‘to know my work had made a contribution to the good of the organisation would please me’. In both cases employees were relatively more negative in 2000, however on balance they were weakly positive.

**Cynicism**

Employees were asked questions relating to cynicism, see Table 16 in Appendix 3 for details. The above results suggested that employees were not overtly cynical about the company itself, although employees did appear to be critical of management’s ability to achieve results.

**Citizenship**

The degree of citizenship indicates the state of the psychological contract. Employees were asked questions relating to citizenship; see Table 17 in Appendix 3. The citizenship results spanned from relatively positive to neutral. Issues that employees were most positive about their obligation to ‘go to work even if I am not feeling well’ and obligation to ‘show loyalty to the organisation’.
**Effort**

The results of perceptions of workload and the effort are presented in Tables 18-23 in Appendix 3. The findings suggested that the majority of employees felt that they were working very hard and could not work any harder, however the majority indicated that they had a lot or total choice as to how hard they work. Therefore, there appeared to be an element of voluntarism. Generally most employees work, at least in part, because they wanted to. However, a significant minority (35%) felt that they had no choice. The majority of employees felt that they were working harder than two years ago, and this may also be related to stress.

**Job Security**

In the scope of the thesis the importance of context has been highlighted. In looking at the state of the psychological contract it is important to establish the level of job security as it may affect perceptions of events in the organisation. Employees were asked a number of questions referring to job security; see Tables 24-26 in Appendix 3 for details. The results indicated, that the majority of employees felt ‘fairly secure’ although a significant minority felt ‘fairly insecure’, most employees explained the insecurity in terms of environmental issues and personal factors.
The state of the psychological contract is summarised in the table below:

Table 22: State Of The Psychological Contract In 2000

<table>
<thead>
<tr>
<th>Construct</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculative trust</td>
<td>On balance employees chose to remain with the organisation by choice.</td>
</tr>
<tr>
<td>Knowledge based trust</td>
<td>Overall company put policy into practice, significantly more so than in 1996. However employees were relatively less happy with provision of challenging work and personal development.</td>
</tr>
<tr>
<td>Institutional trust:</td>
<td></td>
</tr>
<tr>
<td>• Distributive justice</td>
<td>Workload and the distribution of responsibilities were fair but pay continues to be an issue.</td>
</tr>
<tr>
<td>• Procedural justice</td>
<td>Employees were fairly neutral about procedures but were more negative about consultation. Career development continued to be an issue but the extent of feeling had not changed between 1996 and 2000.</td>
</tr>
<tr>
<td>Personal trust</td>
<td>Employees had an association with elements of the mission statement</td>
</tr>
<tr>
<td>Interactional justice</td>
<td>The results were mixed, relationships with colleagues, immediate superior, management was perceived as fair. However the exception was that employees felt that management did not try to see workers point of view.</td>
</tr>
</tbody>
</table>
Outcomes

- Job satisfaction
  Employees had a high level of job satisfaction
- Organisational commitment
  A high level of organisational commitment existed
- Citizenship
  Employees had relative high citizenship
- Cynicism
  Few signs of cynicism but employees were critical of management’s ability to achieve results.
- Effort
  Workload had increased in the last 2 years but the majority, at least in part, did it because they wanted to.

The psychological contract had remained relatively healthy and was evident by the levels of commitment, citizenship and job satisfaction. Furthermore, there were few problems relating to distributive, procedural and interactional issues. The issue that employees were critical of was the degree of training and development and also management’s attempted to meet workers point of view, which was relatively negative, nonetheless the lack of delivery did not appear to have impacted on levels of job satisfaction and commitment. However, on balance, it appeared that the organisation met employees needs and expectations and did so more positively in 2000 than 1996. Further evidence of relative contentment was illustrated by the extent to which the organisation fulfilled their promises.

Section C- 2000 Survey: Site Level Results

The previous section analysed the results from the 2000 survey at the organisational level. The following section breaks these results down and examines them at the site level as illustrated on the route map below.
Psychological contracts are defined and shape their specific context, therefore it was useful to disaggregate the results and analyse the extent to which individual sites viewed issues differently. Respondents were asked to indicate their strength of feeling with a set of statements using one of 1=strongly agree and 5= strongly disagree. The Tables 1-22 in Appendix 4 shows the mean value of the Likert scale separately for each of the five sites and the p value from One Way Analysis of Variance testing for significant differences in the mean values among the sites. Due to the volume of data the results were summarised in the table below, see Appendix 4 for full statistical analysis.

<table>
<thead>
<tr>
<th>Time 1 1996 Quantitative data</th>
<th>Time 2 1997-1999 Qualitative data</th>
<th>Time 3 2000 Quantitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
<td>(A) Organisational context, as defined by the directors</td>
</tr>
<tr>
<td>(B) Organisational level statistics</td>
<td>(B) Site level 'stories'</td>
<td>(B) Organisational level statistics</td>
</tr>
<tr>
<td>(C) Site level statistics</td>
<td></td>
<td>(C) Site level statistics</td>
</tr>
</tbody>
</table>
Table 23: Site Differences From the Year 2000 Survey

<table>
<thead>
<tr>
<th>Trust Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculative trust</td>
<td>Employees chose to remain with the organisation through choice. The results indicated that Newark were relatively more tied to the firm and Huntly relatively less so.</td>
</tr>
<tr>
<td>Knowledge based trust</td>
<td>Overall company puts policy into practice. There were no differences between sites, except on pay where Huntly was relatively more positive and Stirling relatively less positive.</td>
</tr>
<tr>
<td>Institutional trust:</td>
<td></td>
</tr>
<tr>
<td>• Distributive justice</td>
<td>Workload and the distribution of responsibilities were fair but pay continues to be an issue. There were no significant differences between sites.</td>
</tr>
<tr>
<td>• Procedural justice</td>
<td>There were few differences between sites. Career development continued to be an issue and Huntly were relatively more positive and Newark relatively more negative.</td>
</tr>
<tr>
<td>Personal trust</td>
<td>Employees had an association with elements of the mission statement, there were no differences between sites.</td>
</tr>
<tr>
<td>Interactional justice</td>
<td>Few differences existed between sites. The exceptions were management's deceiving employees and owning up to mistakes where Newark were relatively more critical and Huntly relatively less so.</td>
</tr>
<tr>
<td>Outcomes</td>
<td></td>
</tr>
<tr>
<td>• Job satisfaction</td>
<td>Employees had a good level of job satisfaction, there were no differences among sites.</td>
</tr>
<tr>
<td>• Organisational commitment</td>
<td>A good level of organisational commitment existed, there were no differences among sites.</td>
</tr>
<tr>
<td>• Citizenship</td>
<td>Employees had relative high citizenship, no differences among sites existed.</td>
</tr>
<tr>
<td>• Cynicism</td>
<td>Few signs of cynicism but employees were critical of management's ability to achieve results, no differences among sites existed.</td>
</tr>
<tr>
<td>• Effort</td>
<td>Workload had increased in the last 2 years but the majority, at least in part, did it because they wanted to, no differences among sites existed.</td>
</tr>
</tbody>
</table>
Summary: Site Issues

The results indicated that employees in different sites viewed events differently. On balance, Newark was relatively more negative on issues and Huntly were relatively more positive. Employees in Newark were more critical about management and their ability to consult and make improvements although all sites were dissatisfied with pay and career development. However, the results indicated that it was relatively more important for individuals in Newark to remain with the company, and therefore were perhaps more reliant on the organisation to remain there. It was evident that Niddrys’ perceptions had changed from the most negative of the sites in 1996, to one of the most positive in 2000. However, despite such changes there was no differentiation between outcomes that had been measured longitudinally, namely job satisfaction and commitment. Consequently this calls into question the importance of personal trust and interpersonal justice and its effects on outcomes of the psychological contact.

Conclusions Of Chapter 5

The period 1996 – 2000 marked a number of significant changes in the organisation history. Notable changes included a new organisational structure, a new computer system, the closing of two traditional weaving factories and the opening of a greenfield site, notwithstanding the sale of the company. All such changes had occurred in the backdrop of increased competitive pressures and poor exchange rates for the company. With such dramatic change, the employees’ psychological contracts remained remarkably stable. At an organisational level, psychological contracts appeared to be fairly positive, as
illustrated through psychological contract outcomes, of job satisfaction and commitment. Nonetheless, there were also issues that employees were consistently critical of throughout the time period, notably training and development, pay and career development. Furthermore, despite indications of a positive psychological contract, there were signs of growing mistrust between management and employees. However, the degree of mistrust was an illustration of differences between sites, with Niddrys being relatively more positive than Newark, thereby emphasising the influence of micro contextual factors.

Chapter 5 aimed to address the question, 'what factors shape the psychological contract?' From the literature three key propositions were identified
1. Psychological contracts are fluid and change according to specific contexts.
2. The three dimensions of trust shape the psychological contract, namely calculative, knowledge based, institutional and personal.
3. The three dimensions of fairness, more specifically, distributive, procedural and interactional, shape the psychological contract.

The findings have been structured to address these propositions. The value of case study research is that it provides the opportunity for in-depth study. The previous section has critically studied an organisation during three time periods, 1996, 1997-1999 and 2000. The analysis has also been multi-dimensional with results at an organisational, site and in some cases individual level. The volume and the complexity of the results meant the use of summary tables was necessary in order to focus results on the research questions.

Thus, from this case study there is some evidence to support the propositions.
1. Psychological contracts are fluid and change according to specific contexts.

- Psychological contracts change over time and are context dependent. In some situations the specific context may drive changes in the psychological contract, for example the effects of redundancy. In other cases context acts as a mediator, for example the frustration of the lack of career opportunities was guided by the ‘reality’ of a flat organisational structure.

- Psychological contracts differed within an organisation. Significant differences in expectations and perceptions of similar events were observed among sites.

- Although the psychological contract changed over time, in some situations a ‘robustness’ was observed. For example, in the 1996 results Claypotts was on balance the most positive of the sites, but by 2000 where it was relatively more negative. However, interestingly there were no significant differences in the relative level of ‘outcomes’: all sites had the same levels of job satisfaction and of organisational commitment.

- The nature of the psychological contract was more complicated than the literature has previously implied. The evidence suggested that it was not a case of employees having either a transactional or relational contract, elements of each category were evident in psychological contracts.

2. The four dimensions of trust shape the psychological contract, namely calculative, knowledge based, institutional and personal.

- It was evident that knowledge based trust was important on two levels, first, the way in which the organisation operates and second, predictability of individuals particularly managers behaviour.
• Calculative trust seemed to form the basis of the psychological contract as it determined the extent to which the employee was dependent on the organisation. If individuals felt ‘trapped’ or ‘powerless’ there was a resignation to the company’s actions.

• The importance of personal trust or shared values and norms was questioned. Niddry's site moved from being the most negative in 1996 to the most positive in 2000. Further, the results of the qualitative data indicated there was only one site in which employees displayed high levels of trust. However, there were no significant differences between the outcomes, again job satisfaction and commitment. Therefore, perhaps the effects of personal trust have been overstated as the other sites were more negative and did not trust the organisation yet they did not show any less commitment to the organisation.

3. The three dimensions of fairness, more specifically, distributive, procedural and interactional, shape the psychological contract.

• Perceptions of injustice has a negative affect on employee attitudes, for example perceived inequity of pay (distributive justice) or the process of redundancy (procedural justice) impinged on employees’ psychological contracts.

• Interactional justice and being treated as a ‘person not a number’ was crucial to the way in which employees viewed managers and the organisation.

The following chapter discusses the implications of these results for academic theory.
Chapter 6

RESEARCH QUESTION 1: DISCUSSION
CHAPTER 6

RESEARCH QUESTION 1: DISCUSSION

What factors shape the psychological contract?

Introduction

The previous chapter reported the findings of the first research question, 'what factors shape the psychological contract?' In order to examine the results of the research, it is important to place them within both the psychological contract literature and wider bodies of knowledge. Key propositions drawn from the literature were:

1. The psychological contract is dynamic, fluid and context dependent.
2. Trust is an important influence in shaping psychological contracts: calculative, institutional, knowledge-based and interpersonal forms of trust.
3. The extent to which an organisation is perceived to be fair directly impacts on the psychological contract; three facets being distributive, procedural and interactional justice.

This chapter will initially outline the principal findings for each of the above propositions before analysing their implications for theory in terms of the employment relationship and models of the psychological contract.
Conclusions For Research Question 1: What Factors Shape The Psychological Contract

Proposition 1: Psychological Contract Is Dynamic, Fluid And Context Dependent.

The psychological contract is inherently dynamic and fluid in nature and changes as events unfold (Rousseau, 1995) and the results did indeed demonstrate that the psychological contract changed over time. For example this was highlighted by fluctuations in the degree to which employees identified with aspects of the company’s mission statement. It was evident in the surveys that employees associated themselves more strongly in 2000 than in 1996 with the mission statement. Such change illustrates the influence of context and changing perceptions.

The employee-employer relationship is, by its very nature open to change as events and situations at work change (Rousseau, 1995). Furthermore, due to bounded rationality (Simon, 1958) and differing interpretation of events by individuals (Lucero and Allen, 1994; Herriot, 1996), employees psychological contracts may alter in numerous ways and at varying rates. The results supported this view, as illustrated by differing attitudes between sites. For example, some employees expressed that communications within the site had improved while other perceptions were more negative. Therefore it was evident that the micro context was important, and incidents at this level often impinged upon the nature of the psychological contract.
Additionally changes in the psychological contract can, in part, be explained not only by the site level but also by changes in the wider organisational context. The period of study witnessed a number of significant incidents in the company’s history: such as the development of a greenfield site, consistent redundancies and the sale of the company. These major events undoubtedly had an effect on overall perceptions of job security and employee trust in management. Contrary to what might be expected, these significant episodes and potential for change of the psychological contract, some elements of the contract remained stable (Rousseau, 1990; Herriot, Manning and Kidd, 1997; Hiltrop, 1997). For example, on balance, the survey results indicated that the company was perceived as being a fair employer over the study period, 1996 – 2000 despite the redundancies, the sale of the company and future potential redundancies as a result of the relocation to the greenfield site. Similarly in spite of events, it was evident that levels of commitment remained unchanged between 1996 and 2000, echoing Guest and Conway’s (1997) study. Although it is important to stress the changeable nature of the psychological contract, it is also necessary to highlight that aspects of the psychological contract may also remain relatively stable in order to gain full understanding of the phenomenon.

However, not all changes to the psychological contract may be attributed directly to the organisation’s situational factors, as employee attitudes may also change over time in many ways. Employee’s expectations of work changed markedly over the three time periods, 1994, 1996 and 2000; for example training and development became significantly more important over time and ranked second, above pay. It was evident that employees’ priorities in many cases did not
remain stable but were part of the changing nature of the psychological contract and this factor adds to the complexity of the construct.

The importance of context and the extent to which it impinges on the psychological contract is two-fold. First, context may actually drive changes in the psychological contract. More specifically, incidents within the organisation may force a recalculation of the relationship, as demonstrated by a redundancy incident. It was evident in the qualitative data that redundancies forced a reassessment of the employment relationship as it raised questions of trust and fairness. The effects of redundancies extend beyond those who lose their jobs to the ‘survivors’. Qualitative data suggested the ‘survivors’ sense of justice and trust in the organisation were reduced in part due to employee criticism of the selection criteria for redundancy. For example one comment being that hard working, committed employees were losing their jobs. Consequently the nature of the psychological contract may change due to external drivers, in this case the actions of the organisation.

Second, and conversely, context may actually mediate the psychological contract and affect interpretations of events. The research results illustrated that career development and promotion were valued highly by employees, but many were dissatisfied with the opportunities for career progression in the organisation. Such frustration could potentially have led to dissatisfaction and violation of the psychological contract (Robinson and Rousseau, 1994). In this case, however, context acted as a mediating agent: employees had come to recognise that due to delayering and organisational restructuring, where the tier of supervisors and
junior management were removed, few opportunities for developing a career existed; the common comment was 'there is no place to go'. Furthermore, employees realised that this trend was not confined to their particular organisation but was a more general socio-political phenomenon. The results indicated that the lack of opportunities due to "rightsizing" was a 'sign of the times' which meant employees more readily accepted the situation.

The interplay between the psychological contract and contextual issues is complex. The psychological contract appeared to change over time partly as a result of organisational macro and micro contexts. However, not all changes may be attributed to organisational contexts, since the nature of the psychological contract may also alter as a result of changing employee expectations and attitudes. Using an in-depth case study approach allows the complexities of the psychological contract context to be appreciated, although further research is required to explore the complicated interplay between them.

**Proposition 2 - Trust Is An Important Influence In Shaping Psychological Contracts.**

The second proposition drawn from the psychological contract literature suggested that trust is a crucial factor in shaping the psychological contract, with Guest and Conway (1997) defining it as an element of the content of the psychological contract. Trust is also regarded as an important aspect in processual models (Herriot and Pemberton, 1996), as it is vital in negotiation between employee and employer. As we have seen, the concept is multi-faceted (Lewicki and Bunker, 1995) and can be broken down into four categories:
calculative trust depicts the rational assessment of the economic merits of remaining in the company, knowledge-based trust refers to the predictability of behaviour, personal trust refers to common norms and values between employee and employer, and, finally institutional trust is the extent to which employees perceive systems and procedures to be fair. In many respects there is an overlap between aspects of trust and fairness/justice. Institutional trust is faith in systems and procedures, similarly distributive justice (fair distribution of resources) and procedural justice (fairness of procedures) refer to individuals confidence in the organisation. There needs to be a redefinition of the interface between trust and fairness literature to understand further the connection between the two variables.

**Calculative Trust**

The survey findings relating to calculative trust suggested that employees made a rational choice to remain with the company. The 2000 survey results indicated that, at least in part, the reason for staying was a degree of loyalty to the organisation. Employees maintained that even if they were offered a little more money they would stay with the company. Nonetheless, employees were also dependent on the company in a number of ways and many felt it was a necessity to remain with the company, particularly due to the scarcity of available alternatives.

**Knowledge-Based Trust**

The quantitative results relating to knowledge based trust suggested that the company’s behaviour, on balance, was predictable. Employees perceived that
the company fulfilled their promises and brought the mission statement to fruition, as shown in Table 3 in Appendix 1.

**Institutional Trust**

Institutional trust refers to the belief in organisational systems: for example, the perceived fairness of the process for promotion. In terms of distribution of resources or distributive justice, the level of pay appeared to be an issue in both the 1996 and 2000 surveys. The qualitative findings suggested that employees were more critical of the distributive procedures for allocating pay than the absolute level of pay, employees reference point for pay being defined by the level of pay in the local area, not by job type. Interviewees indicated that there were few industrial textile companies in the area to act as a benchmark for salary levels. As a result employees benchmarked themselves against those within the company, which resulted in employees being more critical of the internal equity within the company and the inequity of payment for jobs. This was particularly an issue for the weavers in Claypotts and Stirling sites and this feeling increased with the prospect of all weaving production being situated in the single greenfield site. However, employees were indifferent to procedural justice issues, namely the fairness of the systems and policies themselves.

**Personal Trust**

Finally, personal trust refers to the extent to which employee norms and values are congruent with those of the organisation. The results were ambiguous as the two methods, survey and interview, produced different results. Here we have an interesting phenomenon which speaks to incommensurability. The statistical
findings from the survey suggested that employees felt elements of the mission statement were personally important, which implied that there was a degree of common values and norms and therefore personal trust. The interview data, by contrast, painted a more negative picture with majority of employees expressing a strong degree of mistrust in the organisation. Furthermore, the majority of employees were sceptical about mission statements perceiving them as public relations exercise. This raises methodological questions. Post-positivists have argued for triangulation as a means of reducing the fallibility of any one technique. However, the above results have shown the complexity of using two methods, quantitative and qualitative, and also resurrects the paradigm incommensurability debate, an issue that will discussed in chapter 8.

Guest and Conway (1997) defined trust as part of the content of the psychological contract. The findings relating to the interplay between trust and psychological contract outcomes were contrary to Guest and Conway’s (1997) model. Through the longitudinal case study, changes in trust and the psychological contract outcomes can be traced over time to give an indication of the effect of trust on the psychological contract. The site level results were interesting in this respect. Niddry site over the period of the study developed from being the most negative site, in respect of trust, to the most positive site. This finding was reinforced by the interview data where the majority of employees trusted the organisation. If employees in a particular site have more faith in the organisation, more positive ‘outcomes’ would be expected: for example increased job satisfaction and commitment, relative to other sites. The results demonstrated that there were no significant differences in the levels of
outcomes among sites in the 2000 survey. Therefore, despite a turnaround in one particular site, it seemed to have no bearing on psychological contract outcomes for this site. There are two possible explanations for this trend. First, trust does not affect the psychological contract, contrary to the prediction of Guest and Conway's (1997) model. The second explanation may be a methodological issue, as the above explanation draws heavily on statistical evidence. The validity and reliability of being dependent on one research technique has been questioned by post-postivism, a discussion developed in Chapter 8.

**Proposition 3 – The Extent To Which An Organisation Is Perceived To Be Fair Directly Impacts On The Psychological Contract**

A key concept of the psychological contract literature is fairness and justice. Organisational justice can be subdivided into distributive, procedural and interactional justice as discussed in the literature review. To reiterate the distinction, distributive justice refers to the fairness of resource distribution. Procedural justice refers to perceived fairness of policies and systems, while interactional justice refers to fair interpersonal treatment. The findings relating to procedural justice suggested that employees were relatively neutral about most aspects of policy with no strong positive or negative feelings. This may be explained, in part, by the employees' lack of knowledge concerning policy and procedure. The findings on distributive justice indicated that some aspects engendered stronger feelings, for example pay and conditions. Feelings, however, were less strong concerning workload distribution and employees, on balance, felt workloads were achievable. The survey results relating to interactional justice were positive and suggested that employees had a relatively
good relationship with the employer. However, employees were critical of the ability of management, a finding of both the quantitative and qualitative data.

Summary
The link between fairness, a content variable of the Guest and Conway (1997) model, and psychological contract outcomes was inconclusive. The survey results indicated that there was little change in perceptions of fairness between 1996 and 2000. In a linear model, changes in content would have repercussions for outcomes. There were no significant changes in psychological contract outcomes between 1996 and 2000. It can be argued that as there was little or no change in content, it would be expected that there would be no change to psychological contract outcomes. However, the qualitative data suggested that there was more fluctuation in perceptions of fairness than the survey results would suggest. The dynamics of fairness is perhaps an area for further research.

Implications For theory
A strength of case study research is that it provides an in-depth insight into a phenomenon (Yin, 1994) and it is important to place such insights in wider academic debate. The following section analyses the implications of the findings for theory, first by providing an examination of the employment relationship and the transactional- relational typology and, second, by analysing the inference for both content and processual models of the psychological contract.
The Employment Relationship

The strengths of the psychological contract construct lie in the explanation of the changing nature of employment relationship (Herriot and Pemberton, 1995) and highlights the 'sign of the times' (Guest, 1998). The literature stresses the increased pressure organisations now face (Hiltrop, 1995; Tornow and Meuse, 1994; Cappelli, 1995). Organisations must be flexible, innovative and responsive to customer needs while remaining cost effective and competitive (Hiltrop, 1996). These pressures are borne out in the case study and are highlighted by the senior managers and directors. At the time of the research, the industrial textiles market was mature and the company faced fierce global competition. Pressures to innovate were increasing and the company responded by continuing to develop the new non woven market. The burden of cost cutting was evident by a steady decline in workforce numbers, although the company had not subcontracted work (Gudron, 1994). Further attempts to 'lean out' production was demonstrated by the commitment to the greenfield site, which aimed to increase efficiency. As Cappelli (1998) suggested, employees are not insulated from the state of the market and are all too aware of the implications of production levels for job security and this was evident in the findings reported.

In highlighting the changing nature of the employment relationship the dichotomy of 'old' and 'new' contract is often used (Ehlich, 1994; Kissler, 1994; Morrison, 1994; Rousseau, 1989, 1995; Rousseau and Greller, 1994; Sims, 1994; Sparrow, 1996), as highlighted in the literature review. Many authors (Guest, 1996, 1998; Arnold, 1996; Herriot, 1996; Rousseau, 1995) have highlighted the need for empirical work in order to assess the extent and nature of change to the
psychological contract; and this study contributes to the body of knowledge through such empirical work.

The statistical data demonstrated that training and development became significantly more important to employees between 1994-2000, and latterly was second only to job security. Consequently it appeared that employees expected and desired more training and development, which would be congruent with the employability thesis (Bagshaw 1997; Cappelli, 1998), which states that under current conditions employees aim to make themselves more marketable or employable outside the company. However, this was not evident from the interview data. Employees indeed indicated that training and development was more important to them than in the past, but not for the reason of increased external employability. Rather, they explained that their skills were specialised and specific to the textiles industry, an industry in decline in the area and consequently few other companies and opportunities existed. Therefore the importance placed on training and development was not for external employability but internal employability. It was felt that in times of high job insecurity, training and transferable skills within the company made them less vulnerable to redundancy as they could be moved to different departments. The employability thesis (Bagshaw 1997; Cappelli, 1998) stresses the notion of external employability, whereas, in this situation, internal employability was the important issue.

The ‘new’ contract and employability thesis also assumes workforce mobility. Employees are able and willing to move to take advantage of career
opportunities. There are two aspects developed by this case study. First, there were few alternative companies that existed locally, with employees having to pursue other employment opportunities. Many indicated that they would not move because of the quality of life they had in that area, calling into question the 'real' degree of mobility of the workforce. Even those in Huntly, who felt that their skills were transferable and that they had more options outside the company, still did not want to move away from the area, again due to the quality of life. Therefore in this case, dependent trust (Gordon Sorohan, 1994) is sustained and a dependency bond (Ehrlich, 1994) with the employer remains intact.

The second issue relates to the extent to which employees would actually gain employment in other companies. The majority had worked in the company for over 10 years; and as human capital theory (McLean Parks and Schmedeman, 1994) explains, the longer an individual stays with a company the less employable they are outside the company as skills become company specific and less transferable. Therefore human capital theory would argue that employees would find it more difficult to gain employment elsewhere due to their length of service. This argument suggests that if employees remain with one company the employees' skills are not developed or the skills become too company specific to be transferable. However, within this research a number of employees from Huntly indicated that their skills and experience had developed and would make them more employable externally, yet their career development aspirations were focussed within the organisation, consequently the importance of internal employability re-emerges.
Furthermore, the results suggested that even employees with transferable skills did not abide by a rational decision making process but chose to remain in the same company despite the recognition that there were few opportunities for advancement. Therefore it can be concluded that for those employees work and life balance is important and that maximising income and opportunities are not the sole drivers but other ‘life’ issues also determine career decisions.

The findings indicated that there were few signs of the ‘new’ psychological contract, as defined by the employability thesis. However, does this mean that the ‘old’ contract, characterised by the ‘traditional’ values of job security in return for hard work and loyalty, was intact? As highlighted earlier, it was felt that no employee could expect job security and that job insecurity was a ‘sign of the times’. Despite such views, individuals still placed a great deal of importance on job security. In fact it was ranked the most important aspect of employment in the 1994, 1996 and 2000 surveys. Nevertheless all employees were resigned to the reality of job insecurity. Those in middle age, who in the past may have expected job security, did not have fixed expectations based on the past, as suggested in some of the literature in this area (Sims, 1994). It appeared that employers were no longer able to fulfil their side of the ‘old’ contract, namely job security, but employees perceived it as a societal change and not an individual issue, a notion borne out by Guest and Conway’s (1997) national survey.

The employee’s obligations, as defined by the ‘old’ contract, were hard work and loyalty. The directors indicated that both values were important and that they
tried to foster them. Work levels were increasingly being measured through performance indicators and each machine was now linked to a computer system, which enabled precise monitoring. Consequently it could be argued that employees were being coerced into achieving higher work levels through observation and ‘surveillance’ (Foucault, 1980). Staff did not, however, perceive increased monitoring negatively but as part of the company’s commitment to quality. The importance of loyalty and commitment was demonstrated by paternalistic policies, such as healthcare schemes adopted by the company. Data from the surveys, indicated that employees had a high level of commitment to the organisation. Therefore it can be argued that in this instance, the employer was only buying half the psychological contract as suggested by Hiltrop (1994). Employers still expected loyalty despite the fact that they are unable to provide job security for employees. Nonetheless there were few signs that employees felt that the deal had been changed without their consent, as suggested by Rousseau (1995) and this perhaps stems from the loss of job security in society generally and was not an issue specific to the company.

Thus it can be argued that the findings suggested that the dichotomy of the ‘old’ versus the ‘new’ psychological contract is too simplistic. The findings indicated a more complex situation with aspects of both the old and new contract being evident. Context as a mediating factor, as discussed earlier, also impinged on the nature of the psychological contract and contributed to the complexity. The following section continues the debate between the old and new contract through the transactional-relational typology.
The transactional – relational typology has been used to depict the changing nature of the employment relationship (Rousseau, 1995; Hiltrop, 1996). The psychological contract literature suggests that the 'old' psychological contract was typified by a relational contract and the 'new' contract has become more transactional contract due to increased economic and competitive pressures facing organisations which has resulted in the demise of job security and the single career company path (Hiltrop, 1996; Morrison, 1994; Sparrow, 1996). The relational psychological contract has been characterised by an open ended contract based on both economic and more importantly emotional ties. In contrast the transactional psychological contract is purely economic and is based on a short term horizon (Rousseau, 1995). The literature, in the main, has suggested that transactional and relational contracts represent two ends of a continuum (Rousseau, 1995). The exception was the Millward and Brewerton (1999) conceptualisation where they argued that transactional elements must be fulfilled before relational and emotional ties are made. The survey data illustrated that emotional elements were present, for example commitment. Yet employees, particularly in the weaving factories, were not satisfied with the equity of their pay, which is very much a transactional element. Therefore, while the transactional aspects had not been totally fulfilled emotional and relational aspects were present.

The findings indicated that the psychological contract is more complex than is usually suggested in the literature. The data pointed to that it was not a matter of individuals holding either a relational or a transactional contract, rather
employees demonstrated signs of being committed to the organisation and there were strong perceptions that overall the company was fair: elements of a relational contract. However, in the main, employees did not fully trust the organisation to act in their interests particularly with regard to the unpredictability of their employment and redundancy situations. Therefore there appeared to be a strong emotional link with the organisation, but not one of blind and unquestioning trust and commitment. Furthermore, the data suggested that many of these elements were robust. Several important incidents occurred during the period of study, for example redundancies and the sale of the company; and despite such incidents the research indicated that the degree of commitment to the company remained unchanged. Consequently this trend would concur with Guest and Conway (1997) study and argue that psychological contracts are fairly positive and not as negative as Kessler and Undy (1996) would suggest.

Though the nature of the psychological contract illustrated elements of a relational contract, aspects of the transactional contract were also evident. The issue of pay, training and career development were factors that employees returned to over the period of study. Such issues are individually orientated and typify a transactional contract. Further, the focus on training and career development pointed to the concept of employability and the protean career (Hall and Moss, 1998; Newell, 2000), although the rationale for this was internal employability as discussed previously. In addition, employees were very much aware that job security did not exist. There was no longer the assumption of a ‘job for life’ with the long term relational contract being perceived as unrealistic.
The results suggested that aspects of both the relational and transactional contracts were present and that they were not mutually exclusive, with employees having neither a relational nor a transactional contract. Returning to the notion of the transactional – relational continuum (Rousseau, 1995), the data suggest a central point on the continuum. In terms of theory, is this central point meaningful? There is perhaps a need to develop a further typology, which explores this ‘central point’.

Models Of The Psychological Contract

As discussed in the literature review, there are two principal approaches to conceptualising the psychological contract - content and processual models. The following section examines the implications of the findings for first content and second processual models.

Content Model

1. Causes Of The Psychological Contract

Guest and Conway (1997) provide a linear model of the psychological contract made up of causes, content and consequences. The causes outlined in the model draw on organisational and individual influences, including organisational climate and HR policy and practice. The aspects pertinent to individual employees included past employment experiences, individual expectations of work and the extent of alternative job prospects. It is these causes, content and outcomes that this chapter explores.
The results relating to organisational aspects suggested that culture and climate at the organisational level might be too broad. McFarlane Shore and Tetrick (1994) argued that there would be a degree of similarity within a single organisation; however there appeared to be significant differences amongst sub groups, in this case, sites. Consequently there were significant similarities in the nature of psychological contracts at the site level, where there appeared to be 'group norms' or sub-cultures in operation. The effects of HR policies were more complex than expected. Where employees were asked to comment on organisational policies, typically they did not appear to be aware of the content of these. However, on the few occasions where employees did refer to policy, it was usually where the company had not delivered what was promised and that gaps between policy and practice were evident. Such references is an example of the company creating expectations through policy yet not meeting employees’ needs; an issue employees were critical of. It is possible to argue that HR policies had an indirect affect on the psychological contract very much through the perception of policy rather than the action of documented policy.

Additional variables in the Guest and Conway model (1997) are prior experience, expectations and alternative job prospects. The case study organisation was perhaps atypical in terms of past experiences of employees. The majority of employees had worked for the organisation for more than 10 years and a significant number had never actually worked anywhere else, which is contrary to perceptions generated by current HR literature (Beardwell and Holden, 1997; Cappelli, 1995). Therefore Dunnotar was in some cases an employee’s only reference point in terms of employment. However in most other respects the
organisation was not atypical of organisations outside the 'sunrise' industries in the south east of England as many trends within the case study organisation mirrored national trends (Guest and Conway, 1997). For example expectations of work changed over time and employees placed more emphasis on training and development. Job security remained most important to employees ranking number one in the 1994, 1996 and 2000 surveys. However, despite the gap between the importance placed on job security and the reality of high job insecurity, the psychological contract was not adversely affected. Contextual factors mediated such feelings, employees felt job security was a thing of the past and that no employee today could expect job security. This reflected the background of a saturated labour market and the perception that few alternative job prospects were open to them.

2. Content Of The Psychological Contract

The Guest and Conway (1997) model suggested that the content of the psychological contract included trust, fairness and 'delivery of the deal'. The results pointed to all three elements being important. In terms of the causes impinging on the context, the results suggested that the lack of job security was key to low trust levels, and there was a general feeling of 'I could be next'. This was related to perceptions of injustice where compulsory redundancies fell on those who were perceived as being 'hard working', 'good at their jobs' and 'loyal to the company'. Therefore it was difficult for employees to justify or understand the selection criteria. Another issue that seemed to influence trust levels was management style. One site went from being the most negative to the most positive in the space of two years. To a large extent employees attributed
trust to the management style of the local manager, who took time to consult, communicate and be seen around the shop floor. Other managers who were less visible seemed to engender more suspicion perhaps due to the lack of personal contact. With reference to ‘delivery of the deal’, this factor appeared to play a relatively lesser role in shaping the psychological contract. Employees’ perception of written policies and awareness with practice did not engender strong feelings. This suggested that delivery of the deal played a lesser role in shaping the psychological contract in the workforce.

3. Outcomes Of The Psychological Contract

The Guest and Conway (1997) model divided psychological contract outcomes into two categories, attitudinal and behavioural. The attitudinal outcomes include commitment, job satisfaction, employment relations and security. The extent to which content drove these outcomes was mixed. The results in this respect indicated that employee’s overall viewed the company as fair, and on balance the organisation delivered their part of the deal: few however actually trusted the organisation. Nonetheless despite a lack of trust, employees demonstrated high level of commitment to the organisation. Therefore perhaps fairness rather than trust inspired commitment. Furthermore, employees indicated that job satisfaction has little to do with the relationship with the company; in fact some employees expressed very negative views about the business but enjoyed their job and had pride in their job. Consequently what is questionable is the extent to which job satisfaction is an actual outcome of the psychological contract and the employee – employer relationship. Equally employees expressed the view that no one has job security in today’s
environment and therefore no matter the trust and fairness levels they would not feel secure in their jobs.

Guest and Conway (1997) outlined behavioural outcomes of the psychological contract, which were motivation, effort, attendance/absence, citizenship and intention to stay or quit. The survey results illustrated that employees were prepared to ‘go the extra mile’ and displayed signs of citizenship, motivation and effort. However, when interviewed, employees indicated that effort and working beyond contract was driven by job satisfaction and pride in their job as opposed to helping the company. Further the intention to ‘stay or quit’ or the extent of absenteeism did not appear to relate to trust and fairness of the organisation. In a rational assessment of the employment situation in the area, employees felt that there were few alternatives; and the few alternative job prospects that did exist did not pay the same level of wages. Therefore the power disparity and employees’ need for their jobs, had an effect on levels of absenteeism simply, employees could not afford to lose their jobs.

The findings from the case study offer insights into the application of Guest and Conway’s model (1997). The results suggested that the situation is more complex than is presented by the model. It can be argued that the role of models is to further understanding, not necessarily to describe reality. Nonetheless, it is important to be aware of the complex interactions between variables and to avoid excessive reductionism. The findings also offer, through an in-depth case, insights into a model that has thus far only been applied at a national level using a positivistic methodology.
Processual Model

Processual models have a different emphasis from content models and are less concerned with prescribing content but rather seek to explain the mechanism behind the creation of the psychological contract. The two processual models examined in the literature were those of Herriot and Pemberton (1997) and McFarlane Shore and Tetrick (1994). Both highlighted the cognitive processes behind the contracting and negotiation between the employee and employer. The assessment of cognitive processes is beyond the scope of this study; however, the notion of negotiation can be explored.

The processual models stress a negotiation between two parties, the employee and the employer. The process models of Herriot and Pemberton (1997) McFarlane Shore and Tetrick (1994), outline the process of mediation: informing, negotiating and monitoring the situation. If the employee is not satisfied with the outcome of the negotiation they have the option to exit. Evidence of bilateral exchange between the parties was not evident in the results derived from this study. However, reflecting on the work of Watson (1987), a power disparity impacted on the exchange, for example the issue of earnings. In terms of employee expectations fair pay was one of the most important elements, yet the weaving factories in particular were dissatisfied with their pay and the equity of pay scales within the company. According to the processual models, this would constitute an area of negotiation, especially as the majority of employees were not covered by collective trade union agreements. However, despite management being aware of the situation and in some cases sympathetic
to the inequity, no change occurred. In part, external pressures and shareholder demands made it difficult for the organisation to fulfil equity of pay, as suggested by McLean Parks and Kidder (1994), nonetheless this was not perceived by employees as a satisfactory reason. An option for employees was to leave the company and find another job; however, again the reality was different. The majority of employees’ skills were company and industry specific and few alternative job prospects existed in the area, a view consistent with Cappelli (1995). The employees were therefore powerless to either bargain or exit. The reality of the situation was that the employees were financially tied to the company and in most cases negotiation was not an option, which underlines Gordon Sorohan’s (1994) notion of a dependency culture.

Another debate surrounding processual models is the question, ‘who is the employee bargaining with?’ The process models anthropomorphise the organisation by assuming that it is itself an entity with thoughts and feelings. The results indicated that interpersonal issues, such as personal trust, were tied to senior managers and directors in the organisation. The actual owners or shareholders of the organisation were too far removed for employees to hold them responsible. This suggests that managers have the ability to shape perceptions of interpersonal justice issues. This was clearly demonstrated by the positive effect the Niddry’s manager had on levels of trust. In contrast, employees anthropomorphise the organisation by relating ‘the organisation’, rather than an individual, to policies and systems as they are impersonal and there was no one person associated with them, consequently the ‘organisation’ is the reference point.
The findings of the study contribute to the academic debate surrounding processual models of the psychological contract. Through both quantitative and qualitative study, power relationships were discussed and the implications the concept has for theory have been examined. A further issue arises in association with processual models 'who is the employee actually bargaining or negotiating with;' and this again is an area for further research.

The chapter has discussed the findings of research question one, factors that shape the psychological contract and the implications for theory. The results suggested that in reality the psychological contract construct is more complex than is suggested in the literature. Such insights arise from an in-depth case study, which draws on both quantitative and qualitative data. In many instances questions have been raised. Further research is required to clarify a number of issues and these are outlined in Chapter 9.

The following chapter presents the findings for research question 2, the implications of breaking the psychological contract.
Chapter 7

RESEARCH QUESTION 2: RESULTS
CHAPTER 7

RESEARCH QUESTION 2: RESULTS

What are the implications of breaking the psychological contract?

Introduction

Chapter 7 presents the findings to the second research question, ‘what are the implications of breaking the psychological contract?’ Key propositions drawn from the literature were:

1. The strength of breach or violation will be affected by the importance of the incident to the individual, the way the situation was handled and the existing strength of the employee - employer relationship.
2. Outcomes of breach may result in restoration, recalculation, or rupture of the employment relationship.
3. Relationship rupture will lead to behavioural outcomes of declining citizenship and reduced effort. Rupture will also lead to attitudinal changes: reduced commitment, reduced job satisfaction and an increase in cynicism.

Chapter 7 examines the above propositions through the analysis of process and variance models of the development of psychological contract violation, which were presented in the literature review. The chapter is divided into three sections. The first section analyses the process model of the development of psychological contract violation, drawing on qualitative data gathered in 1999. The second section examines the variance model of psychological contract violation with reference to the 2000 survey. The final section draws on
‘objective’ absentee figures to assess the extent to which changes in the psychological contract have affected organisational performance. The structure of the chapter is presented diagrammatically below:

<table>
<thead>
<tr>
<th>Section A 1999</th>
<th>Section B 2000</th>
<th>Section C 1996-1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Qualitative results analysed at the individual level</td>
<td>• Questionnaire results analysed at the organisational level</td>
<td>• Hard performance and absentee data from the organisation</td>
</tr>
</tbody>
</table>

The above table presents the structure of the chapter, further detail of the sections are presented below:

**Section A**

Section A draws on qualitative data collected throughout 1999. The aim of the section is to analyse the validity of the processual model, which was formed through the synthesis of literature. In order to ‘test’ the processual model, individual employee cases of breach or violation are considered in the context of the model thereby analysing its validity.

**Section B**

Section B examines the results of the 2000 questionnaire and ‘tests’ the variance model, which was illustrated in the literature review. The model analyses causes and outcomes of breaking the psychological contract by using statistical tests: factor analysis; stepwise regression and correlation. The aim is to explore the extent to which causes of psychological contract violation explain behavioural and attitudinal outcomes.
Section C

The final section analyses the data collected by the organisation from 1996-1999 in the form of absenteeism figures. The aim of this section is to ascertain if fluctuations in the employee-employer relationship have affected trends in absenteeism levels.

Section A: Processual Model

The following section explores the implications of breaking the psychological contract by examining the new process model of psychological contract violation and draws on interview data gathered in 1999.

<table>
<thead>
<tr>
<th>Section A 1999</th>
<th>Section B 2000</th>
<th>Section C 1996-1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Qualitative results analysed at the individual level</td>
<td>• Questionnaire results Analysed at the organisational level</td>
<td>• Hard performance and absentee data from the organisation</td>
</tr>
</tbody>
</table>

Qualitative Data: Individual Level

A processual model (see Figure 7 page 96) was created through the synthesis of literature and will be tested using individual accounts of potential violation situations. The strength of the processual approach is that it allows insight into events that triggered feelings of injustice and also an individual’s reactions to those events; individuals do not react in the same way. Consequently the level of analysis in the following section uses individual cases, which examines different
triggers and reactions to events. The aim is to refine the model through individual cases, thus achieving analytical generalisability.

**Content Analysis**

To provide an overview of sources of psychological contract violation, content analysis of sources of breach was undertaken. Content analysis of breach and violation episodes indicated that the most common trigger of breach was interactional justice issue. These accounted for 13 out of the 25 specific incidents. However, the sources of grievances differed, although many employees were critical of the way individuals were treated in a redundancy situation. Issues relating to distributive and procedural justice also appeared to trigger psychological contract breach and violation. There were four incidents where the distributive justice issue of earnings triggered violation, whereas there were two incidents where the process of progression and promotion, a procedural justice issue, led to psychological contract violation.

**The Analysis Of Illustrative Cases**

The following section draws on a number of illustrative cases that demonstrate different reactions to perceived injustice within the organisation; more specifically whether there is relationship restoration, relationship restoration or relationship rupture.
RELATIONSHIP RUPTURE

Case 1: A Case Of Distributive Justice That Led To 'Relationship Rupture'.

The following section presents a case of distributive justice that led to relationship rupture and thereby testing the process model, as shown in the diagram below in Figure 16:
Figure 16: A PROCESSUAL MODEL OF THE DEVELOPMENT OF 'PSYCHOLOGICAL CONTRACT' VIOLATION.

**CONTEXT**

**TRIGGERS OF CONTRACT BREACH**

**MEDIATING FACTORS**

**EFFECT ON THE EMPLOYMENT RELATIONSHIP**

**OUTCOMES**

**MACRO LEVEL**
- Business conditions
- Labour market conditions

**MESO LEVEL**
- Company's strategy
- Functional systems
- HR systems

**MICRO LEVEL**
- Prior experience
- Expectations
- Social context

---

**Line 1**

Unaltered 'psychological contract' state

---

**Line 2**

Altered 'psychological contract' state

---

**Line 3**

---

**Distributive justice issues**
- Procedural justice issues
- Interactional justice issues

**Interpersonal relationships**

Circumstances of breach

Relationship restoration

Relationship rupture

Perceived violation

Relationship recalibration

Lower job satisfaction

Lower citizenship

Lower effort

Lower commitment

Increasing cynicism
The section is organised according to the model, with three sections: triggers of contract breach, mediating factors and outcomes.

**Triggers Of Contract Breach**

The trigger of a sense of injustice in this case was through changing levels of pay and consequently an issue of distributive injustice. The employee commented:

> Well my view of the company has actually changed quite a bit in the last two years because of the circumstances with regards of my own job. When you were here two years ago, since then they have changed my shift pattern; they have cut my wages by over £200 a month because of the changes. It was done in such a way that we were told it was happening. Some managed to stay on the same shift pattern and you felt as though there was a bit of favouritism there. I have actually enquired about going on to the shift pattern, that’s back to the back shifts and I was more or less told that the jobs are there if you want to apply but it was said in such away that you’ve got no hope. So as years ago I thought I had some future in the company, I am not looking forward to another two years.

**Mediating Factors**

Potential mediating factors include interpersonal relationships, individual characteristics, circumstances of breach and outcomes of breach. In spite of a reasonably good relationship with the company, for example in general the company was seen to be fair, the situation had escalated to relationship rupture and individual philosophy or characteristics did not appear to mediate the
situation. Further, circumstances of breach were important to the individual, and there was little negotiation in resolving the problem. The respondent felt powerless:

You have to accept it. I am at the bottom of the ladder so there is nothing I can do. At the end of the day when the ones at the top say, I've got to accept. I've not got the ability to turn around and say 'no'.

Outcomes

Perceptions of distributive injustice resulted in relationship rupture and was signalled by not only the strength of emotion but also by attitudinal and behavioural outcomes, such as the withdrawal of citizenship, reduced job satisfaction, reduced commitment and increased cynicism. He commented:

I don't have the same commitment to the company that I used to have. They have cut my wages by £200 a month. There are further changes coming within my department, we don't know what they are. We are told there are changes coming but we don't know what they are. I've asked what they are and they say 'we don't know what is happening yet'. You just come in and do your job and go now.

After they have dropped my wages £200 a month? No. They still expect the same but they don’t get the same. They don’t even get the same quality. You don’t have the same commitment to the company and the way things are at the moment.
The above quotes illustrate attitudinal and behavioural outcomes of reduced commitment to the organisation and increased mistrust. Further, the employee stated that the violation had impinged on work performance, particularly in relation to work quality and citizenship. A consequence of this situation was that the state of the psychological contract had become more negative.

Case 2: A Case Of Interactional Justice That Led To Relationship Rupture

The following section presents a case of interactional justice that led to relationship rupture and thereby testing the process model, as shown in the diagram below in Figure 17:
Figure 17: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>TRIGGERS OF CONTRACT BREACH</th>
<th>MEDIATING FACTORS</th>
<th>EFFECT ON THE EMPLOYMENT RELATIONSHIP</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO LEVEL</td>
<td>Business conditions</td>
<td>Unaltered ‘psychological contract’ state</td>
<td>Relationship restoration</td>
<td>Lower job satisfaction</td>
</tr>
<tr>
<td></td>
<td>Labour market conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MESO LEVEL</td>
<td>Company’s strategy</td>
<td>Distributive justice issues</td>
<td>Relationship rupture</td>
<td>Lower citizenship</td>
</tr>
<tr>
<td></td>
<td>Functional systems</td>
<td>Procedural justice issues</td>
<td>Perceived violation</td>
<td>Lower effort</td>
</tr>
<tr>
<td></td>
<td>HR systems</td>
<td>Interactional justice issues</td>
<td></td>
<td>Lower commitment</td>
</tr>
<tr>
<td>MICRO LEVEL</td>
<td>Prior experience</td>
<td>Circumstances of breach</td>
<td>Relationship recalibration</td>
<td>Increasing cynicism</td>
</tr>
<tr>
<td></td>
<td>Expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social context</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

294
Triggers of Breach

The background to the case is that there was perceived interactional injustice when a good manager was dismissed.

Everybody is just a number now. The manager used to come around and know everybody by name. Our first day shift after being off the manager used to come round first thing to update you. It changed when they paid him (a former manager). The moved him along the road (to another site) because it wasn’t working very well and he got that up and running and then they sacked him. I don’t know what their idea was at all, anyone who knows about the place got paid off. My boss who was QC for all the factories and he know everything about QC (quality control) and he got paid off. Now there’s no-one that knows about it, the head lad for quality assurance is a mechanic! What does he know about quality?

Mediators

The individual indicated that the good image of the company had been eroded over time and they no longer considered the organisation a ‘good employer’.

The circumstances of the case were also important to the individual and therefore violation or relationship rupture occurred.

Outcomes

The outcomes of relationship rupture affected an individual’s attitude, the employee commented:
I only have 4 years to go so it is just a case of hanging in there until the bitter end but when they do things like that you start not to care. You don’t care about the company like the way you did, most folk feel like that.

Furthermore the relationship rupture also impinged upon employee behaviour:

I don’t think you are as vigilant as you would normally have been. With this new computer system no one has been down to see if you are using it and we don’t have time to use it properly. We are just plodding on.

The case illustrated the process of psychological contract violation from identifying the triggers to the outcomes of events; in this case perceptions of interactional injustice triggered both attitudinal and behavioural outcomes. One issue to note is that the dominant trigger concerned distributive justice, the reduction in pay. Nonetheless, issues of lack of voice and consultation and the way it was dealt with were also important points.

RELATIONSHIP RESTORATION

Case 3: A Case Of Interpersonal Justice That Led To Relationship Restoration.

The following section outlines a case of interpersonal justice that led to relationship restoration, thus testing another pathway of the processual model, see diagram below in Figure 18.
Figure 18: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

**CONTEXT**

**TRIGGERS OF CONTRACT BREACH**
- Unaltered ‘psychological contract’ state

**MEDIATING FACTORS**
- Interpersonal relationships
- Circumstances of breach

**EFFECT ON THE EMPLOYMENT RELATIONSHIP**
- Relationship restoration
- Relationship rupture
- Relationship recalibration

**OUTCOMES**
- Lower job satisfaction
- Lower organisational citizenship
- Lower effort
- Lower organisational commitment
- Increasing cynicism

**MACRO LEVEL**
- Business conditions
- Labour market conditions

**MESO LEVEL**
- Company’s strategy
- Functional systems
- HR systems

**MICRO LEVEL**
- Prior experience
- Expectations
- Social context

**Psychological contract state**
- Distributive justice issues
- Procedural justice issues

**Interactional justice issues**
- Altered ‘psychological contract’ state

*Line 1*

*Line 2*

*Line 3*
Again the structure of the section mirrors the model with triggers of contract breach, mediating factors and outcomes.

*Triggers Of Contract Breach*

In the following case the trigger of psychological contract breach was a perception of injustice related to the way individuals are treated, interpersonal justice. The background of the case was explained by the respondent:

> There was one thing that sticks in my mind. It was a colleague, and we weren't particularly close although the perception of others was that we were very close, which didn't worry me at all but people thought we were very, very close. Let's just say this guy was going through a very rough spell and there were certain moves afoot at that time, well let's just say there were big question marks against him. I was asked to go and do a report on a particular aspect of this guy's behaviour, which I had great difficulty with and I have probably never written a more political report. It wasn't a case of betrayal or misplaced loyalty it was just a stupid thing to ask me to do. Other people could have done it and I thought it was highly insensitive and I still have this whole question mark about the motive behind why I was asked to do it, other than being just totally insensitive.

To further clarify the situation the interviewee was asked, was the feeling of being 'let down' due to the fact that they asked you or was it the whole idea of the request? The interviewee responded:
It was because they asked me to do it. This guy used to report to me in days gone by and I think it was naïve because if John comes back with a bad report, it must be a lot worse than it is if he is saying such and such. I would never ask anyone to do that. The person that asked me to do it, I don't know if it was a degree of cynicism or vindictiveness, not against me. I could have easily said 'I am not doing it'.

Mediating Factors

The interviewee had worked in the company for 16 years and through experience had built up a relatively good perception of the company and suggested that it was an example of a 'good employer'. However, it appeared that one of the reasons why the situation did not develop into something more serious was the underlying philosophy of the individual:

No, there are always ups and downs, good days and bad days. I've always tried to use that view for every negative situation in life, regardless what it is, there is as sure as hell a positive thing. There is always something positive if you approach it the right way. It may be you reflect on a relationship you had with someone, there is always something. I suppose it's 'don't let the bastards beat you down!'

Outcomes

The above comment suggested that at least in part a positive outlook perhaps mediated the situation. A further explanation was that the situation was not of sufficient importance to the individual as to trigger potential psychological contract violation situation.
Case 4: A Case Of Distributive Justice That Led To Relationship Restoration

The following section presents a case of distributive justice that led to relationship restoration and thereby testing the process model, as shown in the diagram below in Figure 19:
Figure 19: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

**CONTEXT**

- **MACRO LEVEL**
  - Business conditions
  - Labour market conditions

- **MESO LEVEL**
  - Company’s strategy
  - Functional systems
  - HR systems

- **MICRO LEVEL**
  - Prior experience
  - Expectations
  - Social context

**TRIGGERS OF CONTRACT BREACH**

- Psychological contract state
  - Distributive justice issues
  - Procedural justice issues
  - Interactional justice issues

**MEDIATING FACTORS**

- Unaltered ‘psychological contract’ state
  - Inter personal relationships
  - Circumstances of breach

**EFFECT ON THE EMPLOYMENT RELATIONSHIP**

- Relationship restoration
  - Relationship rupture
  - Perceived violation
  - Relationship recalibration

**OUTCOMES**

- Lower job satisfaction
- Lower organisational citizenship
- Lower effort
- Lower organisational commitment
- Increasing cynicism

**LINES**

- LINE 1
- LINE 2
- LINE 3
**Trigger of Breach**

In the following case the issue of workload distribution triggered breach of the psychological contract. The employee commented:

One of the most recent, I have mentioned to you that we feel our workload is high in material handling. They never seem to think how it’s going to be done, they think it has to be moved, the material handlers can move it, that’s another job and we feel we are over loaded. They bought in this machine for bailing scrap, it has to be put on palates, put in a bailer, bailed, tied up, shrink wrapped and labelled and transported. They say to us to do that on shift. Some times it only takes 5 minutes sometimes it takes you an hour and a half, that’s extra. We’ve tried talking to them about it and they shrug it off and say it only takes 5 minutes. Yeah, but you might have 10 palates and that’s 45 minutes. It’s not as if before we were standing with our hands in our pockets for that 45 minutes, so where is the time coming from?

**Mediating Factors**

Despite the issue of workload, the employee held a good opinion of the organisation perceiving the company to be fair. However the comment below highlights the importance of perception of both the situations but also the nature of work relatively to life outside work.

We just have to get over it because you can’t stay bitter and twisted forever. One of the advantages of being down at the bottom is when 4.00pm comes I’ve forgotten about the job by the time I get in my car. It’s gone and I never give the plant another thought until I start again.
Someone higher up will be taking their work home, we leave it here. I don’t think about it and I don’t allow it to become too large. Life’s too short!

Outcomes

As a result of mediating factors the incident has not altered the employment relationship and therefore there is ‘relationship restoration’.

Case 5: A Recallibration Of The Employment Relationship Stemming From An Issue Of Interpersonal Justice.

The following section presents a case of interpersonal justice that led to relationship recallibration, as illustrated in the diagram below in Figure 20:
Figure 20: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>TRIGGERS OF CONTRACT BREACH</th>
<th>MEDIATING FACTORS</th>
<th>EFFECT ON THE EMPLOYMENT RELATIONSHIP</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO LEVEL</td>
<td>Business conditions</td>
<td>Unaltered ‘psychological contract’ state</td>
<td>Relationship restoration</td>
<td>Lower job satisfaction</td>
</tr>
<tr>
<td></td>
<td>Labour market conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MESO LEVEL</td>
<td>Company’s strategy</td>
<td>Psychological contract state</td>
<td>Distributive justice issues</td>
<td>Relationship rupture</td>
</tr>
<tr>
<td></td>
<td>Functional systems</td>
<td></td>
<td>Procedural justice issues</td>
<td>Perceived violation</td>
</tr>
<tr>
<td></td>
<td>HR systems</td>
<td></td>
<td>Interactional justice issues</td>
<td>Lower organisational citizenship</td>
</tr>
<tr>
<td>MICRO LEVEL</td>
<td>Prior experience</td>
<td></td>
<td></td>
<td>Lower effort</td>
</tr>
<tr>
<td></td>
<td>Expectations</td>
<td></td>
<td></td>
<td>Lower organisational commitment</td>
</tr>
<tr>
<td></td>
<td>Social context</td>
<td></td>
<td></td>
<td>Increasing cynicism</td>
</tr>
</tbody>
</table>

304
**Triggers Of Contract Breach**

The background of the case involved interpersonal justice issue, more specifically about a lack of consultation. The employee explained:

I used to work at Niddry and there were a few changes going on and all of a sudden me and another girl were told that we were being told that we were being transferred to the accounts department in Huntly. I think we had been there a couple of years and nobody consulted you, you were just told, it wasn’t even the manager that was along there at the time. He didn’t take us in and say it, I think we just got a letter about it. We were really disappointed because we liked working along there, and the thought of coming along to the big Huntly, we didn’t know anybody, big department, we did not like that at all. Fair enough we fitted in, but at the time you thought they want rid of you, it was quite bad.

**Mediating Factors**

The above comment underlined the importance of interpersonal consultation. The general relationship between the employee and employer was relatively good, with perceptions that the company was overall fair, although feelings did not extend to trust.
Outcomes

Nonetheless the incident had led to a recalibration of the relationship in the sense that the employee was more calculating in the relationship. The employee commented:

Yes, it's probably why I've grasped at my studying and taken it on. I would feel sad if I left here but I don't think I would miss the company now I don't think. Some days you have good days and it's great. Other times you've had enough. But I wouldn't have any problems about leaving if I could get a better job.

The above case demonstrated the effect of perceptions of interpersonal injustice on the employment relationship, in this situation the employee has recalibrated the relationship. There did not appear to have been relationship rupture, but the employee had become more calculative, therefore the general state of the psychological contract had altered.

Case 6: A Case Of Procedural Justice That Led To Relationship Recalibration

The following section presents a case of procedural justice that led to relationship rupture and thereby testing the process model, as shown in the diagram below in Figure 21:
Figure 21: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

**CONTEXT**

**MACRO LEVEL**
- Business conditions
- Labour market conditions

**MESO LEVEL**
- Company’s strategy
- Functional systems
- HR systems

**MICRO LEVEL**
- Prior experience
- Expectations
- Social context

**TRIGGERS OF CONTRACT BREACH**

- Psychological contract state

**MEDIATING FACTORS**

- Distributive justice issues
- Procedural justice issues
- Interactional justice issues

**EFFECT ON THE EMPLOYMENT RELATIONSHIP**

- Interpersonal relationships
- Circumstances of breach
- Outcomes of breach

**OUTCOMES**

- Relationship restoration
- Relationship rupture
- Perceived violation
- Relationship recalibration

- Lower job satisfaction
- Lower organisational citizenship
- Lower effort
- Lower organisational commitment
- Increasing cynicism

**PROCESSUAL MODEL**

1. Unaltered ‘psychological contract’ state
2. Altered ‘psychological contract’ state
3. Unaltered ‘psychological contract’ state
Trigger of Contract Breach
The trigger and sense of injustice resulted from procedural issues. He commented:

It is a while back now, a couple of years ago they dismissed the quality assurance manager in the car park I understand. He has just come back from Egypt having celebrated his 25th wedding anniversary, he comes in and parks his car and his boss met him in the car park and says don’t come in. So sometimes these things are not dealt with terribly well.

Mediating Factors
The breach stemmed from the way in which a redundancy situation was handled by the company. The incident did not develop into relationship rupture in part because of the strong relationship the employee had with the organisation; he expressed that he trusted the organisation. Furthermore it can be argued that the event did not affect the individual personally and so there was not engender such strong emotions as to cause violation.

Outcomes
Although the incident did not led to rupture, there was a sense that the individual had recalibrated the relationship.

It does affect the way you see the company but it passes. You just get your head down and get on with what you have to do. You look with horror at some of these things and just think some day that will be me and if I don’t get my head down that day will be sooner than I want it to be. I am not arguing that they haven’t been necessary, they all were probably necessary, the guy didn’t have a job and was clearly surplus to requirements and had to go. But there are ways of doing things.
Sometimes there are culls when things don’t go terribly well and it’s crudely done.

The above quote suggests that the individual has reconsidered the nature of the employment relationship. The effects of perceived procedural injustice had led to increased fear of job loss and a sense of not challenging the status quo but to keep on working and ‘keep your head down’.

Case 7: Example Of A Case, Which Contradicts The Model

The following case, at least in part, contradicts the constructed model and therefore aids refinement of the model. There were three cases that did not fully fit the processual model all for the same reason, the nature of the outcomes of violation. The structure of the section again mirrors the model by firstly examining triggers of breach before mediating factors and finally outcomes.

Triggers Of Breach

The background to the felt violation concerned redundancies. The employee explained:

Fourteen months ago the sales executive was sacked. It came out of the blue. Managers felt he wasn’t performing. But it was very demotivating to the sales team and upsetting. A few months later the sales manager was sacked and it knocked everyone for six! We got Mark from along the road as a sales manager. Then when I was on holiday I got a call at
home and told the sales administrator, whom I had worked with for the longest was told thanks but no thanks! Three members of staff had gone in 3 months. Basically the new sales manager had come in and given the task to do. The company say they are a people company and do this, it is a kick in the stomach.

There was feeling of interpersonal injustice:

If people have talents in a job and if something is not right, surely it is up to management to do something if it is wrong as long as it is not too bad. It seems to be the short sharp shock, it your face doesn't fit, you are out.

Mediating Factors

The employee had a reasonable relationship with the employer and felt that overall the company was a good employer. However, this was not a mediating factor for relationship rupture. Further, the importance attached to the situation and the outcome meant that breach of the psychological contract was almost inevitable.

Outcomes

The case presents some interesting results in terms of outcomes. There appeared to be a mixture of negative attitudes but nonetheless commitment was retained. Negative comment included:

I am a lot more scathing of the company, maybe it's a question of not understanding why they do things at the time. If the workforce is feeling insecure, it's not a happy workforce.
It makes you feel harder to the company with all the changes.

It destroyed the team. We all got on well and it was a good mix, it makes you feel unsettled. The Friday look at the Courier (the local newspaper) is more intense.

The above quotes suggested that relationship rupture had occurred with increased job insecurity, poor morale and increased motivation to find alternative employment. However, surprisingly there were indications that the employee still enjoyed job satisfaction. It was commented:

I give 110% to my job and I get a real buzz out of sales.

I am happy in my job.

Initial results indicated that perhaps there was a separation of ‘the job’ and ‘the company’. Consequently a relationship rupture with the company did not necessarily mean that there was be a decline in job satisfaction. However, the following comment would suggested that this is not the case.

No, despite all that has happened I feel totally committed to the company and what we sell. I am committed but I’m not sure if the company is committed to people. They care and do a lot about safety, for example. But when it comes to number crunching, they are pretty ruthless. I feel that there is an imbalance.
A further explanation would be that the strong employee - employer relationship had stopped the feeling of violation itself but that it had mediated against the expression of some of the outcomes. Therefore, despite feelings of anger, frustration and being 'let down', the relationship was remarkably intact with the retention of commitment, citizenship and job satisfaction. However, paradoxically there were indications that the employee was looking for a new job.

The above case highlights the complex nature of the psychological contract. There were indications of relationship rupture; yet many positive attitudinal elements, for example organisational commitment, remained intact.

Conclusions To Section A

These data indicated that, for the most part the processual model set out in figure 7, the cases ‘supported’ the model. However, analysis indicated that refinements to the model could be made with respect to three issues. First, the trigger of breach may not be confined to one category of justice; for example in a case where distributive justice is the dominant trigger, interpersonal justice issues may exacerbate the situation, consequently triggers of breach may be multi-faceted. Second, it was evident that employee characteristics, such as individual philosophy of life, potentially acted as a mediator for psychological contract violation. Third, results indicated that expressed outcome of violation or relationship rupture was not as simple as presented in the model. Outcomes of violation did not necessary result in reduced commitment, citizenship, job
satisfaction and increased cynicism. A minority of cases illustrated that the strength of the relationship with the company may mediate expressed outcomes or that the employee enjoys their job and it is almost seen as separate from the employer.

This section has tested the processual model of the development of psychological contract violation by drawing on qualitative data. The next section aims to summarise the findings pertaining to the variance model psychological contract violation.

**Section B: Variance Model**

The following section examines the variance model presented in the literature review by drawing on quantitative results gathered in the 2000 survey.

<table>
<thead>
<tr>
<th>Section A 1999</th>
<th>Section B 2000</th>
<th>Section C 1996-1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Qualitative results analysed at the individual level</td>
<td>• Questionnaire results analysed at the organisational level</td>
<td>• Hard performance and absentee data from the organisation</td>
</tr>
</tbody>
</table>

**Quantitative Results**

The aim of the following section aims to analyse the following proposition:

Relationship rupture will lead to behavioural outcomes of declining citizenship and reduced effort. Rupture will also lead to attitudinal changes: reduced commitment, reduced job satisfaction and an increase in cynicism. In order to examine the proposition, the variance model of psychological contract breach violation (see Figure 22 below), which was developed in the literature was tested:
Figure 22: A VARIANCE MODEL OF THE DEVELOPMENT OF PSYCHOLOGICAL CONTRACT VIOLATION

Distributive justice issues
Procedural justice issues
Interactional justice issues

Lower job satisfaction
Lower organisational citizenship
Lower effort
Lower organisational commitment
Increasing cynicism
The model is divided into triggers and outcomes: triggers relate to organisational justice issues, and outcomes include both attitudinal and behavioural categories. Statistical analysis was undertaken to 'predict' the relationship between causes and outcomes; however, 'prediction' is used in a loose sense as statistically significant associations are reported.

To 'test' the model a number of statistical techniques were used. The first was factor analysis, the second, stepwise regression and third, correlation. For a full explanation of the statistical techniques see Chapter 4 pages 135-161. The model below illustrated below in Figures 23 and 24 the results from the calculations, the arrows indicate the significant associations. The figure refers to the correlation between the two variables and whether the relationship is positive or negative. The asterisks indicate the degree of statistical significance (*p<0.05, ** p<0.01, *** p<0.001).
Figure 23: Variance Model Results - Attitudinal Outcomes

TRIGGERS

DISTRICTIVE JUSTICE

PROCEDURAL JUSTICE

ATTITUINAL OUTCOMES

JOB SATISFACTION

COMMITMENT
1. Affective commitment
2. Calculative commitment
3. Personal contribution to the company
4. Not doing more than is required
5. Loyalty

CYNICISM

INTERACTIONAL JUSTICE
1. Relationship with immediate superior
2. Relationship with co-workers
3. Relationship with management
4. Management’s ability to see workers point of view
5. Level of autonomy

0.64***
0.63***
0.55***
0.51***
0.23*
0.64***
0.37***
Figure 24: Variance Model Results - Behavioural Outcomes

TRIGGERS

DISTRIBUTIVE JUSTICE

PROCEDURAL JUSTICE

INTERACTIONAL JUSTICE
1. Relationship with immediate superior
2. Relationship with co-workers
3. Relationship with management
4. Management's ability to see workers point of view
5. Level of autonomy

BEHAVIOURAL OUTCOMES

CITIZENSHIP

EFFORT
1. Level of effort
2. Effort compared to others

0.26**
Attitudinal Outcomes

The above diagrams show that job satisfaction is explained by distributive and procedural justice. Furthermore five factors were identified under the commitment category. However, only two of the factors were explained by any of the justice issues; affective commitment was explained by distributive justice and employees relationship with management whereas loyalty was explained by procedural commitment. Cynicism was explained by procedural justice and relationship with co-workers.

Behavioural Outcomes

The results indicated that citizenship was explained by the level of employee autonomy. Surprisingly effort was not triggered by any of the justice issues.

The results relating to attitudinal and behavioural outcomes were calculated at a 5% significance level. Due to the lack of links between triggers and outcomes, particularly in the case of commitment and effort, the results were also recalculated to a 10% significance level. However, the results did not change. There were no factors that were significant at the 10% value.

Conclusions To Section B

The above section analysed the model of psychological contract breach and violation using a quantitative methodology. The findings suggested that some dimensions of organisation justice triggered attitudinal and behavioural outcomes. However, not all facets of distributive, procedural and interactional
justice are at the root of the psychological contract outcomes. The results suggested that elements of justice were more likely to trigger attitudinal outcomes: distributive justice triggered job satisfaction, procedural justice triggered job satisfaction loyalty and cynicism and interactional justice triggered affective commitment and cynicism. Only one dimension of justice, an aspect of interactional justice, caused changes in employee behaviour, in this case, citizenship. In many ways the quantitative results were divergent from the qualitative findings, which suggested that the psychological contract was complex and this raises key methodological issues that will be discussed in Chapter 8.

This section examined the findings of the variance model. The following section analyses objective organisational data, drawing absenteeism figures of the company.

**Section C: Absenteeism Results**

The following section aims to analyse objective data, more specifically, organisational absenteeism figures.

<table>
<thead>
<tr>
<th>Section A 1999</th>
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<th>Section C 1996-1999</th>
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<tbody>
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<td>• Qualitative results analysed at the individual level</td>
<td>• Questionnaire results analysed at the organisational level</td>
<td>• Absentee data from the organisation</td>
</tr>
</tbody>
</table>
Section C compares key events in the organisation with absenteeism rates within each site, to ascertain if there is a link between psychological contract breach situations and absenteeism levels.

**Key Events And Absenteeism Rates**

The aim of this section is to examine the link between key events in the organisation and absenteeism levels within each site. The absenteeism trends of individual sites were analysed to ascertain if psychological contract violation had impinged on absenteeism. In order to achieve this objective, absenteeism trends were plotted and potential psychological contract violation events (as defined through qualitative data) were superimposed on these graphs. The software package Change Point was then used to ascertain if there had been statistically significant changes in the rate of absentee levels and compared to the psychological contract violation events.

The aim of the following part is to examine the link between key events in the organisation and absenteeism levels within each site. The table below outlines key events in the organisation between 1997-1999.
Table 24: A Table Of Key Events In Dunnotar Between 1997 and 2000

<table>
<thead>
<tr>
<th>Letter</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Jan 97</td>
<td>Re-organisation of the two weaving factories and new manager</td>
</tr>
<tr>
<td>B</td>
<td>Feb 97</td>
<td>New senior management (Non Wovens)</td>
</tr>
<tr>
<td>C</td>
<td>May 97</td>
<td>Redundancies (compulsory and voluntary)</td>
</tr>
<tr>
<td>D</td>
<td>Nov 97</td>
<td>New senior management (Newark)</td>
</tr>
<tr>
<td>E</td>
<td>June 98</td>
<td>Start of the Dallas project (new computer system)</td>
</tr>
<tr>
<td>F</td>
<td>July 98</td>
<td>Announcement that the two weaving factories have been sold, the building of the greenfield sites continue.</td>
</tr>
<tr>
<td>G</td>
<td>Sep 98</td>
<td>New management (Newark)</td>
</tr>
<tr>
<td>H</td>
<td>Nov 98</td>
<td>Company was put on the market</td>
</tr>
<tr>
<td>I</td>
<td>Aug 99</td>
<td>Offer was made for the company</td>
</tr>
<tr>
<td>J</td>
<td>Nov 99</td>
<td>Confirmation of purchase of the company</td>
</tr>
<tr>
<td>K</td>
<td>Nov 99</td>
<td>Dallas project goes ‘live’ (new computer system)</td>
</tr>
</tbody>
</table>

The graphs below present absenteeism trends for each site. The letter associated with each event is plotted on the absenteeism graphs below:
It is evident from the graph above that absenteeism rates fluctuate over time. However, there appears to be no real correlation between psychological contract violation events and changes in absenteeism. This was confirmed through the control charts, which found that there were no statistically significant changes in the percentage of lost hours at a 90% confidence level.
It is evident from the graph above that absenteeism rates changed over time. Nonetheless, there appears to be no association between psychological contract violation events and changes in absenteeism. However, with further analysis and calculation of control charts, absenteeism values appear unusually high at March 1998 and February 1999. However if these dates are compared to the key events (Table 24) these periods of high absentee rates do not coincide with identified psychological contract violation events. There are two explanations here, first, there is another potential psychological contract violation event that was not identified. Second, the trends are a result of an earlier event and there is a time lag from cause and effect. Third, there is another explanation and is unrelated to psychological contract violation.
The above graph shows that in spite of fluctuations in absenteeism changed over time there appears to be no correlation between psychological contract violation events and changes in absenteeism. However, with analysis of the control chart there appears to be high absenteeism rates in November 1998, as shown below:

In November 1998 the company was put on the market, therefore one possible explanation is that psychological contract were breached and this accounted for the unusually high absenteeism trend.
It is evident from the graph above that absenteeism rates changed over time. However, there appears to be no clear association between psychological contract violation events and changes in absenteeism. This was confirmed through the control chart, which found that there were no statistically significant changes in the percentage of lost hours at a 90% confidence level.
It is evident from the graph above that there is no correlation between psychological contract violation events and changes in absenteeism. This was confirmed through the control chart as there were no statistically significant changes in the percentage of lost hours at a 90% confidence level.
Conclusions To Section C

The absentee figures suggested that levels of absenteeism vary both through time and between sites. However, there does not appear to be a clear trend between absentee levels and potential psychological contract events which is incongruent with Nicolson and John (1985). The tenuous link may be a result of methodological issues such as the time lag between cause and effect. Another methodological issue is that there are many causes of absenteeism, consequently it is difficult to isolate one factor. Another possible reason for the lack of correlation is the power disparity between the employer and employee. In times of high job insecurity, employees may be less inclined to display negative behavioural outcomes of psychological contract violation due to fear of redundancy.

Conclusions To Chapter 7

Chapter 7 presented the findings of research question 2, ‘what are the implications of breaking the psychological contract?’ To address the question new models were tested; the processual model through qualitative findings and the variance model through quantitative results. To analyse the implications of psychological contract breach and violation on absenteeism data were examined in relation to key organisational events.

Processual Model

The processual model delineated the process of psychological contract breach and violation by outlining triggers, mediating factors and outcomes. The
qualitative findings generally concurred with the processual model. However
analysis indicated that the model could be refined in two ways. First there my be
more than one aspect of justice that causes breach. Second, an employee’s
positive outlook on life may mediate against violation. Third, the outcomes of
relationship rupture were more complex than presented in the model; in a
minority of cases there were emotional signs of violation, such as anger and
disillusionment, yet organisational commitment and job satisfaction remained
intact.

Variance Model
The variance model outlined cause and effect of psychological contract breach
and violation, which was tested through 2000 survey results. The findings
suggested that causal justice factors were more likely to trigger attitudinal than
behavioural outcomes. Therefore the statistics suggested that psychological
contract violation leads to more negative attitudes but does not necessarily extent
to changes in behaviour.

Absenteeism Data
The final section examined the implications of psychological violation and
absenteeism. The findings suggested that there was no clear link between
psychological contract violation events and changes to absentee levels.

The following chapter discusses the findings in relation to the psychological
contract and wider bodies of knowledge.
Chapter 8

RESEARCH QUESTION 2: DISCUSSION
CHAPTER 8
RESEARCH QUESTION 2: DISCUSSION

What are the implications of breaking the psychological contract?

Introduction

This discussion chapter addresses the second research question concerning the implications of breaking the psychological contract. In order to research this question a new model of psychological contract violation was developed through the synthesis of the literature. The model was operationalised using both processual and variance perspectives.

Key propositions from the literature were:

1. The strength of breach or violation will be affected by the importance of the incident to the individual, the way the situation was handled by management and the strength of the employee - employer relationship.
2. Outcomes of breach may result in restoration, recalculation, or rupture of the employment relationship.
3. Relationship rupture will lead to behavioural outcomes of declining citizenship and reduced effort. Rupture will also lead to attitudinal changes: reduced commitment, reduced job satisfaction and an increase in cynicism.

The following section will examine the above propositions in relation to first, the processual model and second, the variance model.
Conclusions For Research Question 2: The Implications Of Breaking The Psychological Contract

Processual Model Results

The results were informed by propositions drawn from the literature review:

Proposition 1 – The Strength Of Breach/ Violation Of Psychological Contract Will Be Affected By The Importance Of The Incident To The Individual, The Way The Situation Is Handled By Management And The Strength Of The Employee - Employer Relationship.

The extent to which the identification of injustice leads to violation is dependent on the three mediating factors above. The individual cases from the empirical work indicated that the significance placed on an incident by the individual was a critical factor. If it was not deemed to be of sufficient importance, the relationship with the employer was restored. Equally, if the organisation managed the situation well then the relationship may be restored. A 'good' relationship with the company was another mediating factor outlined in the model. Essentially employees gave the organisation the 'benefit of the doubt,' thereby preventing relationship rupture.

However, the results from the individual cases indicated that this was not always the case. The general state of the psychological contract in the company was good, with positive perceptions of fairness and commitment although levels of trust differed between sites. Nonetheless the findings suggested that when there was a case of
perceived injustice someone had to be blamed, which concurs with Sheppard, Lewicki and Minton (1992). The target of such blame was usually the organisation.

Furthermore, Niddrys demonstrated signs of a high degree of trust, however this did not prevent employee violation of the psychological contract with the employer. It was evident that employees placed trust in ‘individuals’, in this case the site manager, but not ‘the company’, consequently it is perhaps limiting to define trust relations between an employee and the entity of the ‘organisation’. This returns to the debate in the psychological contract literature of anthropomorphise the organisation and this issue of defining ‘who or what’ the employer is, see Chapter 6.

The findings contribute to the debate and suggest that the concept of the ‘employer’ is two-fold. First, interactional justice and personal trust are concerned with the interaction of individuals. The results stressed that such relationships are between ‘people’ not the abstract notion of the ‘organisation’. Second, distributive and procedural issues are impersonal as they deal with systems and procedures, and the relationship can be defined in terms of the ‘organisation’ and not individuals. Accordingly the findings go some way to unpack the nature of the relationship between employees and the organisation and its representatives.

A further mediating factor that was evident from the findings but not defined in the model, was an individual’s philosophy on life. A number of employees illustrated a positive outlook on life, and despite the company’s actions remained optimistic, which may have prevented psychological contract violation.
**Proposition 2 - Outcomes Of Breach May Result In Restoration, Recalculation Or Rupture Of The Employment Relationship**

Due to the subjective nature of the psychological contract individuals reactions to incidents vary (Rousseau, 1995). The new model outlines three consequences of perceived injustice on the employee-employer relationship: restoration, recalculation and rupture. The results confirmed these three categories. For example, in several instances employee perceptions of the organisation were unchanged by the grievance; therefore the relationship was re-established or restored. Other employees were influenced in a different way and recalculated the psychological contract, becoming more rational and shrewd about the reciprocal relationship. Equally when the organisation’s actions were insupportable, rupture occurred breaking the current psychological contract with negative outcomes, which are outlined in the following section.

**Proposition 3 – Relationship Rupture Will Lead To Behavioural Outcomes Of Reduced Citizenship And Effort. Rupture Will Also Lead To Attitudinal Changes: Reduced Commitment, Reduced Job Satisfaction And An Increase In Cynicism.**

Models of psychological contract violation (Rousseau, 1995; Morrison and Robinson, 1997) focus on the process of breach and fail to define the consequences for the employment relationship. Important questions are ‘what are the implications of breaking the psychological contract and does psychological contract violation impinge on employee and organisational performance?’
The outcomes of relationship 'rupture' in the processual model were reduced job satisfaction, commitment, citizenship and effort while levels of cynicism increased. It was evident from the interviews that such attitudinal and behavioural outcomes occurred as a result of psychological contract violation, which is compatible with Guest and Conway’s (1997) results. The level of effort employees put into a task was the only departure from Guest and Conway’s findings. The interviews revealed that the amount of effort expended by an employee on work was not dependent only on the nature of the relationship with the employer but was also based on degree of pride they had in their job. Similarly in a significant minority of cases, job satisfaction was unaffected, consequently implying that the 'organisation' and the 'job' may be separate entities, and therefore job satisfaction is concerned with the nature of the job and not the relationship with the employer.

In a minority of cases, the situation was more complex than suggested by Guest and Conway (1997); despite feelings of anger, 'violation' and the search for alternative employment commitment, job satisfaction and citizenship remained intact. It is difficult to explain such cases but it highlights that the psychological contract can be strongly influenced by individual perceptions and personalities (Rousseau, 1995; Herriot, 1996).

The processual model has been substantiated through individual illustrative cases and examined in terms of the process and outcomes of relationship rupture. The variance model also aims to consider the effect of psychological contract violation.
The Variance Model Results

Proposition three, the implications of relationship rupture, was also explored through measuring cause and effect with the variance model. The model outlined causes of violation, which were distributive, procedural and interactional justice issues, while outcomes were divided into attitudinal and behavioural issues.

In terms of organisational justice’s impact on attitudinal outcomes, the results indicated, first, that distributive justice triggered job satisfaction and affective commitment; second, that procedural justice was linked with job satisfaction, loyalty and cynicism; and third, that interactional justice was associated with cynicism and affective commitment. Organisational justice issues triggered fewer behavioural outcomes; autonomy (an interactional feature) was connected to citizenship.

Attitudinal Outcomes.

The statistical results established that distributive justice was linked with job satisfaction and may be explained by equity theory (Adams, 1965), which can be summarised by the term a ‘fair days pay for a fair days work’. Essentially if an organisation gives tangible recognition to employee achievement through earnings, it follows that the individual would be more satisfied with their job. Distributive justice was also connected with affective commitment, indicating that a fair distribution of resources results in increased affinity with the organisation. To a degree this concurs with Millward and Brewerton’s (1999) thesis, which suggested
that transactional aspects of the psychological contract must be fulfilled before relational issues can be addressed. The results of this thesis perhaps take this concept a stage further arguing that a fair distribution of transactional aspects actually *drives* relational characteristics due to the cause and effect association.

It was evident from the year 2000 questionnaire results that procedural justice was statistically linked to job satisfaction. It follows that if there is perceived equity in the decision making process, frustration is minimised thereby job satisfaction is enhanced. Procedural justice was also associated with loyalty. A possible explanation is to return to the concept of knowledge based trust. Knowledge based trust emphasises consistency of behaviour, consequently it can be argued that the predictability of procedures enhances the sense of evenhandedness and to an extent trust and loyalty. Equally, procedural justice was also connected with cynicism, and as a result when there is a lack of fairness and equity then employees were prone to become more skeptical.

In terms of interactional justice, the relationship with co-workers was linked with cynicism. A possible explanation is that interactional justice stresses the idea of culture and sub culture indicating that interaction with others and the influence of group norms invokes cynicism. The relationship with management was linked with affective commitment, underlining that the notion of personal trust and the importance of management visibility may inspire increased organisational commitment.
**Behavioural Outcomes**

The statistical results indicated that there was only one significant association between organisational justice and psychological behavioural outcomes, this being that the level of employee’s autonomy (a dimension of interactional justice) was linked with organisational citizenship. It follows that the greater the level of responsibility the more inclined employees are to work beyond the written contract, a trend which is congruent with HR literature on empowerment (Beardwell and Holden, 1999).

The findings did not point to any other statistically significant correlations that linked aspects of justice to behavioural outcomes. Additionally, the interview data suggested that an employee’s effort was not attributed to organisational justice but was a result of ‘pride in the job’.

Statistically significant associations aid the refinement of the variance model. The variance model has contributed to the psychological contract violation literature by defining the implication of perceived injustice. The following section outlines this thesis’s contribution to wider academic debates.

**Implications for theory**

**A Model Of The Development Of Psychological Contract Violation**

A key contribution that this thesis makes is the creation and evaluation of a model of psychological contract violation. The model was created through synthesising
literature and was operationalised through both processual and variance methodologies. The processual model was analysed through illustrative individual cases of psychological breach and violation, while the variance model was tested by drawing on statistics from the year 2000 survey, which outlined triggers or causes and effects of relationship violation or rupture. The duel approach provides two pictures of psychological contract violation and minimises post-positivists concern of fallibility of measurement through triangulation.

In the processual model, dimensions of injustice initiate relationship rupture, the consequences of which are reduced job satisfaction, citizenship, commitment and effort, with a corresponding increase in cynicism. The variance model analyses such associations by testing cause and effect, which are also defined in the processual model. Therefore the implications of breach can be explained through two avenues using different methodological techniques and triangulation.

**Processual Model**

The research process has allowed the refinement of the processual model and the amended version is presented in the diagram below in Figure 30:
MACRO LEVEL
Business conditions
Labour market conditions

MESO LEVEL
Company's strategy
Functional systems
HR systems

MICRO LEVEL
Prior experience
Expectations
Social context

Figure 30: A PROCESSUAL MODEL OF THE DEVELOPMENT OF ‘PSYCHOLOGICAL CONTRACT’ VIOLATION.

Context

Triggers of Contract Breach

Meso Level

Unaltered ‘psychological contract’ state

Distributive justice issues

Inter personal relationships

Relationship restoration

Individual characteristics

Relationship rupture

Perceived violation

Circumstances of breach

Relationship recalibration

Outcomes of breach

Lower job satisfaction

Altered ‘psychological contract’ state

Lower organisational citizenship

LINE 1

LINE 2

Lower effort

LINE 3

Lower organisational commitment

Increasing cynicism

Outcomes

Social context
The processual model adopts a more holistic approach than the variance methodology as it focuses on events and is heavily dependent on context, consequently there is a tendency for the results to be complex. The findings suggested that in a number of cases relationship rupture or violation led to changes in all of the psychological contract outcomes. As defined by the processual model, job satisfaction, citizenship, effort and commitment decreased as cynicism increased. However, the complication of the results became evident where a minority of cases did not fit with the processual model. In a small number of instances there were feelings of violation as defined through emotions of anger, frustration and resentment (Rousseau, 1989), yet few psychological contract violation outcomes were evident. Job satisfaction, citizenship and effort remained high, which may have meant that the 'job' and the 'organisation' were recognised as distinct entities, as suggested by the results of research question 1, which found that effort and citizenship were driven by pride in the job and job satisfaction. However, in the minority of cases affective commitment also remained high, although continuance commitment decreased and the individuals were looking for alternative employment. Therefore the individual and subjective nature of the psychological contract was stressed, which is consistent with Rousseau's (1995) argument. The model was not amended in light of these results, as the trend was evident only in a minority of cases.

The model was refined in two ways as a result of the findings and changes to the diagram of the model are highlighted in bold. First, it was evident in the cases that
more than one justice issue triggered psychological contract breach, consequently this is reflected in the amended model. Second, a further mediating factor was identified through the empirical work: an employee’s philosophy may mediate or exacerbate the potential for relationship rupture. In light of the results the notion of individual characteristics was incorporated into the processual model as a mediating factor.

**Variance Model**

The variance model focused on cause and effect of variables as opposed simply to events or activities. The statistical results analysed the triggers: distributive, procedural or interactional justice that caused psychological contract violation outcomes. A summary of the results is presented below:

- Distributive justice influenced job satisfaction and affective commitment
- Procedural justice influenced job satisfaction, loyalty and cynicism
- Aspects of interactional justice influenced violation outcomes. The relationship with co-workers caused cynicism while relationship with management caused affective commitment.

The above results suggested that amendments to the model were required and this is presented in the diagram below in Figure 31:
Figure 31: A VARIANCE MODEL OF THE DEVELOPMENT OF PSYCHOLOGICAL CONTRACT VIOLATION

ATTITUDINAL OUTCOMES
- Lower job satisfaction
- Lower organisational commitment
- Increasing cynicism

BEHAVIOURAL OUTCOMES
- Lower organisational citizenship

Distributive justice issues
Procedural justice issues
Interactional justice issues
The rationale for using two methodological techniques was to triangulate results in order to gain a clearer picture of ‘truth’. To an extent the results of the processual model are consistent with those of the variance model in that in certain cases psychological contract outcomes were affected in similar ways. However, the nature of the results of the two methods were somewhat different, and in part relate back to methodological assumptions, which are discussed in the following section. The processual model, with its focus on events, does not link particular triggers with specific outcomes, but the causes invoke ‘a state of mind and emotion’, that of felt ‘violation’, which occurs as a result of an incident. The variance model is more detached and clinical as it deals with cause and effect of variables and is separated from context and events and as a result the particular dimension of justice that initiates breach becomes immaterial. Therefore it is perhaps not a question of gaining a clearer picture of ‘truth’ but gaining a different picture of ‘reality’.

**Methodological Issues**

This thesis seeks to explore aspects of the psychological contract using case study methodology. In using such a holistic approach it was evident that the nature of the psychological contract is more complex than is presented in the literature, even allowing for the notion that theory seeks to further understanding rather than to describe; the dynamics of the psychological contract are perhaps underplayed. Many authors (Guest, 1996, 1998; Arnold, 1996; Herriot, 1996; Rousseau, 1995) have argued that the psychological contract construct suffers from a lack of
empirical study, consequently a key contribution of the thesis is to study the psychological contract empirically over time using a multiple methodology. To date the majority of empirical work on the psychological contract has adopted quantitative methods, for example by surveying MBA students (see Robinson and Rousseau, 1994). This present study undertakes an in-depth investigation of the psychological contract insitu and over time, drawing on both qualitative and quantitative methods and archive data although testing the model through a single case study does not allow statistical generalisability. However, by empirically testing and refining the models analytical generalisability (Yin, 1994) is possible. It follows that the model may be tested in different contexts, thereby contributing to the body of knowledge in the field.

A mixed method has been applied in two different ways. First, in addressing the first research question on factors that shape the psychological contract, a quantitative study was conducted in 1996 and 2000, to ascertain the extent of ‘absolute’ change. Additionally qualitative techniques were used to examine the process by which change occurred during the interim period 1997-1999. Therefore longitudinality was achieved through both quantitative and qualitative methods. A strong point of the thesis is that a contextual approach was adopted, which stresses the importance of historical, economic and organisational circumstances. Furthermore, the specific temporal order of events and activities has been emphasised, and was examined by conducting interviews. This reinforces the value of longitudinal research when analysing the psychological contract.
The second application of mixed methods was to examine the second research question, ‘what are the implications of breaking the psychological contract’. Here two methods were used to triangulate results, which is in line with assumptions of post-positivism. As a post-positivist, one of the underlying philosophical stances is the imperfection of measurement (Trochim, 1999; Tashakkori and Teddlie, 1998). Post-positivists do not believe that any one technique can provide an adequate picture of ‘reality’. Accordingly, more than one method was used to reduce the limitations associated with a single technique and to shed light on the ‘truth’. However, during the course of analysis there have been points where qualitative and quantitative results have been contradictory. For example, while studying factors which shape the psychological contract, the level of employee identification with elements of the mission statements was analysed to assess personal trust. Statistical evidence pointed to strong personal identification with the mission statement. In contrast qualitative data suggested clearly that there was no identification with the mission statement and that the majority of the interviewees were sceptical and that it was merely for public relations. Furthermore, the situation is more complex when exploring research question 2, the implications of psychological contract violation, as results differed even within the application of one method. The significance of individual realities, interpretations and socially constructed accounts (Miller and Glassner, 1997) was highlighted as the processual model was tested.
Therefore instead of confirming ‘reality’ or ‘truth’ the situation by triangulation, multiple methods made interpretation more difficult and did not aid theory testing (Brannen, 1996). The differences between the quantitative and qualitative results raises the paradigm commensurability debate (Burrell and Morgan, 1979) and question whether methods from such different ontological epistemological underpinnings can be reconciled.

**Conclusions To Chapter 8**

In examining the implications of breaking the psychological contract two models have been evaluated. The processual model outlined aspects of justice: distributive, procedural and interactional, as triggers of breach. The results were in agreement with the model where potential breach was triggered by identification of injustice. Further, the model assumed that there would be one trigger of breach: distributive, procedural or interactional. The results indicated, however, that breach or violation was not necessary triggered by *one* aspect of justice, for example discrepancies regarding earnings (distributive justice) were exacerbated by the way individuals were treated by managers (interactional justice). Accordingly facets of justice may influence each other and do not act in isolation as described by the initial processual model.

The extent to which perceptions of fairness impinged on the psychological contract was examined by the variance model. The variance model tested the association between aspects of justice and psychological contract attitudinal and behavioural
outcomes. The findings found that distributive justice affected job satisfaction and affective commitment, while procedural justice was associated with job satisfaction, loyalty and cynicism. Aspects of interactional justice also triggered outcomes: relationship with co-workers was linked to cynicism, while the relationship with management was linked to affective commitment. In terms of behavioural outcomes, the level of autonomy, an element of interactional justice, was connected with citizenship. Therefore it can be concluded that perceptions of justice have important implications for behavioural and attitudinal outcomes.
Chapter 9

CONCLUSIONS
CHAPTER 9
CONCLUSIONS

Introduction

This thesis has attempted to contribute to the literature and the academic debates concerning the psychological contract. Two specific questions were used to provide a focus for the research. These were:

1. What factors shape the psychological contract?
2. What are the implications of breaking the psychological contract?

A review of literature was conducted to address the research questions and propositions were drawn from existing research in the field. The propositions were:

1. What factors shape an individual’s psychological contract with an employer?
   - Psychological contracts are fluid and change according to specific contexts.
   - Different aspects of trust, namely calculative, knowledge based, institutional and personal, each shape the psychological contract.
   - Different aspects of perceptions of fairness, more specifically, distributive, procedural and interactional, also each shape the psychological contract.

2. What are the implications of breaking a psychological contract?
   - The strength of breach and violation will be affected by the importance of the incident to the individual, the way the situation is handled by the employer and the strength of the existing employment relationship.
• Breach may affect individuals in different ways: relationship restoration, recalculation or rupture.
• Relationship rupture will lead to behavioural outcomes of reduced citizenship and effort and attitudinal outcomes of reduced commitment and job satisfaction and increased cynicism.

Additionally, a new model of psychological contract breach and violation was formed through the synthesis of literature. The model was empirically examined, first by a processual approach and second using variance methodology. A longitudinal case study was used to evaluate both the propositions and the models and the organisational background was presented in chapter 3.

The thesis adopted a post-positivist methodology, as outlined in chapter 4. Key propositions of the post-positivist stance are, first, a denial of the existence of one absolute ‘truth’; rather the aim is to predict trends in a probabilistic sense, with the post-positivists being sympathetic to differing interpretations of events. Second, the importance attributed by post-positivists on the issue of the fallibility of measurement. The research addressed the above issues by analysing findings at the site level thereby stressing different interpretations of events and moving away from the notion of one ‘absolute truth’. Further, both quantitative and qualitative methodologies were adopted in order to minimise the limitations of any one technique. However, it was evident throughout the research that triangulation was
difficult where findings from two methods conflicted. This methodological debate was developed in chapter 8.

The findings and discussion of Research Question 1 were presented in Chapters 5 and 6. The findings illustrated that the psychological contract is an inherently dynamic phenomenon, for example the degree to which employees were associated with the mission statement and the organisation over time. It was also evident that trust was an important factor that shapes the nature of the relationship between employee and employer. Nonetheless trust is a multi-faceted construct. Knowledge based trust and institutional trust appeared to be important for employees; the predictability of events and faith in procedures seemed to help maintain the relationship. The results concerning personal trust suggested that common values and goals between employee and employer may not be essential for a positive psychological contract. However further research is required to explore the role of personal trust further. Fairness also appeared to shape the psychological contract. The concept of equity or justice, particularly distributive and interactional, was crucial to maintaining the relationship.

The results from Research Question 2 were examined in Chapters 7 and 8. The principal findings concurred with the processual model. Triggers of breach seemed to stem from perceptions of injustice and the effect to which this had on the relationship appeared to be mediated by the importance of the incident to the employee, the way management handled the situation, strength of the relationship
but also an individual's personality. Consequently the result of breach varied from
an unchanged relationship to psychological contract violation or rupture. The
qualitative findings suggested the consequences of rupture were complex and both
attitudes and behaviour were affected. However, the variance model indicated that
attitudes were predominantly affected with little or no change in behaviour.

In drawing conclusions from the thesis it is useful to return to the concept of the
psychological contract as an analytical construct and will be considered in the
following section.

**Psychological Contract As An Analytical Construct**

Herriot (1998) highlighted the potential for the psychological contract to develop
into rhetoric or a convenient label for the changing employment relationship.
Similarly, a number of authors (Guest, 1996, 1998; Arnold, 1996; Rousseau, 1995)
reaffirmed this notion and stressed the need for the development of the
psychological contract as an analytical construct rather than a prescriptive label. As
such, the thesis uses the psychological contract as a mechanism for examining three
issues. First, the psychological contract as a means of exploring the changing state
of the employment relationship. Second, the construct was used to examine the
contributions of human resource management on individual and organisational
performance. Finally the psychological contract was used to investigate the
dynamics of the employment relationship and the implications of it breaking down.
The literature (for example Hiltrop, 1996; Herriot and Pemberton, 1995) has argued that through the 1990s challenges facing organisations have changed. Increased competition has meant organisations have been forced to adopt cost cutting strategies (Cappelli, 1995) while aiming to remain innovative and flexible. The literature has contended that strategic adjustment has had serious implications for the way employees are managed (Herriot, Manning and Kidd, 1997). The psychological contract has been used as a metaphor to describe the changing nature of the employment relationship (Millward and Brewerton, 1998) characterised by the transition from the ‘old’ contract of job security in return for loyalty and hard work, to a ‘new’ psychological contract based on employability (Bagshaw, 1997; Newell, 2000) and nondependent trust (Gordon Sorohan, 1994). However, at this level of analysis the psychological contract can potentially become a convenient label without analysing the degree of change.

Research Question 1 analysed factors that shape the psychological contract and as a result examined the nature of the employment relationship. The findings suggested that the psychological contract had not changed to the degree suggested in the literature. The ‘old’ contract was still reasonably well intact, albeit in a slightly altered form. Employees recognised that job security was no longer offered by any organisation, yet the findings indicated that there was a high degree of commitment, citizenship and effort, issues outlined in the ‘old’ contract. In terms of the ‘new’
psychological contract, the employability thesis was not borne out by the results. Many employees chose to stay with the company due to the quality of life, which stresses the importance of 'life issues' outside work. These trends were drawn from a single case study and therefore cannot claim to have statistical generalisability to other cases. Nonetheless the findings offer hypotheses that challenge current literature and is a springboard for further research.

This thesis studied the psychological contract from the employees perspective. However, Sparrow (1998) has suggested that further study of employers' expectations of employees is necessary. Nonetheless conceptualisations of the employment relationship anthropomorphise 'the employer'; the employer is seen as a coherent entity with views, attitudes and expectations. A key question in the literature is who or what constitutes 'the employer', as discussed in Chapter 2. This thesis has contributed to this debate. It was evident from the findings that issues relating to interactional justice or personal trust were based on interactions between individuals. As a result employees viewed managers as their employer. However, when inquiries of an impersonal nature arose, for example distributive or procedural justice issues, the employer was perceived to be an abstract notion of 'the organisation' and was not associated with any particular group of individuals. These findings do not provide a definitive answer to the question of who or what is 'the employer', and therefore it is perhaps an area for further research.
2. Analysing Human Resource Management

Throughout the 1980s and 1990s human resource management emerged as an important paradigm for managing people in organisations (McBain, 1997). HRM has been described in 'hard' and 'soft' terms (Beardwell and Holden, 1999; Poole, 1999). The 'hard' aspect stresses increased organisational performance through the strategic management of human resources. In contrast, the 'soft' side of HRM emphasises the importance of gaining the 'hearts and minds' of employees and consequently may be described as unitarist in nature. The essence of human resource management is the premise that employees are a source of competitive advantage rather than a cost to the organisation (Beardwell and Holden, 1999; Poole, 1999; Armstrong, 1999).

The extent to which HRM has in practice affected organisational and individual performance has been questioned (Legge, 1994). Additionally, there is little evidence to suggest that 'soft' issues such as commitment and trust influence employee performance (McKendall and Margulis, 1995). Although the psychological contract appears to embrace the unitarist philosophy, the Guest and Conway model (1997) emphasizes job satisfaction, commitment and citizenship as outcomes of a positive relationship. However, it can be argued that the subjective and unspoken psychological contract is 'owned' by the individual and for that reason the organisation cannot 'force' change (Rousseau, 1995), although the company can indirectly influence it (Guest and Conway, 1997). Thus the psychological contract, as a construct, does not assume that the organisation and workforce share the same
values but assesses employee perception of the employer whether positive or negative.

The second research question explored the implications of breaking the psychological contract and contributes to the question of ‘soft’ HRM’s influence on employee performance. An element of the analysis assessed the extent to which employee efforts were affected by psychological contract breach or violation. The results pertaining to the processual model suggested that the level of employee effort could be affected by psychological contract violation, although the extent depended on mediating factors such as the strength of the employment relationship. In contrast, the variance model indicated that aspects of fairness did not impinge on employee effort although the level of autonomy affected citizenship, which is congruent with the HR empowerment literature (Johnson, 1992; Jenkins, 1996). As a result the findings were ambivalent concerning the association between psychological contract breach and employee effort.

To examine the impact of psychological contract breach and violation on levels of absenteeism, secondary data gathered by the company were examined. Absenteeism data indicated that there were few signs of negative reactions to psychological contract violation situations. The reasons behind this became evident through the interviews. The issue of the balance of power between the employee and employer was important; employees were dependent on the company as a result of a lack of alternative employment opportunities. Furthermore, the majority of employees
experienced high job insecurity as the workforce had steadily decreased over the last
decade. Therefore as a result of inequality of power and the necessity of employees
to retain their jobs, levels of effort and absenteeism were unaffected by perceived
injustice. Accordingly the results enhance the view that the psychological contract
can be used as an analytical construct.

This thesis analysed the dynamics of a single case study organisation over a four
year period. Hence this thesis offers a unique insight into aspects of the
management of change, although it was not one of the aims of this study. The thesis
adopts a processual perspective and falls within Collins’ (1998) critical monograph
school of thought. Consequently the thesis studies ‘changing as opposed to change’.
The results highlight that organisational change is not a planned and linear process
but can be complex, unpredictable and even chaotic. The psychological contract
offers a mechanism for studying the effects of organisational change on employees,
and the findings offer a number of insights into effective management of change.
First, the findings emphasize the importance of personal interactions between
management and employees. Individuals appeared only to trust managers if they
were visible and where there was good communication. Second, a related point is
that a good employment relationship may mediate psychological contract violation
as the employee gives the employer the ‘benefit of the doubt’. Finally, the findings
suggested that it is important to guide expectations of change through involvement
and communication thereby avoiding incongruent expectations and psychological
contract violation.
3. Analysing The Development Of The Employment Relationship

The psychological contract has also been used to examine the dynamics of the employment relationship. The findings suggested that internal and external contextual issues played an important role in shaping the psychological contact. In addition the results indicated that perceptions of fairness were important; and the variance model established that aspects of justice in particular affected attitudinal outcomes such as affective commitment.

The findings also suggested that personal trust appeared to be less important to a positive psychological contract. Despite low trust relations between employees and employers, individuals were still committed to the organisation and expressed loyalty to the company. McKendall and Margulis (1995) argued that it is dangerous for employees to ‘trust’ their company as an organisation’s principal goal is the pursuit of profit and loyalty will not reciprocated. Furthermore the ‘new’ psychological contract literature suggested that dependent trust should be broken (Gordon Sorohan, 1994; McKendall and Margulis, 1995) and employees should take ownership of their own careers. Therefore perhaps there should be less importance placed on the notion of personal trust.

In this thesis the concept of the psychological contract has been applied to the relationship between an employee and employer. The concept, however, need not be limited merely to these two parties. Levinson et al (1962) broadened the definition of the psychological contract to encompass different stakeholders, for
example between an employee and their line manager or among colleagues.
Therefore the value of the concept is that it may be applied in various contexts and at
different levels and provides opportunities for further research.

**Implications For Policy And Practice**

The psychological contract has been embraced not only by academics but also by
practitioners as it explains the changing nature of the employment relationship
(Herriot and Pemberton, 1996). Similarly this thesis has a number of outcomes and
recommendations for practitioners, outlined below:

1. Subgroups may hold different psychological contracts. Therefore management
   should not assume that the whole organisation hold the same career aspirations
   or feel the same obligation to the organisation.
2. Psychological contracts change over time and through two-way communication
   the state of the contract can be assessed and monitored.
3. Employee expectations can be shaped directly through organisational policies;
   frustration occurs if the company then does not deliver its ‘promises’.
4. With less hierarchical organisational structures there are fewer employee
   opportunities for advancement. Employees may accept this limitation but
   nonetheless want recognition of achievements. Companies must adopt
   alternative means of recognition, for example by performance relative pay or job
   enrichment.
5. Communication between management and employees and visibility of management are important issues for building trust.

6. Perceived fairness of the organisation’s actions is important for shaping positive employee attitudes.

7. In order to disseminate the findings to practitioners, an aim is to publish the results of this thesis in practitioner journals.

Critical Reflections on Conducting the Research

This thesis has used a number of different methodological techniques. Alvesson and Skoldberg (2000) stressed the importance of reflecting on the research process; therefore with regard to both qualitative and quantitative techniques it is valuable to review and consider the fieldwork process. While conducting the interviews, the significance of gaining a rapport with the interviewee became apparent.

Subjectivists stress that the researcher is not a neutral observer but impinges on and is part of the whole research process (Gill and Johnson, 1997; Kvale, 1996). The importance of tailoring your conduct to the interview situation became obvious. When interviewing a weaver and a director the language used and the clothes worn were different. A related issue was how to document the interview, whether to record the interview or take written notes. Does taping the interview jeopardize the rapport with the interviewee? Or if the interviewer is writing does that in itself cause a barrier? Reflecting on the research process, tape recording the interviews appeared to be a more satisfactory option. At the beginning
of the interview respondents were aware of the tape recorder, but that seemed to disappear after about 5-10 minutes. Using this technique, the interviewee had the full attention of the interviewer and the flow of the interview was not stopped while the researcher took notes. As a result interviewees appeared to give spontaneous answers and volunteered information - criteria for a good interview according to Silverman (2000).

A learning process also took place with the quantitative survey technique. The first survey, conducted in 1996, was distributed in the training room of the case study organisation and the researchers were available to answer questions. In the year 2000 survey this distribution mechanism was not possible and employees were sent the survey to their home address. On reflection, the first distribution method was more successful because it allowed for two-way communication between the researcher and respondent. This reinforces the importance of personal interaction where the respondents are human beings and not part of an experiment.

**Limitations Of The Study**

Throughout the research process the author was aware of the limitations and methodological problems and these were discussed fully in Chapter 3. However, on reflection of the research process several methodological limitations became apparent. First, the 1996 survey was opportunistic and based on a consultancy project. Consequently the content was in part governed by the company and had
implications for the constructs measured in 1996 although the company did not try unduly to influence the research. Second, as a single case study, access was regulated by the company; and during the period of study the organisation experienced many changes, including the sale of the company. This had implications for the number of interviews conducted in 1999 and the delay of the second survey in the year 2000. Third, the volume and complexity of data resulted in data management problems and data overload. Consequently it was necessary to use summary tables to present the findings. Finally, by adopting a single case study approach, statistical generalisability was not possible. However, through the development and testing of the model analytical generalisability was achievable.

Implications For Further Research

Research often poses more questions than it provides answers. As such the thesis has provided the impetus for further research. Potential research areas are outlined below:

1. Further testing of the processual and variance models in a wider range of contexts to increase both analytical and statistical generalisability.

2. Further research in the case study organisation to assess the progression and changes to the psychological contract.
3. Research in a company with stronger trade unions, to explore the way in which trade unions affect the psychological contract and to ascertain if unions act as a mediator for psychological breach and violation.

4. Further research on the state and the nature of the psychological contract, to assess the nature of the psychological contract in wider organisational contexts and examine the variants of the ‘old and ‘new’ psychological contracts.

5. Further research to explore issues of power in the psychological contract.

6. Further research to explore who or what represents the ‘employer’, thereby clarifying the role within the psychological contract.


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Appendix 1

Statistical Tables

1996 RESULTS – ORGANISATIONAL LEVEL

Table 1: Expectations of work

The table below illustrates issues which employee’s value and how they had changed between 1994-1996. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1994 mean</th>
<th>Rank</th>
<th>1996 mean</th>
<th>Rank</th>
<th>2 sample t-test (df&gt;150)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I have job security</td>
<td>1.50</td>
<td>1</td>
<td>1.28</td>
<td>1</td>
<td>-9.38</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.70</td>
<td>2</td>
<td>1.34</td>
<td>2</td>
<td>-14.72</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.70</td>
<td>2</td>
<td>1.41</td>
<td>3</td>
<td>-2.03</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>It is very important that I enjoy my job</td>
<td>1.80</td>
<td>4</td>
<td>1.60</td>
<td>7</td>
<td>-6.68</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I know what is going on and why in my site</td>
<td>1.80</td>
<td>4</td>
<td>1.51</td>
<td>6</td>
<td>-11.13</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I have good working conditions and facilities</td>
<td>1.90</td>
<td>6</td>
<td>1.47</td>
<td>5</td>
<td>-17.68</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I receive suitable training and development for my job</td>
<td>2.00</td>
<td>7</td>
<td>1.41</td>
<td>3</td>
<td>-23.95</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I know what the customer thinks of my work</td>
<td>2.00</td>
<td>7</td>
<td>1.90</td>
<td>9</td>
<td>-3.32</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>It is very important that I work for a caring company</td>
<td>2.00</td>
<td>7</td>
<td>1.67</td>
<td>8</td>
<td>-12.20</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>
Table 2: Calculative trust

Employees were asked a number of questions, which asked them to assess the worth of staying with their present employers. A Likert scale was used where 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree and 5 = strongly disagree and n = 539.

The results are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>3.13</td>
<td>7.82</td>
<td>25.00</td>
<td>25.57</td>
<td>29.39</td>
<td>12.21</td>
</tr>
<tr>
<td>Give an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.59</td>
<td>14.85</td>
<td>34.21</td>
<td>34.02</td>
<td>11.09</td>
<td>5.83</td>
</tr>
</tbody>
</table>

Table 3: Knowledge based Trust

Knowledge based trust refers to the predictability of behaviour, where 1 = unimportant and 4 = important (n = 539). The results pertaining to knowledge based trust are illustrated below.

n = 539.

<table>
<thead>
<tr>
<th>Key dimensions of the missions statement</th>
<th>Extent company puts the mission statement into practice (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.69</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.66</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.63</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.39</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.23</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.14</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>2.85</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>2.80</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>2.69</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>2.65</td>
</tr>
</tbody>
</table>
Table 4: Distributive Justice

Employees were asked questions relating to the distribution of resources, in particular pay and fringe benefits. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539. The results are presented below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies I know</td>
<td>2.95</td>
<td>4.31</td>
<td>35.96</td>
<td>29.03</td>
<td>21.91</td>
<td>8.80</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.82</td>
<td>6.18</td>
<td>37.27</td>
<td>32.58</td>
<td>16.10</td>
<td>7.87</td>
</tr>
</tbody>
</table>

Table 5: Procedural Justice

Employees were asked several questions relating to procedural justice; particularly the extent to which procedures and the decision making process is seen to be fair. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539. The table below illustrates the results:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>2.56</td>
<td>8.57</td>
<td>49.91</td>
<td>21.42</td>
<td>16.76</td>
<td>3.35</td>
</tr>
<tr>
<td>I have been given plenty of opportunity for career development beyond my immediate job</td>
<td>3.40</td>
<td>2.06</td>
<td>14.23</td>
<td>36.52</td>
<td>35.77</td>
<td>11.42</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>3.41</td>
<td>1.70</td>
<td>13.77</td>
<td>37.55</td>
<td>36.04</td>
<td>10.94</td>
</tr>
<tr>
<td>The basis of which I am paid is fair</td>
<td>3.00</td>
<td>3.74</td>
<td>33.27</td>
<td>31.59</td>
<td>21.50</td>
<td>9.91</td>
</tr>
</tbody>
</table>
Table 6: Personal Trust

Personal trust refers to the extent to which employees and the organisation share common norms and values, where with 1 = unimportant and 4 = important and n = 539. The results are illustrated in the table below.

<table>
<thead>
<tr>
<th>Key dimensions of the missions statement</th>
<th>Value to individual (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain safe working environment</td>
<td>3.73</td>
</tr>
<tr>
<td>High levels of customer service</td>
<td>3.68</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.60</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>3.50</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>3.49</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.45</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.34</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.30</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>3.23</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>3.17</td>
</tr>
</tbody>
</table>

Table 7: Interactional Justice

Employees were asked several questions relating to interactional justice and the results are set out below. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things go wrong with respect to safety in my site manager normally blame employees</td>
<td>2.82</td>
<td>10.67</td>
<td>25.09</td>
<td>38.95</td>
<td>22.10</td>
<td>3.18</td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.52</td>
<td>7.56</td>
<td>63.69</td>
<td>22.12</td>
<td>12.67</td>
<td>3.97</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which</td>
<td>3.18</td>
<td>2.08</td>
<td>25.14</td>
<td>22.27</td>
<td>31.57</td>
<td>7.94</td>
</tr>
</tbody>
</table>
they have made

In Dunnotar employees are encouraged to share knowledge and information

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>All in all, I am satisfied with my job.</td>
<td>2.37</td>
<td>11.70</td>
<td>53.40</td>
<td>23.58</td>
<td>9.25</td>
<td>2.08</td>
</tr>
<tr>
<td>In general, I like working here.</td>
<td>2.25</td>
<td>10.04</td>
<td>62.50</td>
<td>20.83</td>
<td>5.49</td>
<td>1.14</td>
</tr>
<tr>
<td>There are several aspects about my job I don’t like.</td>
<td>2.71</td>
<td>7.37</td>
<td>38.19</td>
<td>32.14</td>
<td>20.98</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Table 8: Job Satisfaction

Employees were asked several questions relating to job satisfaction, the results are presented below. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.32</td>
<td>15.28</td>
<td>45.66</td>
<td>32.26</td>
<td>5.47</td>
<td>1.32</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.45</td>
<td>9.07</td>
<td>49.15</td>
<td>31.19</td>
<td>8.51</td>
<td>2.08</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.43</td>
<td>4.91</td>
<td>13.40</td>
<td>29.06</td>
<td>38.68</td>
<td>13.96</td>
</tr>
</tbody>
</table>

Table 9: Organisational Commitment

Several questions were asked relating to this issue and the results of the 1996 survey are shown below. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>1st Std</th>
<th>2nd Std</th>
<th>3rd Std</th>
<th>4th Std</th>
<th>5th Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.74</td>
<td>37.03</td>
<td>52.07</td>
<td>10.53</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.99</td>
<td>19.77</td>
<td>63.65</td>
<td>14.88</td>
<td>1.32</td>
<td>0.38</td>
</tr>
<tr>
<td>I would feel bad if I performed my job poorly</td>
<td>1.90</td>
<td>28.38</td>
<td>57.52</td>
<td>9.96</td>
<td>3.38</td>
<td>0.75</td>
</tr>
<tr>
<td>I feel a great sense of personal satisfaction when I do my job well</td>
<td>1.86</td>
<td>29.03</td>
<td>58.24</td>
<td>11.24</td>
<td>0.94</td>
<td>0.56</td>
</tr>
</tbody>
</table>
### 1996 RESULTS – SITE LEVEL

#### Table 1: Expectations of work

The table below expectations of work among the five sites, a Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 539.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I work for a caring company</td>
<td>1.67</td>
<td>1.77</td>
<td>1.71</td>
<td>1.65</td>
<td>1.64</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I enjoy my job</td>
<td>1.72</td>
<td>1.51</td>
<td>1.63</td>
<td>1.46</td>
<td>1.56</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.69</td>
<td>1.71</td>
<td>1.64</td>
<td>1.65</td>
<td>1.55</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what the customer thinks of my work</td>
<td>1.81</td>
<td>1.68</td>
<td>1.97</td>
<td>2.07</td>
<td>1.83</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>It is very important that I have job security</td>
<td>1.21</td>
<td>1.57</td>
<td>1.35</td>
<td>1.29</td>
<td>1.21</td>
<td>&lt;0.00 1</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.28</td>
<td>1.64</td>
<td>1.27</td>
<td>1.48</td>
<td>1.34</td>
<td>&lt;0.00 1</td>
</tr>
<tr>
<td>It is very important that I receive suitable training and development for my job</td>
<td>1.46</td>
<td>1.46</td>
<td>1.46</td>
<td>1.27</td>
<td>1.38</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what is going on and why in my site</td>
<td>1.49</td>
<td>1.48</td>
<td>1.68</td>
<td>1.42</td>
<td>1.39</td>
<td>&lt;0.00 1</td>
</tr>
<tr>
<td>It is very important that I have good working conditions and facilities</td>
<td>1.42</td>
<td>1.67</td>
<td>1.49</td>
<td>1.51</td>
<td>1.41</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>There are several aspects about my job I don’t like</td>
<td>2.64</td>
<td>3.16</td>
<td>2.67</td>
<td>2.67</td>
<td>2.75</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Table 2: Calcutative trust

Employees were asked a number of questions, which asked them to assess the worth of staying with their present employers, the results for each site are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this job for good</td>
<td>3.14</td>
<td>3.35</td>
<td>2.99</td>
<td>3.10</td>
<td>3.29</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain in Dunnotar</td>
<td>2.35</td>
<td>2.41</td>
<td>22.73</td>
<td>2.80</td>
<td>2.50</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 3: Knowledge based Trust

Knowledge based trust refers to the predictability of behaviour, the results pertaining to knowledge based trust for each site (the extent to which the company puts the mission statement into practice) are illustrated below.

<table>
<thead>
<tr>
<th>Key dimensions of the missions statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.72</td>
<td>3.70</td>
<td>3.72</td>
<td>3.54</td>
<td>3.69</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.57</td>
<td>3.58</td>
<td>3.30</td>
<td>3.20</td>
<td>3.38</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.64</td>
<td>3.87</td>
<td>3.61</td>
<td>3.57</td>
<td>3.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.24</td>
<td>3.25</td>
<td>2.98</td>
<td>2.79</td>
<td>3.13</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>3.00</td>
<td>2.93</td>
<td>2.69</td>
<td>2.65</td>
<td>2.80</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>2.88</td>
<td>2.93</td>
<td>2.59</td>
<td>2.50</td>
<td>2.72</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>2.95</td>
<td>2.80</td>
<td>2.49</td>
<td>2.41</td>
<td>2.66</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>3.03</td>
<td>3.00</td>
<td>2.66</td>
<td>2.62</td>
<td>2.84</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.24</td>
<td>3.35</td>
<td>3.18</td>
<td>2.96</td>
<td>3.10</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.61</td>
<td>3.74</td>
<td>3.68</td>
<td>3.77</td>
<td>3.60</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Table 4: Distributive Justice

Employees were asked questions relating to the distribution of resources, in particular pay and fringe benefits, the results for each site are presented below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies that I know</td>
<td>2.92ab</td>
<td>2.80ab</td>
<td>2.99ab</td>
<td>2.60a</td>
<td>3.16b</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.74</td>
<td>2.55</td>
<td>2.79</td>
<td>2.70</td>
<td>3.02</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Table 5: Procedural Justice

The table below shows the means of the Likert scale relating to procedural justice separately for each site. The table also includes the p value from one way analysis of variance for significant differences in the mean values among the sites. Tukey's pairwise comparisons were used to determine significant differences between pairs of sites.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>2.39a</td>
<td>2.39ab</td>
<td>2.38ab</td>
<td>2.94b</td>
<td>2.66ab</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>I have been given plenty opportunity for career development beyond my immediate job</td>
<td>3.18a</td>
<td>3.00a</td>
<td>3.39a</td>
<td>3.77b</td>
<td>3.46ab</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>3.22a</td>
<td>3.23a</td>
<td>3.42a</td>
<td>3.78b</td>
<td>3.39a</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Table 6: Personal Trust

Personal trust refers to the extent to which employees and the organisation share common norms and values. Employees were asked to rate aspects of the mission statement according to how important they were to them. The results for each site are illustrated in the table below.

<table>
<thead>
<tr>
<th>Key dimensions of the missions statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.64</td>
<td>3.93</td>
<td>3.62</td>
<td>3.73</td>
<td>3.70</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.58</td>
<td>3.82</td>
<td>3.55</td>
<td>3.67</td>
<td>3.55</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.69</td>
<td>3.93</td>
<td>3.70</td>
<td>3.82</td>
<td>3.66</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.35</td>
<td>3.70</td>
<td>3.30</td>
<td>3.44</td>
<td>3.36</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>3.14</td>
<td>3.58</td>
<td>3.10</td>
<td>3.32</td>
<td>3.09</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>3.17</td>
<td>3.74</td>
<td>3.06</td>
<td>3.52</td>
<td>3.14</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>3.37</td>
<td>3.77</td>
<td>3.35</td>
<td>3.56</td>
<td>3.36</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>3.38</td>
<td>3.74</td>
<td>3.36</td>
<td>3.63</td>
<td>3.35</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.28</td>
<td>3.54</td>
<td>3.33</td>
<td>3.44</td>
<td>3.21</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.33</td>
<td>3.58</td>
<td>3.28</td>
<td>3.37</td>
<td>3.34</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

Table 7: Interactional Justice

The table below illustrates the results of one way analysis of variance, testing for significant differences among sites on the issue of interactional justice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Dunnotar continuous improvement is mainly about looking after its employees.</td>
<td>2.66a</td>
<td>2.58ab</td>
<td>2.75ab</td>
<td>3.03b</td>
<td>2.91ab</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>In Dunnotar continuous improvement is mainly about making profits</td>
<td>2.45</td>
<td>2.42</td>
<td>2.20</td>
<td>2.49</td>
<td>2.19</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

423
When things go wrong with respect to safety in my site managers normally blame employees

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things go wrong with respect to safety in my site managers normally blame employees</td>
<td>3.04ab</td>
<td>3.03ab</td>
<td>2.71ab</td>
<td>3.04b</td>
<td>2.55a</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.25a</td>
<td>2.45ab</td>
<td>2.26ab</td>
<td>2.77ab</td>
<td>2.41b</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which they have made</td>
<td>2.97a</td>
<td>2.87ab</td>
<td>3.22ab</td>
<td>3.37b</td>
<td>3.29b</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>In Dunnotar employees are encouraged to share knowledge and information</td>
<td>2.48a</td>
<td>2.16a</td>
<td>2.67ab</td>
<td>3.03b</td>
<td>2.80b</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 8: Job Satisfaction

The table below demonstrates the results of one way analysis of variance, testing for significant differences among sites on the issue of job satisfaction. Tukey's pairwise comparisons was used to determine significant differences between pairs of sites. Different letters in a row indicates the sites that have a significantly different mean value.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All in all, I am satisfied with my job</td>
<td>2.13</td>
<td>2.13</td>
<td>2.51</td>
<td>2.54</td>
<td>2.32</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In general, I like working here</td>
<td>2.14</td>
<td>1.93</td>
<td>2.39</td>
<td>2.25</td>
<td>2.24</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>There are several aspects about my job I don't like</td>
<td>2.64</td>
<td>3.16</td>
<td>2.67</td>
<td>2.67</td>
<td>2.75</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Table 9: Organisational Commitment

The table below demonstrates the results of one way analysis of variance, testing for significant differences among sites on the issue of organisational commitment. Tukey’s pairwise comparisons was used to determine significant differences between pairs of sites. Different letters in a row indicates the sites that have a significantly different mean value.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.19a</td>
<td>2.09ab</td>
<td>2.25ab</td>
<td>2.36ab</td>
<td>2.46b</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.26a</td>
<td>2.32ab</td>
<td>2.42ab</td>
<td>2.59b</td>
<td>2.59b</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.43</td>
<td>3.64</td>
<td>3.35</td>
<td>3.47</td>
<td>3.49</td>
<td>&gt;0.50</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.73</td>
<td>1.67</td>
<td>1.87</td>
<td>1.68</td>
<td>1.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.91</td>
<td>1.97</td>
<td>2.09</td>
<td>1.99</td>
<td>1.92</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Appendix 3
Statistical Tables

2000 RESULTS – ORGANISATIONAL LEVEL

Table 1: Expectations of work

The table below illustrates issues which employee’s value and how they had changed between 1996-2000. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 105.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 mean</th>
<th>Rank</th>
<th>2000 mean</th>
<th>Rank</th>
<th>2 sample t-test (df&gt;150)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I have job security</td>
<td>1.28</td>
<td>1</td>
<td>1.33</td>
<td>1</td>
<td>0.70</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.34</td>
<td>2</td>
<td>1.46</td>
<td>4</td>
<td>1.29</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.41</td>
<td>3=</td>
<td>1.55</td>
<td>6</td>
<td>-1.47</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I receive suitable training and development for my job</td>
<td>1.41</td>
<td>3=</td>
<td>1.44</td>
<td>2</td>
<td>0.32</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good working conditions and facilities</td>
<td>1.47</td>
<td>5</td>
<td>1.45</td>
<td>3</td>
<td>2.08</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what is going on and why in my site</td>
<td>1.51</td>
<td>6</td>
<td>1.50</td>
<td>5</td>
<td>0.70</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Table 2: Calculative trust

Employees were asked a number of questions, which asked them to assess the worth of staying with their present employers. A Likert scale was used where 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree and 5 = strongly disagree and n = 105.

The results are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>2.95</td>
<td>8.0</td>
<td>32.0</td>
<td>24.0</td>
<td>25.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.40</td>
<td>18.0</td>
<td>39.0</td>
<td>31.0</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>I am not afraid of what might happen if I quit my job without having another line up</td>
<td>3.78</td>
<td>1.96</td>
<td>10.78</td>
<td>18.63</td>
<td>44.12</td>
<td>24.51</td>
</tr>
<tr>
<td>It would be very hard for me to leave my organisation right now, even if I wanted to</td>
<td>2.69</td>
<td>10.68</td>
<td>38.83</td>
<td>25.24</td>
<td>21.36</td>
<td>3.88</td>
</tr>
<tr>
<td>Too much in my life would be disrupted if I decided I wanted to leave my organisation right now</td>
<td>2.39</td>
<td>17.0</td>
<td>40.0</td>
<td>29.0</td>
<td>10.0</td>
<td>1.0</td>
</tr>
<tr>
<td>It would be too costly for me to leave my organisation right now</td>
<td>2.34</td>
<td>17.48</td>
<td>45.63</td>
<td>22.33</td>
<td>14.56</td>
<td>0</td>
</tr>
<tr>
<td>Right now, staying with my organisation is a matter of necessity as much as desire</td>
<td>2.39</td>
<td>20.39</td>
<td>39.81</td>
<td>21.36</td>
<td>17.48</td>
<td>0.97</td>
</tr>
<tr>
<td>I feel I have too few alternative employment options to consider leaving this organisation</td>
<td>2.21</td>
<td>19.0</td>
<td>46.0</td>
<td>16.0</td>
<td>16.0</td>
<td>0</td>
</tr>
<tr>
<td>One of the few serious consequences of leaving this organisation would be the scarcity of available alternatives</td>
<td>2.20</td>
<td>22.55</td>
<td>45.10</td>
<td>21.57</td>
<td>10.78</td>
<td>0</td>
</tr>
<tr>
<td>One of the major reasons I continue to work for this organisation is that an alternative organisation may not match the overall benefits that I have here</td>
<td>2.42</td>
<td>12.62</td>
<td>48.54</td>
<td>25.24</td>
<td>11.65</td>
<td>1.94</td>
</tr>
</tbody>
</table>
Two questions were retained from the 1996 survey enabling an indication of change in calculative trust. The results are shown below:

**Table 3**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt;130)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>3.13</td>
<td>2.95</td>
<td>-1.45</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.59</td>
<td>2.40</td>
<td>-1.71</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

**Table 4: Knowledge based Trust**

Knowledge based trust refers to the predictability of behaviour. The mission statement of the company was used to operationalise company promises. Employees were then asked to retrospectively rate the extent to which the company had put them into practice. The results pertaining to knowledge based trust are illustrated below.

<table>
<thead>
<tr>
<th>Key dimensions of the mission statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 sample t test (df&lt;150)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.69</td>
<td>1.28</td>
<td>-42.25</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.39</td>
<td>1.56</td>
<td>-21.91</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.63</td>
<td>1.34</td>
<td>-38.52</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.07</td>
<td>1.99</td>
<td>-11.76</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>2.80</td>
<td>2.43</td>
<td>-4.01</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>2.67</td>
<td>2.53</td>
<td>-1.64</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>2.65</td>
<td>2.63</td>
<td>-0.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>2.81</td>
<td>2.45</td>
<td>-3.29</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.16</td>
<td>1.86</td>
<td>-14.77</td>
<td>&gt;0.001</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.66</td>
<td>1.47</td>
<td>-29.87</td>
<td>&gt;0.001</td>
</tr>
</tbody>
</table>
To expand on the notion of the company's obligations, employees were asked, in the 2000 survey to what extent had they felt that the company had first promised to execute certain issues and second the degree to which they had fulfilled them. The results are shown in the table below:

**Table 5:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Promise (Mean)</th>
<th>Fulfil (Mean)</th>
<th>2 Sample t-test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company has promised to provide me with a reasonably secure job.</td>
<td>2.85</td>
<td>2.88</td>
<td>-0.09</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has promised to provide me with fair pay for the work I do.</td>
<td>2.79</td>
<td>2.93</td>
<td>-0.98</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has promised to provide me with a career.</td>
<td>3.44</td>
<td>3.22</td>
<td>1.57</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The promised to provide me with interesting work.</td>
<td>3.15</td>
<td>2.95</td>
<td>1.52</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company promised to ensure fair treatment by managers and supervisors</td>
<td>2.61</td>
<td>2.69</td>
<td>-0.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has promised to help me with the problems I encounter outside work</td>
<td>3.00</td>
<td>3.11</td>
<td>-0.75</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

**Table 6: Distributive Justice**

Employees were asked questions relating to the distribution of resources, in particular pay and fringe benefits. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 105.

The results are presented below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies that I know</td>
<td>2.54</td>
<td>9.71</td>
<td>46.60</td>
<td>29.13</td>
<td>8.74</td>
<td>5.83</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.49</td>
<td>12.75</td>
<td>42.16</td>
<td>31.37</td>
<td>10.78</td>
<td>2.94</td>
</tr>
</tbody>
</table>
I feel that my colleagues job responsibilities are fair 2.67 3.0 42.0 36.0 15.0 0
Overall, the rewards I received here now are quite fair 2.96 4.81 30.77 32.69 26.92 4.81
I consider my current work load to be quite fair 2.86 6.80 33.01 33.01 21.36 5.83
I think that my current level of pay is fair 3.12 1.0 29.0 29.0 25.0 13.0

There were two questions in the 1996 survey that related to distributive justice and these were retained for longitudinal comparisons, these results are presented below.

Table 7

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt; 130)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies that I know</td>
<td>2.95</td>
<td>2.54</td>
<td>-3.78</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.82</td>
<td>2.49</td>
<td>-3.18</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Table 8: Procedural Justice

Employees were asked several questions relating to procedural justice; particularly the extent to which procedures and the decision making process is seen to be fair. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 105. The table below illustrates the results:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>3.23</td>
<td>2.91</td>
<td>23.30</td>
<td>34.95</td>
<td>25.24</td>
<td>13.59</td>
</tr>
<tr>
<td>I have been given plenty opportunity for career development beyond my immediate job</td>
<td>2.03</td>
<td>25.24</td>
<td>54.37</td>
<td>12.62</td>
<td>7.77</td>
<td>0</td>
</tr>
</tbody>
</table>
The company generally provides opportunity for promotion 2.88 4.0 27.0 47.0 15.0 4.0
The basis of which I am paid is fair 2.48 8.74 53.40 23.30 9.71 4.85
I feel procedures are designed to collect accurate information necessary for making decisions 3.01 2.94 35.29 26.47 28.43 6.86
I feel procedures are designed to provide opportunities to appeal or challenge the decision 2.96 3.0 36.0 25.0 27.0 6.0
I feel procedures are designed to have all sides affected by the decision represented 3.02 4.90 32.35 32.35 16.67 13.73
I feel procedures are designed to generate standards so that decisions could be made with consistency 2.97 3.92 34.31 34.31 15.69 11.76
I feel procedures are designed to hear the concerns of all those affected by the decision 3.18 2.0 30.0 25.0 29.0 12.0
I feel procedures are designed to provide useful feedback regarding the decision and its implementation 2.89 5.83 34.95 35.92 10.68 12.62
I feel procedures are designed to allow for requests for clarification or additional information about the decision 2.87 4.85 34.95 38.83 10.68 10.68

A few questions were retained from the 1996 survey for the purposes of comparison, see below.

Table 9

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt; 130 )</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>2.56</td>
<td>2.71</td>
<td>1.35</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I have been given plenty opportunity for career development beyond my immediate job</td>
<td>3.40</td>
<td>3.61</td>
<td>1.94</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>3.41</td>
<td>3.60</td>
<td>0.92</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The basis of which I am paid is fair</td>
<td>3.01</td>
<td>3.20</td>
<td>1.77</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Table 10: Personal Trust

Personal trust refers to the extent to which employees and the organisation share common norms and values. The results are illustrated in the table below.

<table>
<thead>
<tr>
<th>Key dimensions of the mission statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 sample t test (df&lt;150)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of customer service</td>
<td>3.68</td>
<td>1.21</td>
<td>-46.29</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Conduct business with honesty</td>
<td>3.60</td>
<td>1.28</td>
<td>-38.51</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Maintain safe working environment</td>
<td>3.73</td>
<td>1.16</td>
<td>-50.91</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Give people more responsibility</td>
<td>3.38</td>
<td>1.51</td>
<td>-28.18</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide challenging work</td>
<td>3.18</td>
<td>1.97</td>
<td>-14.92</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide personal development</td>
<td>3.23</td>
<td>1.75</td>
<td>-14.93</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide fair reward system</td>
<td>3.42</td>
<td>1.63</td>
<td>-18.79</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Provide open communications</td>
<td>3.44</td>
<td>1.49</td>
<td>-22.71</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Environmentally aware and socially responsible</td>
<td>3.33</td>
<td>1.53</td>
<td>-22.12</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Fair return to the shareholder</td>
<td>3.35</td>
<td>1.59</td>
<td>-22.09</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 11: Interactional Justice

Employees were asked several questions relating to interactional justice and the results are set out below. A Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 105.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Dunnotar continuous improvement is mainly about looking after its employees.</td>
<td>3.23</td>
<td>2.91</td>
<td>23.30</td>
<td>34.95</td>
<td>25.24</td>
<td>13.59</td>
</tr>
<tr>
<td>In Dunnotar continuous improvement is mainly about making profits</td>
<td>2.03</td>
<td>25.24</td>
<td>54.37</td>
<td>12.62</td>
<td>7.77</td>
<td>0</td>
</tr>
<tr>
<td>When things go wrong with respect to safety in my site</td>
<td>2.88</td>
<td>4.0</td>
<td>27.0</td>
<td>47.0</td>
<td>15.0</td>
<td>4.0</td>
</tr>
<tr>
<td>managers normally blame employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.48</td>
<td>8.74</td>
<td>53.40</td>
<td>23.30</td>
<td>9.71</td>
<td>4.85</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which they have made</td>
<td>3.01</td>
<td>2.94</td>
<td>35.29</td>
<td>26.47</td>
<td>28.43</td>
<td>6.86</td>
</tr>
<tr>
<td>In Dunnotar employees are encouraged to share knowledge and information</td>
<td>2.96</td>
<td>3.0</td>
<td>36.0</td>
<td>25.0</td>
<td>27.0</td>
<td>6.0</td>
</tr>
<tr>
<td>My supervisor always considers my viewpoint</td>
<td>3.02</td>
<td>4.90</td>
<td>32.35</td>
<td>32.35</td>
<td>16.67</td>
<td>13.73</td>
</tr>
<tr>
<td>My supervisor is always able to suppress personal biases</td>
<td>2.97</td>
<td>3.92</td>
<td>34.31</td>
<td>34.31</td>
<td>15.69</td>
<td>11.76</td>
</tr>
<tr>
<td>My supervisor is always able to give me timely feedback about decisions and they're implications</td>
<td>3.18</td>
<td>2.0</td>
<td>30.0</td>
<td>25.0</td>
<td>29.0</td>
<td>12.0</td>
</tr>
<tr>
<td>My supervisor always treats me with kindness and consideration</td>
<td>2.89</td>
<td>5.83</td>
<td>34.95</td>
<td>35.92</td>
<td>10.68</td>
<td>12.62</td>
</tr>
<tr>
<td>My supervisor always shows concern for my rights as an employee</td>
<td>2.87</td>
<td>4.85</td>
<td>34.95</td>
<td>38.83</td>
<td>10.68</td>
<td>10.68</td>
</tr>
<tr>
<td>My supervisor always deals with me in a truthful manner</td>
<td>2.74</td>
<td>6.0</td>
<td>42.0</td>
<td>29.0</td>
<td>11.0</td>
<td>9.0</td>
</tr>
<tr>
<td>If I got into difficulties at work I know my workmates would try and help me out</td>
<td>2.27</td>
<td>15.53</td>
<td>56.31</td>
<td>16.50</td>
<td>8.74</td>
<td>2.91</td>
</tr>
<tr>
<td>I can trust the people I work with to lend me a hand if I need it</td>
<td>2.21</td>
<td>21.57</td>
<td>50.0</td>
<td>17.65</td>
<td>6.86</td>
<td>3.92</td>
</tr>
<tr>
<td>Most of my workmates can be relied upon to do as they say they will do</td>
<td>2.34</td>
<td>12.0</td>
<td>60.0</td>
<td>18.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>I have full confidence in the skills of my workmates</td>
<td>2.44</td>
<td>16.83</td>
<td>40.59</td>
<td>25.74</td>
<td>14.85</td>
<td>1.98</td>
</tr>
<tr>
<td>Most of my fellow workers would get on with the job even if supervisors were not around</td>
<td>2.24</td>
<td>27.18</td>
<td>52.43</td>
<td>9.71</td>
<td>8.74</td>
<td>0.97</td>
</tr>
<tr>
<td>I can rely on other workers not to make my job more difficult by careless work</td>
<td>2.68</td>
<td>6.0</td>
<td>41.0</td>
<td>34.0</td>
<td>17.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Management at my firm is sincere in its attempt to meet the</td>
<td>3.37</td>
<td>3.92</td>
<td>20.59</td>
<td>43.14</td>
<td>25.49</td>
<td>5.88</td>
</tr>
</tbody>
</table>
Certain questions, which refer to interactional justice, were retained to ascertain if attitudes had changed over the 1996-2000 period, see the table below.

Table 12

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt; 130)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Dunnotar continuous improvement is mainly about looking after its employees.</td>
<td>2.82</td>
<td>3.23</td>
<td>3.74</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In Dunnotar continuous improvement is mainly about making profits</td>
<td>2.32</td>
<td>2.03</td>
<td>-3.18</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>When things go wrong with respect to safety in my site managers normally blame employees</td>
<td>2.82</td>
<td>2.88</td>
<td>0.62</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.52</td>
<td>2.48</td>
<td>-0.32</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which they have made</td>
<td>3.18</td>
<td>3.01</td>
<td>-1.57</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar employees are encouraged to share knowledge and information</td>
<td>2.69</td>
<td>2.96</td>
<td>2.41</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>
Table 13: Job Satisfaction

Employees were asked several questions relating to job satisfaction, the results are presented below. A Likert scale was used where 1= strongly agree, 2= agree, 3= neutral, 4= disagree and 5= strongly disagree and n = 105.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt;130)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All in all, I am satisfied with my job</td>
<td>2.37</td>
<td>2.39</td>
<td>0.22</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In general, I like working here</td>
<td>2.25</td>
<td>2.35</td>
<td>1.09</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>There are several aspects about my job I don't like</td>
<td>2.71</td>
<td>2.72</td>
<td>0.09</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

Table 14: Organisational Commitment

Several questions were asked relating to this issue and the results of the 1996 survey are shown below. A Likert scale was used where 1= strongly agree, 2= agree, 3= neutral, 4= disagree and 5= strongly disagree and n = 105.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.50</td>
<td>7.84</td>
<td>45.10</td>
<td>39.22</td>
<td>4.90</td>
<td>2.94</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.66</td>
<td>4.90</td>
<td>55.88</td>
<td>28.43</td>
<td>7.84</td>
<td>2.96</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.39</td>
<td>6.0</td>
<td>16.0</td>
<td>25.0</td>
<td>39.0</td>
<td>14.0</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.94</td>
<td>22.33</td>
<td>63.11</td>
<td>13.59</td>
<td>0.97</td>
<td>0</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.94</td>
<td>22.55</td>
<td>63.73</td>
<td>11.76</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>I'm not willing to put myself out just to help the organisation</td>
<td>3.70</td>
<td>3.0</td>
<td>5.0</td>
<td>22.0</td>
<td>51.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Even if Dunnotar were not doing so well financially, I would be reluctant to change to another employer</td>
<td>2.44</td>
<td>7.77</td>
<td>56.31</td>
<td>23.30</td>
<td>9.71</td>
<td>2.91</td>
</tr>
<tr>
<td>The offer of a bit more money with another employer would not seriously make me think of changing my job</td>
<td>2.93</td>
<td>5.83</td>
<td>32.04</td>
<td>30.10</td>
<td>27.18</td>
<td>4.85</td>
</tr>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>2.95</td>
<td>8.0</td>
<td>32.0</td>
<td>24.0</td>
<td>25.0</td>
<td>9.0</td>
</tr>
<tr>
<td>I would feel bad if I performed my job poorly</td>
<td>2.04</td>
<td>23.30</td>
<td>60.19</td>
<td>9.71</td>
<td>2.91</td>
<td>3.88</td>
</tr>
<tr>
<td>I feel a great sense of personal satisfaction when I do my job well</td>
<td>1.86</td>
<td>33.01</td>
<td>51.46</td>
<td>13.59</td>
<td>1.94</td>
<td>0</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.40</td>
<td>18.0</td>
<td>39.0</td>
<td>31.0</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>I am not afraid of what might happen if I quit my job without having another line up</td>
<td>3.78</td>
<td>1.96</td>
<td>10.78</td>
<td>18.63</td>
<td>44.12</td>
<td>24.51</td>
</tr>
<tr>
<td>It would be very hard for me to leave my organisation right now, even if I wanted to</td>
<td>2.69</td>
<td>10.68</td>
<td>38.83</td>
<td>25.24</td>
<td>21.36</td>
<td>3.88</td>
</tr>
<tr>
<td>Too much in my life would be disrupted if I decided I wanted to leave my organisation right now</td>
<td>2.39</td>
<td>17.0</td>
<td>40.0</td>
<td>29.0</td>
<td>10.0</td>
<td>1.0</td>
</tr>
<tr>
<td>It would be too costly for me to leave my organisation right now</td>
<td>2.34</td>
<td>17.48</td>
<td>45.63</td>
<td>22.33</td>
<td>14.56</td>
<td>0</td>
</tr>
<tr>
<td>Right now, staying with my organisation is a matter of necessity as much as desire</td>
<td>2.39</td>
<td>20.39</td>
<td>39.81</td>
<td>21.36</td>
<td>17.48</td>
<td>0.97</td>
</tr>
<tr>
<td>I feel I have too few alternative employment options to consider leaving this organisation</td>
<td>2.21</td>
<td>19.0</td>
<td>46.0</td>
<td>16.0</td>
<td>16.0</td>
<td>0</td>
</tr>
<tr>
<td>One of the few serious consequences of leaving this organisation would be the scarcity of available alternatives</td>
<td>2.20</td>
<td>22.55</td>
<td>45.10</td>
<td>21.57</td>
<td>10.78</td>
<td>0</td>
</tr>
<tr>
<td>One of the major reasons I continue to work for this organisation is that an alternative organisation may not match the</td>
<td>2.42</td>
<td>12.62</td>
<td>48.54</td>
<td>25.24</td>
<td>11.65</td>
<td>1.94</td>
</tr>
</tbody>
</table>
The table below highlights the comparative results of the 1996 and 2000 surveys:

**Table 15**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1996 Mean</th>
<th>2000 Mean</th>
<th>2 Sample t-test (df&gt;130)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.32</td>
<td>2.50</td>
<td>2.01</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.45</td>
<td>2.66</td>
<td>0.93</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.43</td>
<td>3.39</td>
<td>-0.37</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.74</td>
<td>1.94</td>
<td>2.75</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.99</td>
<td>1.94</td>
<td>-0.64</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I sometimes feel like leaving this employment for good</td>
<td>3.13</td>
<td>2.95</td>
<td>-1.45</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I would feel bad if I performed my job poorly</td>
<td>1.91</td>
<td>2.04</td>
<td>1.41</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel a great sense of personal satisfaction when I do my job well</td>
<td>1.86</td>
<td>1.86</td>
<td>0.08</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar</td>
<td>2.59</td>
<td>2.40</td>
<td>-1.71</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

**Table 16: Cynicism**

Employees were asked questions relating to cynicism, results are shown in the table below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the projects that are supposed to solve problems around here won’t do much good</td>
<td>3.08</td>
<td>7.0</td>
<td>20.0</td>
<td>49.0</td>
<td>21.0</td>
<td>0</td>
</tr>
<tr>
<td>The people who are responsible for solving problems around</td>
<td>2.82</td>
<td>10.58</td>
<td>25.00</td>
<td>36.54</td>
<td>27.88</td>
<td>0</td>
</tr>
</tbody>
</table>

438
here don’t try hard enough to solve them.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempts to make things better around here won’t produce good results</td>
<td>3.21</td>
<td>5.77</td>
<td>16.38</td>
<td>30.77</td>
<td>45.19</td>
<td>1.92</td>
</tr>
<tr>
<td>The people who are responsible for making improvements around here don’t know enough about what they are doing</td>
<td>2.90</td>
<td>9.0</td>
<td>22.0</td>
<td>38.0</td>
<td>27.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Suggestions on how to solve problems won’t produce much real change</td>
<td>3.11</td>
<td>5.77</td>
<td>17.31</td>
<td>39.42</td>
<td>34.62</td>
<td>2.88</td>
</tr>
<tr>
<td>The people who are responsible for making things better around here don’t care enough about their jobs</td>
<td>3.20</td>
<td>6.67</td>
<td>11.43</td>
<td>41.90</td>
<td>35.24</td>
<td>4.76</td>
</tr>
<tr>
<td>Plans for the future won’t amount to much</td>
<td>3.38</td>
<td>1.0</td>
<td>10.0</td>
<td>37.0</td>
<td>47.0</td>
<td>2.0</td>
</tr>
<tr>
<td>The people who are responsible for solving problems around here don’t have the skills that are needed to do their jobs</td>
<td>3.10</td>
<td>6.80</td>
<td>18.45</td>
<td>37.86</td>
<td>32.04</td>
<td>4.85</td>
</tr>
</tbody>
</table>

Table 17: Citizenship

The degree of citizenship is a good indicator of the state of the ‘psychological contract’. Employees were asked some questions about citizenship; the results are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>% Strongly Agree</th>
<th>% Agree</th>
<th>% Neutral</th>
<th>% Disagree</th>
<th>% Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel obliged to work even if I don’t feel particularly well</td>
<td>2.43</td>
<td>13.46</td>
<td>48.08</td>
<td>22.12</td>
<td>14.42</td>
<td>1.92</td>
</tr>
<tr>
<td>I feel obliged to show loyalty to the organisation</td>
<td>2.53</td>
<td>10.0</td>
<td>40.0</td>
<td>35.0</td>
<td>12.0</td>
<td>0</td>
</tr>
<tr>
<td>I feel obliged work overtime or extra hours when required</td>
<td>2.92</td>
<td>3.81</td>
<td>34.29</td>
<td>34.29</td>
<td>20.95</td>
<td>6.67</td>
</tr>
<tr>
<td>I feel obliged to volunteer to do tasks outside my job description</td>
<td>2.95</td>
<td>4.81</td>
<td>27.88</td>
<td>38.46</td>
<td>25.00</td>
<td>3.85</td>
</tr>
</tbody>
</table>
Effort

The tables below highlight the results of the perception employees have of their workload and the effort individuals put into their work, see the table below for details.

Table 18

A15. How much effort do you put into your work or how hard would you say you work?

<table>
<thead>
<tr>
<th>Statement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not working particularly hard</td>
<td>4.0</td>
</tr>
<tr>
<td>I am working quite hard</td>
<td>16.0</td>
</tr>
<tr>
<td>I am working very hard</td>
<td>28.0</td>
</tr>
<tr>
<td>I am working as hard as I can and could not imagine being able to work any harder</td>
<td>32.0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>16.0</td>
</tr>
<tr>
<td>Mean</td>
<td>3.40</td>
</tr>
</tbody>
</table>

Table 19

A16. In your present job, how much say do you have over how hard you work?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total choice</td>
<td>18.81</td>
</tr>
<tr>
<td>A lot of choice</td>
<td>62.38</td>
</tr>
<tr>
<td>Some choice</td>
<td>16.83</td>
</tr>
<tr>
<td>Not much choice</td>
<td>0.99</td>
</tr>
<tr>
<td>No choice at all</td>
<td>0.99</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.03</td>
</tr>
</tbody>
</table>
Table 20

A17. In your present job, how much of the time are you working really hard?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All of the time</td>
<td>33.65</td>
</tr>
<tr>
<td>Most of the time</td>
<td>23.08</td>
</tr>
<tr>
<td>Some of the time</td>
<td>42.31</td>
</tr>
<tr>
<td>Hardly any of the time</td>
<td>0.96</td>
</tr>
<tr>
<td>None of the time</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.28</strong></td>
</tr>
</tbody>
</table>

Table 21

A18. When you are really putting a lot of effort into your job is it because you want to or is it because in the kind of work you do you has no choice?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Want to</td>
<td>17.0</td>
</tr>
<tr>
<td>No choice</td>
<td>35.0</td>
</tr>
<tr>
<td>Both</td>
<td>39.0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.43</strong></td>
</tr>
</tbody>
</table>

Table 22

A19. How hard are you working compared with about 2 years ago?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much harder</td>
<td>8.65</td>
</tr>
<tr>
<td>Harder</td>
<td>50.0</td>
</tr>
<tr>
<td>About the same</td>
<td>41.35</td>
</tr>
<tr>
<td>Less hard</td>
<td>0</td>
</tr>
<tr>
<td>Much less hard</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know/Not relevant</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.33</strong></td>
</tr>
</tbody>
</table>
Table 23

A20. Compared with other people doing similar jobs in your organisation, how hard would you say you are working?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much harder</td>
<td>2.86</td>
</tr>
<tr>
<td>Harder</td>
<td>77.14</td>
</tr>
<tr>
<td>About the same</td>
<td>17.14</td>
</tr>
<tr>
<td>Less hard</td>
<td>2.86</td>
</tr>
<tr>
<td>Much less hard</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know/Not relevant</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.20</strong></td>
</tr>
</tbody>
</table>

Job Security

Employees were asked a number of questions referring to job security; see below for details.

Table 24

A21. How secure do you feel in your present job?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very secure</td>
<td>4.0</td>
</tr>
<tr>
<td>Fairly secure</td>
<td>51.0</td>
</tr>
<tr>
<td>Fairly insecure</td>
<td>37.0</td>
</tr>
<tr>
<td>Very insecure</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.44</strong></td>
</tr>
</tbody>
</table>
**Table 25**

A22. How worried are you about your job security?

<table>
<thead>
<tr>
<th>Statement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very worried</td>
<td>10.53</td>
</tr>
<tr>
<td>Fairly worried</td>
<td>63.16</td>
</tr>
<tr>
<td>Not very worried</td>
<td>17.11</td>
</tr>
<tr>
<td>Not at all worried</td>
<td>4.31</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.29</strong></td>
</tr>
</tbody>
</table>

**Table 26**

A23. If you are worried or fairly worried about your job security, what is the main reason?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors affecting your own job</td>
<td>1.96</td>
</tr>
<tr>
<td>Factors to do with the organisation</td>
<td>8.82</td>
</tr>
<tr>
<td>The economy/ wider employment issues</td>
<td>43.14</td>
</tr>
<tr>
<td>Personal factors</td>
<td>39.22</td>
</tr>
<tr>
<td>Other/ don’t know</td>
<td>6.86</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>3.40</strong></td>
</tr>
</tbody>
</table>
Appendix 4
Statistical Tables

2000 RESULTS – SITE LEVEL

Expectations of work

Table 1

The table below expectations of work among the five sites, a Likert scale was used where 1=strongly agree, 2=agree, 3=neutral, 4= disagree and 5= strongly disagree and n = 105.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very important that I work for a caring company</td>
<td>1.67</td>
<td>1.89</td>
<td>1.60</td>
<td>1.31</td>
<td>1.92</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I enjoy my job</td>
<td>1.58</td>
<td>1.56</td>
<td>1.89</td>
<td>1.54</td>
<td>1.60</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good relations with the people around me</td>
<td>1.58</td>
<td>1.56</td>
<td>1.53</td>
<td>1.54</td>
<td>1.48</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what the customer thinks of my work</td>
<td>1.76</td>
<td>1.80</td>
<td>2.03</td>
<td>1.92</td>
<td>1.84</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have job security</td>
<td>1.23</td>
<td>1.70</td>
<td>1.23</td>
<td>1.31</td>
<td>1.29</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I am paid well</td>
<td>1.41</td>
<td>1.70</td>
<td>1.27</td>
<td>1.46</td>
<td>1.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I receive suitable training and development for my job</td>
<td>1.58</td>
<td>1.70</td>
<td>1.50</td>
<td>1.31</td>
<td>1.21</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I know what is going on and why in my site</td>
<td>1.58</td>
<td>1.40</td>
<td>1.63</td>
<td>1.08</td>
<td>1.54</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It is very important that I have good working conditions and facilities</td>
<td>1.29</td>
<td>1.70</td>
<td>1.50</td>
<td>1.31</td>
<td>1.33</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Calculative trust

Table 2
Employees were asked a number of questions, which asked them to assess the worth of staying with their present employers, the results are presented below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not afraid of what might happen if I quit my job without having another line up</td>
<td>3.58</td>
<td>3.44</td>
<td>3.83</td>
<td>4.00</td>
<td>3.73</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It would be very hard for me to leave my organisation right now, even if I wanted to</td>
<td>2.64</td>
<td>3.00</td>
<td>2.57</td>
<td>2.61</td>
<td>2.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Too much in my life would be disrupted if I decided I wanted to leave my organisation right now</td>
<td>2.31</td>
<td>2.50</td>
<td>2.30</td>
<td>2.46</td>
<td>2.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>It would be too costly for me to leave my organisation right now</td>
<td>2.52</td>
<td>2.70</td>
<td>2.07</td>
<td>2.54</td>
<td>2.31</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Right now, staying with my organisation is a matter of necessity as much as desire</td>
<td>2.52</td>
<td>3.20</td>
<td>1.93</td>
<td>2.46</td>
<td>2.44</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel I have too few alternative employment options to consider leaving this organisation</td>
<td>2.47</td>
<td>2.90</td>
<td>1.93</td>
<td>2.61</td>
<td>2.16</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>One of the few serious consequences of leaving this organisation would be the scarcity of available alternatives</td>
<td>2.42</td>
<td>2.80</td>
<td>1.86</td>
<td>2.23</td>
<td>2.12</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>One of the major reasons I continue to work for this organisation is that an alternative organisation may not match the overall benefits that I have here</td>
<td>2.42</td>
<td>2.40</td>
<td>2.33</td>
<td>1.92</td>
<td>2.76</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Knowledge based Trust

Knowledge based trust refers to the predictability of behaviour, the results pertaining to knowledge based trust (the extent to which the company puts the mission statement into practice) are illustrated below.

Promises

The tables below illustrate the results of promises and the fulfilment of promises at the site level:

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement</strong></td>
</tr>
<tr>
<td>The company has promised to provide me with a reasonably secure job.</td>
</tr>
<tr>
<td>The company has promised to provide me with fair pay for the work I do.</td>
</tr>
<tr>
<td>The company has promised to provide me with a career.</td>
</tr>
<tr>
<td>The promised to provide me with interesting work.</td>
</tr>
<tr>
<td>The company promised to ensure fair treatment by managers and supervisors</td>
</tr>
<tr>
<td>The company has promised to help me with the problems I encounter outside work</td>
</tr>
</tbody>
</table>
Employees were asked to what extent has the company fulfilled obligations, the results are presented in the table below:

### Table 4

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company has provided me with a reasonably secure job.</td>
<td>2.57</td>
<td>1.90</td>
<td>2.53</td>
<td>2.46</td>
<td>4.12</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has provided me with fair pay for the work you do.</td>
<td>2.53</td>
<td>2.50</td>
<td>3.10</td>
<td>2.61</td>
<td>3.37</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>The company has provided me with a career.</td>
<td>3.00</td>
<td>2.50</td>
<td>3.48</td>
<td>3.31</td>
<td>3.25</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has provided me with interesting work.</td>
<td>2.84</td>
<td>2.50</td>
<td>3.43</td>
<td>2.69</td>
<td>2.87</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>The company has ensured fair treatment by managers and supervisors.</td>
<td>2.52</td>
<td>2.70</td>
<td>2.93</td>
<td>2.92</td>
<td>2.44</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company has helped me with the problems I have encountered outside work.</td>
<td>3.28</td>
<td>3.10</td>
<td>3.07</td>
<td>2.54</td>
<td>3.45</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

The Company’s Mission and Values

The tables below highlight the results of perceptions of mission statement and the degree to which the organisation abides by them as perceive by the different sites. Employees were asked to rate how they perceive the company put aspects of their mission statement into practice, the results are shown in the table below:

### Table 5

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide the highest level of customer service</td>
<td>1.17</td>
<td>1.40</td>
<td>1.37</td>
<td>1.23</td>
<td>1.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To conduct all business with honesty</td>
<td>1.58</td>
<td>1.50</td>
<td>1.70</td>
<td>1.61</td>
<td>1.46</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To maintain a safe working environment</td>
<td>1.33</td>
<td>1.00</td>
<td>1.47</td>
<td>1.46</td>
<td>1.23</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To give people more responsibility for they’re own</td>
<td>1.61</td>
<td>2.00</td>
<td>2.16</td>
<td>2.07</td>
<td>1.92</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

449
### Distributive Justice

Employees were asked questions relating to the distribution of resources, in particular pay and fringe benefits, the results are presented below.

**Table 6**  
The table below illustrates the results of distributive justice at the site level.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Claypotts Mean</th>
<th>Huntly Mean</th>
<th>Newark Mean</th>
<th>Niddry Mean</th>
<th>Stirling Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Dunnotar the pay is generally good in relation to other companies that I know</td>
<td>2.44</td>
<td>2.30</td>
<td>2.57</td>
<td>2.31</td>
<td>2.72</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>At Dunnotar the fringe benefits are generally good in relation to other companies that I know</td>
<td>2.39</td>
<td>2.10</td>
<td>2.67</td>
<td>2.46</td>
<td>2.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel that my colleagues job responsibilities are fair</td>
<td>2.61</td>
<td>2.50</td>
<td>3.27</td>
<td>2.69</td>
<td>3.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Overall, the rewards I received here now are quite fair</td>
<td>2.72</td>
<td>2.50</td>
<td>3.16</td>
<td>2.31</td>
<td>2.96</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I consider my current work load to be quite fair</td>
<td>2.82</td>
<td>2.60</td>
<td>3.73</td>
<td>3.00</td>
<td>3.19</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>I think that my current level of pay is fair</td>
<td>2.83</td>
<td>2.60</td>
<td>3.23</td>
<td>2.46</td>
<td>2.54</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>My current work schedule is fair</td>
<td>2.61</td>
<td>2.80</td>
<td>2.73</td>
<td>2.38</td>
<td>2.69</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
## Procedural Justice

### Table 7

The table below highlights the results relating to procedural justice are defined by individual sites:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given plenty opportunity to acquire the relevant skills needed for my job</td>
<td>3.47</td>
<td>2.80</td>
<td>4.00</td>
<td>3.38</td>
<td>3.60</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I have been given plenty opportunity for career development beyond my immediate job</td>
<td>3.05</td>
<td>3.20</td>
<td>3.67</td>
<td>3.15</td>
<td>3.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The company generally provides opportunity for promotion</td>
<td>3.00</td>
<td>2.70</td>
<td>3.40</td>
<td>3.07</td>
<td>3.36</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The basis of which I am paid is fair</td>
<td>2.87</td>
<td>2.60</td>
<td>3.10</td>
<td>2.76</td>
<td>2.92</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to collect accurate information necessary for making decisions</td>
<td>3.00</td>
<td>2.60</td>
<td>3.27</td>
<td>3.15</td>
<td>2.96</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to provide opportunities to appeal or challenge the decision</td>
<td>2.94</td>
<td>2.40</td>
<td>3.40</td>
<td>3.08</td>
<td>3.00</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to have all sides affected by the decision represented</td>
<td>2.94</td>
<td>2.40</td>
<td>3.40</td>
<td>3.08</td>
<td>3.00</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to generate standards so that decisions could be made with consistency</td>
<td>2.62</td>
<td>2.70</td>
<td>3.27</td>
<td>2.92</td>
<td>2.42</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>I feel procedures are designed to hear the concerns of all those affected by the decision</td>
<td>2.88</td>
<td>2.40</td>
<td>3.50</td>
<td>2.92</td>
<td>3.42</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to provide useful feedback regarding the decision and its implementation</td>
<td>2.94</td>
<td>2.70</td>
<td>3.50</td>
<td>2.61</td>
<td>3.30</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I feel procedures are designed to allow for requests for clarification or additional information about the decision</td>
<td>3.00</td>
<td>2.70</td>
<td>3.40</td>
<td>2.77</td>
<td>3.150</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
Personal Trust

Table 8

Personal trust refers to the extent to which employees and the organisation share common norms and values. Employees were asked to rate aspects of the mission statement according to how important they were to them. The results for each site are illustrated in the table below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide the highest level of customer service</td>
<td>1.10</td>
<td>1.10</td>
<td>1.36</td>
<td>1.07</td>
<td>1.23</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To conduct all business with honesty</td>
<td>1.21</td>
<td>1.20</td>
<td>1.30</td>
<td>1.23</td>
<td>1.38</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To maintain a safe working environment</td>
<td>1.10</td>
<td>1.10</td>
<td>1.20</td>
<td>1.07</td>
<td>1.26</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To give people more responsibility for their own work</td>
<td>1.47</td>
<td>1.60</td>
<td>1.56</td>
<td>1.53</td>
<td>1.46</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To provide challenging work</td>
<td>1.63</td>
<td>2.10</td>
<td>1.80</td>
<td>1.77</td>
<td>2.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To provide individuals with opportunities for personal development</td>
<td>1.52</td>
<td>1.70</td>
<td>1.80</td>
<td>1.46</td>
<td>2.11</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To provide a fair system of financial and non-financial rewards</td>
<td>1.47</td>
<td>1.80</td>
<td>1.70</td>
<td>1.15</td>
<td>1.92</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To provide open communications</td>
<td>1.37</td>
<td>1.70</td>
<td>1.50</td>
<td>1.23</td>
<td>1.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To be environmentally aware and socially responsible</td>
<td>1.55</td>
<td>2.00</td>
<td>1.48</td>
<td>1.30</td>
<td>1.57</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To provide a fair return to the shareholder</td>
<td>1.78</td>
<td>1.60</td>
<td>1.58</td>
<td>1.69</td>
<td>1.50</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
**Interactional Justice**

**Table 9**
Employees were asked several questions relating to interactional justice and the results are set out below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Dunnotar continuous improvement is mainly about looking after its employees.</td>
<td>2.82</td>
<td>3.20</td>
<td>3.47</td>
<td>3.31</td>
<td>3.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar continuous improvement is mainly about making profits</td>
<td>2.58</td>
<td>1.80</td>
<td>1.73</td>
<td>2.00</td>
<td>2.11</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>When things go wrong with respect to safety in my site managers normally blame employees</td>
<td>2.94</td>
<td>3.20</td>
<td>2.67</td>
<td>2.92</td>
<td>2.81</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar people are treated firmly but fairly if they act in a manner which is contrary to company standards</td>
<td>2.88</td>
<td>2.20</td>
<td>2.60</td>
<td>2.15</td>
<td>2.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In Dunnotar the culture is such that people readily own up to mistakes which they have made</td>
<td>3.12</td>
<td>2.80</td>
<td>3.47</td>
<td>2.69</td>
<td>2.65</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>In Dunnotar employees are encouraged to share knowledge and information</td>
<td>3.05</td>
<td>2.30</td>
<td>3.27</td>
<td>2.46</td>
<td>3.07</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>My supervisor always considers my viewpoint</td>
<td>3.43</td>
<td>2.50</td>
<td>3.30</td>
<td>2.61</td>
<td>2.92</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>My supervisor is always able to suppress personal biases</td>
<td>3.47</td>
<td>2.60</td>
<td>3.00</td>
<td>3.08</td>
<td>2.77</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>My supervisor is always able to give me timely feedback about decisions and they’re implications</td>
<td>3.53</td>
<td>3.10</td>
<td>3.37</td>
<td>2.77</td>
<td>3.04</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>My supervisor always treats me with kindness and consideration</td>
<td>3.47</td>
<td>2.50</td>
<td>3.00</td>
<td>2.77</td>
<td>2.85</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>My supervisor always shows concern for my rights as an employee</td>
<td>3.29</td>
<td>2.30</td>
<td>3.10</td>
<td>2.77</td>
<td>2.77</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>My supervisor always deals with me in a truthful manner</td>
<td>3.18</td>
<td>2.00</td>
<td>3.00</td>
<td>2.61</td>
<td>2.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td></td>
<td>Scale 1: Strongly disagree</td>
<td>Scale 2: Disagree</td>
<td>Scale 3: Agree</td>
<td>Scale 4: Strongly agree</td>
<td>Scale 5: Can't say</td>
<td>Significance</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>If I got into difficulties at work I know my workmates would try and help me out</td>
<td>2.59</td>
<td>1.90</td>
<td>2.57</td>
<td>2.08</td>
<td>1.92</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>I can trust the people I work with to lend me a hand if I need it</td>
<td>2.41</td>
<td>2.00</td>
<td>2.43</td>
<td>2.00</td>
<td>2.04</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Most of my workmates can be relied upon to do as they say they will do</td>
<td>2.35</td>
<td>2.30</td>
<td>2.40</td>
<td>2.08</td>
<td>2.46</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I have full confidence in the skills of my workmates</td>
<td>2.29</td>
<td>2.20</td>
<td>2.82</td>
<td>2.38</td>
<td>2.12</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Most of my fellow workers would get on with the job even if supervisors were not around</td>
<td>1.82</td>
<td>1.0</td>
<td>2.27</td>
<td>2.31</td>
<td>2.73</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I can rely on other workers not to make my job more difficult by careless work</td>
<td>2.70</td>
<td>2.80</td>
<td>2.96</td>
<td>2.41</td>
<td>2.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Management at my firm is sincere in its attempt to meet the workers point of view</td>
<td>4.77</td>
<td>2.60</td>
<td>3.69</td>
<td>2.77</td>
<td>2.81</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel quite confident that the firm will always try to treat me fairly</td>
<td>2.82</td>
<td>2.30</td>
<td>3.87</td>
<td>2.54</td>
<td>2.46</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Our management would be quite prepared to gain advantage by deceiving the workers</td>
<td>2.71</td>
<td>3.80</td>
<td>2.77</td>
<td>3.23</td>
<td>3.33</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Our firm has a poor future unless it can attract better managers</td>
<td>2.70</td>
<td>3.80</td>
<td>2.53</td>
<td>3.77</td>
<td>3.23</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Management can be trusted to make sensible decisions for the firm's future</td>
<td>2.76</td>
<td>2.40</td>
<td>3.13</td>
<td>2.61</td>
<td>2.64</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Management at work seems to do an efficient job</td>
<td>2.94</td>
<td>2.40</td>
<td>3.26</td>
<td>2.38</td>
<td>2.40</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Job Satisfaction

Table 10

Employees were asked several questions relating to job satisfaction. The results below show the results of job satisfaction as broken down by site:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All in all, I am satisfied with my job</td>
<td>1.88</td>
<td>2.50</td>
<td>2.70</td>
<td>2.61</td>
<td>2.26</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>All in all, I am satisfied with my job</td>
<td>2.35</td>
<td>1.90</td>
<td>2.50</td>
<td>2.23</td>
<td>2.42</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In general, I like working here</td>
<td>3.62</td>
<td>3.70</td>
<td>3.53</td>
<td>3.92</td>
<td>3.74</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In general, I don’t like my job</td>
<td>2.69</td>
<td>2.44</td>
<td>2.50</td>
<td>2.85</td>
<td>3.00</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>There are several aspects about my job I don’t like</td>
<td>2.76</td>
<td>2.30</td>
<td>2.97</td>
<td>2.38</td>
<td>2.75</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

Organisational Commitment

Table 11

The results below concern organisational commitment at the site level:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am quite proud to be able to tell people that I work for Dunnotar</td>
<td>2.70</td>
<td>2.20</td>
<td>2.46</td>
<td>2.38</td>
<td>2.65</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel myself to be part of Dunnotar</td>
<td>2.41</td>
<td>2.10</td>
<td>2.73</td>
<td>2.08</td>
<td>3.38</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I would not recommend a close friend to join our staff</td>
<td>3.25</td>
<td>3.80</td>
<td>2.90</td>
<td>2.69</td>
<td>3.56</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>To know that my own work had made a contribution to the good of the organisation would please me</td>
<td>1.76</td>
<td>1.60</td>
<td>2.20</td>
<td>1.92</td>
<td>2.00</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>In my work I like to feel that I am making some effort not just for myself, but for the organisation as well</td>
<td>1.88</td>
<td>1.80</td>
<td>2.21</td>
<td>1.85</td>
<td>1.92</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
I'm not willing to put myself out just to help the organisation | 3.76 | 3.50 | 3.30 | 4.25 | 3.77 | <0.05
---|---|---|---|---|---|---
Even if Dunnotar were not doing so well financially, I would be reluctant to change to another employer | 2.29 | 2.00 | 2.46 | 2.61 | 2.69 | 0.05
---|---|---|---|---|---|---
The offer of a bit more money with another employer would not seriously make me think of changing my job | 2.94 | 2.20 | 3.13 | 3.07 | 3.00 | >0.05
---|---|---|---|---|---|---
I sometimes feel like leaving this employment for good | 3.12 | 3.60 | 2.60 | 2.77 | 3.00 | >0.05
---|---|---|---|---|---|---
I would feel bad if I performed my job poorly | 1.82 | 2.30 | 2.16 | 1.53 | 2.11 | >0.05
---|---|---|---|---|---|---
I feel a great sense of personal satisfaction when I do my job well | 1.59 | 1.90 | 2.06 | 1.61 | 2.04 | >0.05
---|---|---|---|---|---|---
Given an opportunity to work for another company at the same wages, I would choose to remain with Dunnotar | 2.64 | 2.00 | 2.46 | 2.23 | 2.46 | >0.05
---|---|---|---|---|---|---

**Cynicism**

**Table 12**

The table below illustrates the results surrounding cynicism at the site level.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Clappotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the projects that are supposed to solve problems around here won't do much good</td>
<td>3.84</td>
<td>3.30</td>
<td>2.53</td>
<td>3.15</td>
<td>3.07</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>The people who are responsible for solving problems around here don't try hard enough to solve them.</td>
<td>3.10</td>
<td>3.50</td>
<td>2.33</td>
<td>3.15</td>
<td>2.80</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Attempts to make things better around here won't produce good results</td>
<td>3.31</td>
<td>3.80</td>
<td>2.80</td>
<td>3.46</td>
<td>3.38</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>The people who are responsible for making improvements around here don't know enough about</td>
<td>3.16</td>
<td>3.40</td>
<td>2.33</td>
<td>3.23</td>
<td>3.00</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

456
<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel obliged to work even if I don’t feel particularly well</td>
<td>2.73</td>
<td>2.33</td>
<td>2.40</td>
<td>2.38</td>
<td>2.27</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel obliged to show loyalty to the organisation</td>
<td>2.79</td>
<td>2.60</td>
<td>2.36</td>
<td>2.42</td>
<td>2.50</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel obliged work overtime or extra hours when required</td>
<td>2.84</td>
<td>2.60</td>
<td>3.10</td>
<td>2.61</td>
<td>3.03</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>I feel obliged to volunteer to do tasks outside my job description</td>
<td>2.95</td>
<td>2.60</td>
<td>2.97</td>
<td>2.54</td>
<td>3.24</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

**Citizenship**

**Table 13**

The table below show results of citizenship between the sites.
**Effort**

The tables below highlight the results relating to the degree of effort:

**Table 14**
How much effort do you put into your work or how hard would you say you work?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = I am not working particularly hard</td>
<td>3.58</td>
<td>3.00</td>
<td>3.67</td>
<td>3.31</td>
<td>3.08</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = I am working quite hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = I am working very hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = I am working as hard as I can and could not imagine being able to work any harder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 15**
In your present job, how much say do you have over how hard you work?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Total choice</td>
<td>1.76</td>
<td>2.30</td>
<td>2.13</td>
<td>2.31</td>
<td>2.00</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = A lot of choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Some choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Not much choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = No choice at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 16**
In your present job, how much of the time are you working really hard?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = All of the time</td>
<td>2.00</td>
<td>2.60</td>
<td>1.97</td>
<td>2.38</td>
<td>2.61</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = Most of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Some of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Hardly any of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = None of the time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17
How hard are you working compared with about 2 years ago?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Much harder</td>
<td>2.42</td>
<td>2.40</td>
<td>2.30</td>
<td>2.23</td>
<td>2.35</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = Harder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = About the same</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Less hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = Much less hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18
Compared with other people doing similar jobs in your organisation, how hard would you say you are working?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Much harder</td>
<td>2.42</td>
<td>2.00</td>
<td>3.13</td>
<td>2.31</td>
<td>2.19</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = Harder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = About the same</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Less hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = Much less hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Job Security
The tables below illustrate levels of job security as defined by site.

Table 19
How secure do you feel in your present job?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Very secure</td>
<td>2.10A</td>
<td>2.90B</td>
<td>2.23AB</td>
<td>2.75AB</td>
<td>2.54A B</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>2 = Fairly secure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Fairly insecure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Very insecure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 20
How worried are you about your job security?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Claypotts</th>
<th>Mean Huntly</th>
<th>Mean Newark</th>
<th>Mean Niddry</th>
<th>Mean Stirling</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Very worried</td>
<td>2.06</td>
<td>4.00</td>
<td>2.58</td>
<td>2.28</td>
<td>2.05</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>2 = Fairly worried</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Not very worried</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Not at all worried</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


APPENDIX 5
## Appendix 5

### Orientations To Work Approach And The Employment Relationship

<table>
<thead>
<tr>
<th>EMPLOYEE with</th>
<th>EMPLOYER with</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Resources of cash, skills, knowledge, physique etc</td>
<td>(a) Capital resources</td>
</tr>
<tr>
<td>(b) Motives, expectations and interests</td>
<td>(b) Motives, expectations and interests</td>
</tr>
<tr>
<td>(Influenced by class, education, family, gender, race etc)</td>
<td>(Influenced by state of markets, sources of funding, etc)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYEE INPUT</th>
<th>EMPLOYEE REWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical effort</td>
<td>Wage/salary and fringe benefits</td>
</tr>
<tr>
<td>Mental application</td>
<td>Fulfilment of job satisfaction</td>
</tr>
<tr>
<td>Impairment (fatigue etc)</td>
<td>Opportunities to fulfil personal satisfaction</td>
</tr>
<tr>
<td>Surrender of autonomy and acceptance of control by employer or his agents</td>
<td>Social rewards</td>
</tr>
<tr>
<td></td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td>Power</td>
</tr>
<tr>
<td></td>
<td>Status</td>
</tr>
<tr>
<td></td>
<td>Potential advancement</td>
</tr>
</tbody>
</table>

(Source: Watson, 1987: 102)