Foci-specific Psychological Contracts: Target-similarity effects on foci-specific OCB and Job satisfaction

A thesis
submitted in partial fulfillment
of the requirements for the degree
of

Doctor of Philosophy

at

The University of Waikato

by

Khalid Khan

Waikato Management School
Hamilton, New Zealand
2016

© 2016 Khalid Khan

Abstract

Psychological contracts provide a framework for understanding the employment relationship. The literature on psychological contracts has focused on the relationship of a focal-employee with a 'unitary employer'. This thesis employees the target-similarity model, proposed by Lavelle, Rupp, and Brockner (2007), to extend the psychological contract framework to include the foci-specific psychological contracts a focal-person establishes with his/her organisation, supervisor, and peers. Three independent studies were carried out for this thesis. The first two studies concurrently tested the effects of foci-specific psychological contracts breach on work-related outcomes. The first study investigated the effect of foci-specific psychological contracts breach on OCBs directed at the specific foci. The results from this study indicate that foci-specific psychological contract breach had a target-similarity effect on the OCBs directed at the foci breaching the psychological contract. Results from this study also indicate that the psychological contract breach by the supervisor has a spill-over effect on the OCBs directed at the organisation and the peers. The results from the second study also confirmed that the foci-specific psychological contract breach had a target-similarity effect on the focal-person's satisfaction with the foci breaching the psychological contract. Results from this study also confirmed that foci-specific psychological contract breach had spillover effect on the focal-person's satisfaction with the various organisational foci. Study three was designed to empirically test the effects of peer-to-peer psychological contract breach on a focal-person's satisfaction with his/her peers. The results from this study included the identification of the content of the peer-to-peer psychological contract, and confirmed the negative relationship between the breach of peer-to-peer psychological contracts and satisfac-

tion with peers. Implications for the psychological contract theory, future research, and practice are discussed at the end of the thesis.

Contents

1 Introduction 1

2 Literature Review 7
2.1 State of the Literature 7
2.2 Psychological Contract Historic Developments 27
2.2.1 The pre-Rousseau era 27
2.2.2 The post-Rousseau era 31
2.3 Obligations - the Content of the Psychological Contract . . 33
2.4 The Types of Psychological Contracts 34
2.5 Breach and Violation of the Psychological Contracts 40
2.6 Outcomes of Psychological Contract Breach 42
2.7 Critic of Rousseau's Conceptualisation 46
2.8 Making the Case for a Multi-Foci Conceptualisation of Psychological Contracts 52
2.8.1 Target-similarity model 53
2.8.2 Foci-specific commitment studies 56
2.8.3 Foci-specific organisational support studies 61
2.8.4 Foci-specific social exchange literature 63
2.8.5 Multi-foci psychological contracts 65

3 Developing the multi-foci hypothesis 73
3.1 Introduction 73
3.2 Study-1: Multi-Foci OCBs 73

3.2.1 Review of studies focusing on foci-specific measures of OCBs 74
3.3 Study-2: Multi-Foci Job Satisfaction 79
3.3.1 Review of studies using global measure of job satisfaction 81
3.3.2 Review of studies based on facet-specific measures of job satisfaction 83
3.3.3 Psychological contract breach and job satisfaction . 86
3.4 Study-3: Determining the Content of Peer-To-Peer Psychological Contracts and Their Influence on Satisfaction with Co-Workers 90

4 Methodology 93
4.1 Philosophical Assumptions and Paradigms 93
4.1.1 Ontology 94
4.1.2 Epistemology 97
4.1.3 Approach to theory development 98
4.1.4 Choice of research methodology 100
4.1.5 Research Strategy 101
4.1.6 Using Vignettes for Data Collection 103
4.2 Sample and Procedure (Study 1) 118
4.2.1 OCB Measures 121
4.3 Sample and Procedure (Study 2) 121
4.3.1 Satisfaction measures 126
4.4 Sample and Procedure (Study 3) 126
4.4.1 Study 3 Measures 127

5 Descriptive Statistics and Assumptions testing 131
5.1 Parametric Assumptions 131
5.1.1 Study 1: Testing for the Assumption of Normality . . 132
5.1.2 Study 1: Testing for the assumption Homogeneity . . 134
5.1.3 Study 1: Testing for Outliers and influential cases . . 135

5.1.4 Study 1: Testing for the assumption of no multicollinearity . . . 136
5.1.5 Study 2: Testing for the Assumption of Normality . . 138
5.1.6 Study 2: Testing for the Assumption of Homogeneity 139
5.1.7 Study 2: Testing for Outliers and influential cases . . 140
5.1.8 Study 2: Testing for the assumption of independence 141

6 Results and Analysis 143
6.1 Study 1 Results and Analysis . . . 143
6.1.1 Repeated Measure Design for study 1 . . . 149
6.2 Study 2 Results and Analysis . . . 160
6.2.1 Graphical Analysis . . . 160
6.2.2 Testing the internal validity of the vignettes . . . 164
6.2.3 Repeated Measure Analysis foci-specific satisfaction 167
6.2.4 Testing for the interaction effects of foci-specific psychological contract breach on focal-person's foci-specific satisfaction . . . 178
6.3 Study 3 Results and Analysis . . . 186

7 Discussion 193
7.1 Discussion Study 1 . . . 194
7.2 Discussion Study 2 . . . 202
7.3 Discussion Study 3 . . . 210
7.4 General Discussion . . . 211
7.5 Using Vignettes in a Quantitative Design . . . 222
7.6 Limitations . . . 223

8 Implications 227
8.1 Implications for Future Research . . . 227
8.2 Implications for Managers . . . 229

9 Summary and Conclusions 233

10 Appendix 237
10.1 Study 3 Online Questionnaire 237
10.2 Histograms for Foci-Specific Citizenship Behaviours Directed at the Organisation 244
10.3 Histograms for Foci-Specific Citizenship Behaviours Directed at the Supervisor 249
10.4 Histograms for Foci-Specific Citizenship Behaviours Directed at the Peers 254
10.5 Histograms for Ali's Reported Satisfaction with His Organisation 259
10.6 Histograms for Ali's Reported Satisfaction with His Supervisor 264
10.7 Histograms for Ali's Reported Satisfaction with His Peers . 269
10.8 Stacked Frequency Plots (SFP) for Foci-Specific Citizenship Behaviour 274
10.9 Stacked Frequency Plots (SFP) for Foci-Specific Satisfaction 282

References 291

List of Figures

1.1 Vignette configuration for current thesis 4

2.1 *Year-Wise Article Publication Frequencies for Items Hosted on JSTOR* 11
2.2 *UCSD Map of Science Visualisations for Psychological Contracts Domain* 13
2.3 *Restubog's Articles by Subject Area and Type of Article* . . 18
2.4 *Fledman's Research Focus Word-Cloud* 20
2.5 *Schalk's Articles by Subject Area and Type of Article* 21
2.6 *Schalk's Research Focus Word-Cloud* 22
2.7 *Journal of Organizational Behavior; Articles per Year and Subject Area.* 24
2.8 *IJHRM; Articles per Year and Subject Area.* 26
2.9 *Exchange Relationships. Adopted from Shore and Barksdale (1998)* 37
2.10 Psychological contract breach, violation, and their moderators 43

4.1 *Deduction, Induction and Abduction: from Reason to Research (Saunders et al., 2012, p. 145)* 98
4.2 Factorial vignettes (Rost, Weibel, & Osterloh, 2007, p. 27). . 105
4.3 Strengths and weaknesses of using internet based surveys(R. E. Wilson, Gosling, & Graham, 2012). 124

6.1 *Response Frequency Table for Foci-Specific OCBs* 145
6.2 *Response Frequency Table for Foci-Specific Job-Statisfaction* 162
6.3 *Interaction Effects of PCO and PCS to Satisfaction with the Organisation* 179

6.4 *Interaction Effects of PCO and PCP to Satisfaction with the Organisation* 180
6.5 *Interaction Effects of PCS and PCP to Satisfaction with the Organisation* 182
6.6 *Interaction Effects of PCO, PCS, and PCP to Ali's Reported Satisfaction with His Organisation* 183
6.7 *Interaction Effects of PCO and PCP to Satisfaction with the Peers* 186
6.8 *Response Frequencies for Top Peer-To-Peer Promises* 188
6.9 Structural Model 192

7.1 *Effect of Foci-Specific Psychological Contract Breach on Foci-Specific OCBs* 195
7.2 *Effect of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction* 204
7.3 *Interaction-Effects of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction* 207
7.4 *Effect of Foci-Specific Psychological Contract Breach on Foci-Specific OCBs* 213
7.5 *Effect of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction* 213
7.6 *Typologies of Distant Leadership* (Antonakis & Atwater, 2002) 217
7.7 *Hofsede's Dimensions of Culture, Based on Hofstede (2001)* 219
7.8 *Cultural Context of Pakistan (Source http://geert-hofstede.com/pakistan.html)* 220

10.1 Study 3 on-line questionnaire introduction page 237
10.2 Study 3 on-line questionnaire demographics form 238
10.3 Study 3 default peer-to-peer psychological contract content selection form 239
10.4 Study 3 filled peer-to-peer psychological contract content selection form 240
10.5 Study 3 peer-to-peer psychological contract breach form . . 241
10.6 Peer specific OCB and satisfaction form 242
10.7 Study 3 thank you page 243

10.8 Histogram of OCB directed at the organisation: Scenario 1 244
10.9 Histogram of OCB directed at the organisation: Scenario 2 245
10.10 Histogram of OCB directed at the organisation: Scenario 3 245
10.11 Histogram of OCB directed at the organisation: Scenario 4 246
10.12 Histogram of OCB directed at the organisation: Scenario 5 246
10.13 Histogram of OCB directed at the organisation: Scenario 6 247
10.14 Histogram of OCB directed at the organisation: Scenario 7 247
10.15 Histogram of OCB directed at the organisation: Scenario 8 248
10.16 Histogram of OCB directed at the supervisor: Scenario 1 . . 249
10.17 Histogram of OCB directed at the supervisor: Scenario 2 . . 250
10.18 Histogram of OCB directed at the supervisor: Scenario 3 . . 250
10.19 Histogram of OCB directed at the supervisor: Scenario 4 . . 251
10.20 Histogram of OCB directed at the supervisor: Scenario 5 . . 251
10.21 Histogram of OCB directed at the supervisor: Scenario 6 . . 252
10.22 Histogram of OCB directed at the supervisor: Scenario 7 . . 252
10.23 Histogram of OCB directed at the supervisor: Scenario 8 . . 253
10.24 Histogram of OCB directed at the peers: Scenario 1 254
10.25 Histogram of OCB directed at the peers: Scenario 2 255
10.26 Histogram of OCB directed at the peers: Scenario 3 255
10.27 Histogram of OCB directed at the peers: Scenario 4 256
10.28 Histogram of OCB directed at the peers: Scenario 5 256
10.29 Histogram of OCB directed at the peers: Scenario 6 257
10.30 Histogram of OCB directed at the peers: Scenario 7 257
10.31 Histogram of OCB directed at the peers: Scenario 8 258
10.32 Histogram of Ali's reported satisfaction with his organisation: Scenario 1 259
10.33 Histogram of Ali's reported satisfaction with his organisation: Scenario 2 260
10.34 Histogram of Ali's reported satisfaction with his organisation: Scenario 3 260
10.35 Histogram of Ali's reported satisfaction with his organisation: Scenario 4 261
10.36 Histogram of Ali's reported satisfaction with his organisation: Scenario 5 261

10.37 Histogram of Ali's reported satisfaction with his organisation: Scenario 6 262
10.38 Histogram of Ali's reported satisfaction with his organisation: Scenario 7 262
10.39 Histogram of Ali's reported satisfaction with his organisation: Scenario 8 263
10.40 Histogram of Ali's reported satisfaction with his supervisor: Scenario 1 264
10.41 Histogram of Ali's reported satisfaction with his supervisor: Scenario 2 265
10.42 Histogram of Ali's reported satisfaction with his supervisor: Scenario 3 265
10.43 Histogram of Ali's reported satisfaction with his supervisor: Scenario 4 266
10.44 Histogram of Ali's reported satisfaction with his supervisor: Scenario 5 266
10.45 Histogram of Ali's reported satisfaction with his supervisor: Scenario 6 267
10.46 Histogram of Ali's reported satisfaction with his supervisor: Scenario 7 267
10.47 Histogram of Ali's reported satisfaction with his supervisor: Scenario 8 268
10.48 Histogram of Ali's reported satisfaction with his peers: Scenario 1 269
10.49 Histogram of Ali's reported satisfaction with his peers: Scenario 2 270
10.50 Histogram of Ali's reported satisfaction with his peers: Scenario 3 270
10.51 Histogram of Ali's reported satisfaction with his peers: Scenario 4 271
10.52 Histogram of Ali's reported satisfaction with his peers: Scenario 5 271
10.53 Histogram of Ali's reported satisfaction with his peers: Scenario 6 272

10.54 Histogram of Ali's reported satisfaction with his peers: Scenario 7 272
10.55 Histogram of Ali's reported satisfaction with his peers: Scenario 8 273
10.56 Scenario 1: SFP for foci-specific citizenship behaviours . . . 274
10.57 Scenario 2: SFP for foci-specific citizenship behaviours . . . 275
10.58 Scenario 3: SFP for foci-specific citizenship behaviours . . . 276
10.59 Scenario 4: SFP for foci-specific citizenship behaviours . . . 277
10.60 Scenario 5: SFP for foci-specific citizenship behaviours . . . 278
10.61 Scenario 6: SFP for foci-specific citizenship behaviours . . . 279
10.62 Scenario 7: SFP for foci-specific citizenship behaviours . . . 280
10.63 Scenario 8: SFP for foci-specific citizenship behaviours . . . 281
10.64 Scenario 1: SFP for foci-specific satisfaction 282
10.65 Scenario 2: SFP for foci-specific satisfaction 283
10.66 Scenario 3: SFP for foci-specific satisfaction 284
10.67 Scenario 4: SFP for foci-specific satisfaction 285
10.68 Scenario 5: SFP for foci-specific satisfactions 286
10.69 Scenario 6: SFP for foci-specific satisfactions 287
10.70 Scenario 7: SFP for foci-specific satisfactions 288
10.71 Scenario 8: SFP for foci-specific satisfactions 289

List of Tables

2.1 *Database and Query Wise Distribution of Articles* 9
2.2 *Discipline Wise Distribution of Articles on psychological contracts Across Journals* 14
2.3 *Query Based Ranking of Top 10 Authors by Number of Articles on JSTOR* 16
2.4 *Query Based Ranking of Top 10 Authors by Number of Articles on Scopus* 19
2.5 *Query Based Ranking of Top 10 Journals by Number of Articles on JSTOR* 23
2.6 *Query Based Ranking of Top 10 Journals by Number of Articles on Scopus* 25
2.7 *Content of Psychological Contracts (adopted from Cable, 2008)* 35

4.1 *Ontology and Epistemology of Research Paradigms (Saunders et al., 2012, p. 140)* 96
4.2 *Differences between Quantitative and Qualitative Research (Adapted from Saunders Et Al. (2012)* 101
4.3 *Policy Analysis Vignettes (Rousseau & Anton, 1988)* 106
4.4 *Vignettes and Foci-Specific Psychological Contract Status* . . 115
4.5 *Organisational Citizenship Behaviour Scales* 120
4.6 *Peer-specific Satisfaction Scales* 126
4.7 *Peer-To-Peer Psychological Promises* 129

5.1 *Descriptive Statistics for Foci-Specific OCBs* 133
5.2 *Study 1: Homogeneity Testing* 135
5.3 *Case-Wise Statistics for OCBs Directed at the Organisation* . 137

5.4 *Descriptive Statistics for Foci-Specific Job Satisfaction Measures* 139
5.5 *Study 2: Homogeneity Testing for Foci-Specific Satisfaction Measures* 140
5.6 *Case-Wise Statistics for Ali's Reported Satisfaction with His Organisation* 141

6.1 *Study 1: Correlations and Descriptive Statistics* 146
6.2 *Sets of Breached and Fulfilled Vignettes* 148
6.3 *Study 1: Independent Sample T-Test Analysis* 148
6.4 *Study 1 : Model-Fit Statistics for Models with Fixed and Random Intercepts* 151
6.5 *Model Summary; Fixed Effects Model for Foci-Specific OCBs* 152
6.6 *Model-Fit Statistics for Models with Fixed and Mixed Effects* 153
6.7 *Model Summary; Mixed Effects Model for Foci-Specific OCBs* 156
6.8 *Model-Fit Statistics for Models with and without Interaction Effects* 157
6.9 *Model Summary; Mixed Effects Model for OCBs Directed at the Supervisor* 158
6.10 *Regression Coefficients for Foci-Specific Psychological Contracts* 159
6.11 *Study 2: Correlations and Descriptive Statistics* 164
6.12 *Sets of Breached and Fulfilled Vignettes* 166
6.13 *Study 2: Independent Sample T-Test Analysis* 166
6.14 *Model-Fit Statistics for Models with Fixed and Random Intercepts* 169
6.15 *Model Summary; Fixed Effects Model for Foci-Specific Satisfaction Measures* 170
6.16 *Model-Fit Statistics for Models with Fixed and Mixed Effects* 172
6.17 *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Organisation* 174
6.18 *Model-Fit Statistics for Models with and without Interaction Effects* 175
6.19 *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Organisation and Supervisor* 176

6.20 *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Peers* 177
6.21 *Peer-To-Peer Psychological Promises* 188
6.22 *Results of Confirmatory Factor Analysis for Study Variables* . 190
6.23 *Correlations and Descriptive Statistics of Study Variables* . . 191

7.1 Missing Data Pattern for a Three-Form Design 225

Chapter 1

Introduction

The work of Rousseau and her colleagues (Robinson, Kraatz, & Rousseau, 1994; Rousseau, 1989, 1995, 2005; Rousseau & McLean Parker, 1993; Rousseau & Tijoriwala, 1998) on the psychological contract theory has reignited interest in the construct. A psychological contract is formed between two parties when either of the two parties perceives that the other has made an explicit or implicit promise to meet their expectations. When a focal-person (typically and employee) perceives that his/her organisation or an agent of the organisation has reneged on the terms the psychological contract the contract is said to be breached. Most of the current literature on psychological contracts deals with the antecedents and outcomes of psychological contract breach. The psychological contract theory, as envisaged by Rousseau, is not limited to understanding the relationships between employees and their employers. A psychological contract may exist between a doctor and his patient; teacher and student; between peers within an organisation, and so forth. What is important is that the relationship is based on a perceived reciprocal exchange of needs. That is, individuals can form psychological contracts not just with their organisation but with other entities that they engage with in social interactions, whether inside of the organisation or outside of it. Contrary to this salient feature of the theory, most of the current research on psychological contract (within the organisation behaviour field) has primarily focused on the relationship between the focal employee and a "unitary employer" (Marks, 2001, pp. 142). That is, despite being theoretically broad, the typical empirical focus is singularly nar-

row. A major drawback of focusing on a "unitary employer" as the second party to the psychological contract, specifically from the perspective of designing affective human resource interventions, is that it may fail to isolate the specific antecedents of behavioural changes that are being investigated.

The concept "unitary employer" is also not supported by the Social Exchange Theory. This is important because most of the work on psychological contracts is informed by the social exchange theory (Rousseau, 1995). According to this theory within a social setting (such as organisations) social exchanges occur among social actors when they interact with each other and as a results of this interactions a set of obligations are generated (Cropanzano & Mitchell, 2005). Organisations are social constructs (Farnham & Horton, 1993) that are made up of various social actors. Furthermore, Johannisson (1987, p. 3) rightly notes "The genuine unit of organized effort is the dyadic relationship between two persons", so it makes sense that these dyadic social exchanges be represented in the theory of psychological contracts.

To elaborate the above point considers the case of two employees X and Z who have experienced psychological contract breach. Their organisation conducted a work environment assessment survey. X and Z identified lack of supervisor support and lack of support from peers, respectively, as probable reasons that will lead to a withdrawal of their organisational commitment. Measures that are currently in use (Conway & Briner, 2005) to assess physiological contract breach cannot, to a large extent, capture X's perception of psychological contract breach by his supervisor, and Z's perception of psychological contract breach by her peers. Whereas theoretically, both these relationships qualify as psychological contracts, considering that they are primarily based on reciprocal exchange of expectations and their breakdown is associated with similar behavioural consequences as reported by research on the traditional employee-employer psychological contracts violation. Consequently, from a researchers perspective and indeed organisational perspective, we may find these two employees (X and Z) as likely to report low commitment to their organisation despite also reporting no psy-

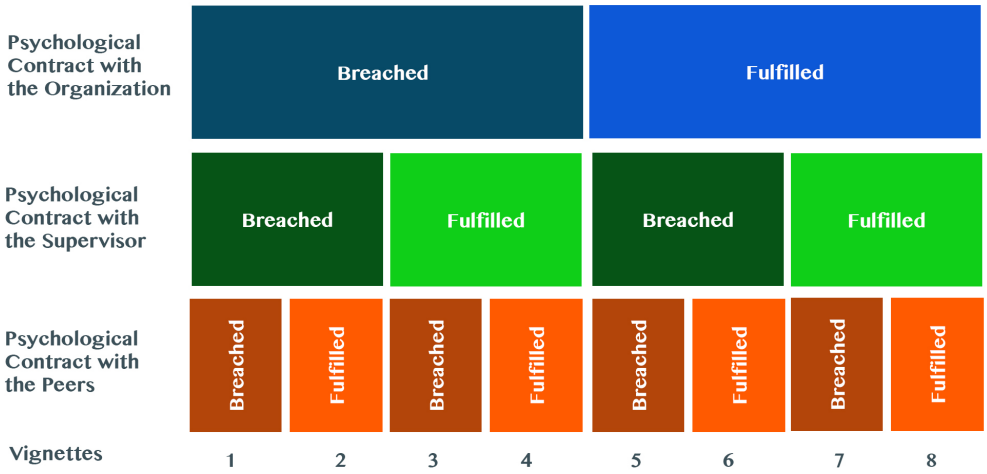
chological breach with the organisation. This is because despite their breaches occurring (with supervisor and peers respectively) these factors are not typically captured in current studies of psychological breach due to the sole focus on organisations as unitary-employers.

This thesis draws upon the the target-similarity model developed by (Lavelle et al., 2007) to provide empirical evidence that a focal-person targets the organisational foci breaching his/her psychological contracts with negative work-related outcomes and that this breach also influences the work-related outcomes directed at other organisational foci who may not have breached their psychological contracts with the focal-person. A quantitative instrument based on vignettes technique (more below) was developed to test for the validity of the multi-foci model of psychological contract breach and its effect on different work-related outcomes. This instrument was used in two separate studies. These studies were used to test the effect of multi-foci psychological contract breach on two different work-related outcomes: organisational citizenship behaviour, and foci-specific satisfaction. These two outcomes were selected because their respective literatures have provided support for the validity of the multi-foci model of their constructs.

The instrument designed for this study was based on the vignette technique. Participants were presented a short story about a factitious character in an organisational setting. The main story was used to establish a single content psychological contracts between the protagonist of the vignette and his organisation, supervisor, and peers. Eight distinct scenarios were then generated which presented situation combining different combinations of psychological contract breach and fulfilment (Figure 1.1). The respondents, taking the stance of informants, were then asked to answer three items relating each to satisfaction and organisational citizenship behaviour with respect to each foci. Two different samples were used for the two studies. Both samples were drawn from Pakistan, to further broaden the scope of international studies and cultural contexts that are much needed within the psychological contracts literature.

A third separate study was conducted to focus on peer-to-peer psychological contracts. Peers are an important element of the organisa-

Figure 1.1: Vignette configuration for current thesis



tional context and the quality of relationship that a focal-person has with his/her peers is an important determinant of a number of important work related outcome (Chiaburu & Harrison, 2008). The purpose of the third study was to investigate the content of the psychological contracts with peers and the effect of their breach on the focal-person's satisfaction with his/her peers. An on-line survey instrument was developed for this study which was based on the instrument designed by Kickul, Lester, and Finkl (2002). This instrument is used to identify the key contents of a psychological contract and then determine whether the contract has been fulfilled or breached.

In summary, the novelty of this thesis lies in its use of a distinctive methodology, contribution to the psychological contract theory by incorporating the multi-foci approach, testing the target-similarity model (Lavelle et al., 2007), determining the key content of peer-to-peer psychological contracts, and the use of a non-western sample. Overall this study proves the target-similarity of effect of psychological contacts breach of foci-specific work-related behaviours (OCB) and the focal-person satisfaction with different organisational foci.

The thesis is organised as follows: Chapter two provides a details literature review on the subject matter. The literature review starts with a broad scanning of the relevant literature, a process which Porter, Kongthon, and Lu (2002) refer to as research profiling, which was used

to identify the prevailing trends in the psychological contracts research, highlighted the most published authors on the subject matters and also the top journal based on the number of publications. This is followed by in Chapter 2 by a traditional literature review on the relevant literatures. Chapter 3 builds upon the literature review to build up to the hypothesis that were tested for this thesis. Chapter 4 provides a detailed discussion on the choice of research design and methods. A detailed discussion is provided on the use of vignettes and how best to use them as a part of a research design. Chapter 5 presents the descriptive statistics for the various statistical analysis that were carried out on the data and the results for these tests are presented in chapter 6. The results are provided separately for each study. Chapter 7 starts of by providing a discussion the results of each separate study and then offers an overall discussion for thesis and the ends with offering a reflection on the use of the vignettes technique as a research method. Limitations for the current study are also recoded in Chapter 7. Chapter 8 highlights the implications of the current study. The summary of the thesis and conclusions are provided in Chapter 9.

Chapter 2

Literature Review

All research efforts start with a literature review. Fink (2013) offers the following definition of a literature review

> A research literature review is a systematic, explicit, and reproducible method for identifying, evaluating, and synthesising the existing body of completed and recorded work produced by researchers, scholars, and practitioners (p. 3).

The advent of modern of information and communication technologies has also influenced the way literature reviews are carried out. Specific to the process of analysing the extant literature, technologies such as online data bases (more below)and the advancement in their capabilities has enabled researcher to map breadth of the literature. This is akin to an explorer mapping the lay of a land. The following literature review starts with this general description of the breadth of the literature on psychological contracts by looking at the top journal and most cited authors on the subject matter. This will be followed by a traditional literature review.

2.1 State of the Literature

Modern literature reviews start with the accumulation of the relevant peer reviewed journal articles. The primary sources for these articles are databases which have been specifically setup to store, categorise, index, and distribute these research articles. Among the most utilised of these

online journal databases (OJD) are Web of Science[1] (WOS), JSTOR[2], and Scopus[3] (Hood & Wilson, 2003). The developments in these databases have allowed researchers to determine the scope of an available literature on a specific research topic are, discover what are the important topics within that literature and do basic trend analysis (Adam, 2002).

In recent years OJD have allowed their end-users to download and interact with the metadata of their archived documents. Metadata are attributes assigned to each independent article such as its author/s, title, key terms, subject domain, and so forth (Kogalovsky, 2013). The availability of this metadata has facilitated the process of writing up a literature review in that it helps the researcher to identify key terms within the area of focus, what are the latest research trends within that area, who are the key authors, and which are top journals in a give area. All information that is important for writing up an encompassing review of literature for a given area of research.

Searching OJD starts with formulating proper search queries. A search query is a combination of key-words or phrases that the researcher is interested in (e.g., psychological contracts). Different OJDs then use different search algorithms to retrieve articles that are most relevant to the key-words used in the query. The basic algorithm involves retrieving articles ranked by the frequency of key-words appearing in the returned articles. OJD offer their endusers different sets of filters which can be used to restrict the results to specific criteria. These include restricting the results to articles that include all the given key-words or phrases, or articles that have the given key-words or phrases in the abstract, and articles that have the given key-words or phrases in the title. These restrictive filters are helpful in narrowing down the results of the query to the most relevant articles.

Table 2.1 shows the results for the search query comprised of the term "psychological contract". Scopus returned the highest number of articles

[1]Web of Science is a Thomson Reuters product and can be accessed at http://www.webofknowledge.com

[2]JSTOR is part of ITHAKA, a not-for-profit organisation helping the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways. It can be accessed at http://www.jstor.org/

[3]Scopus is a product of Elsevier and can be accessed at http://www.scopus.com/

Table 2.1: *Database and Query Wise Distribution of Articles*

Query type	Number of Articles		
	JSTOR	Scopus	WOS
Anywhere in the article	1235	7757	1431
Abstract	120	999	NA
Title	77	616	564

for the search query on all levels on restriction. Scopus hosts 7757 articles that have the term psychological contract present in them. When the results were restricted for articles that had the term psychological contract in the abstract Scopus returned a result with 999 articles. Finally, Scopus hosts 616 papers which have the term psychological contract in their titles. WOS hosts a total of 1431 articles that have the term psychological contract in their bodies. There is significant overlap between the articles hosted on WOS and Scopus, almost to the extent that the WOS archive seems to be a subset of Scopus. For this reason further was carried out only on Scopus and JSTOR. JSTOR had a unique set of 1235 papers with the term psychological contract in the body, and 120 articles with the term in the abstract, and 77 articles with term in the title.

Researchers can use the OJD to track the evolution of a research topic. OJD store the year of publication information alongside each individual articles that they host. They also offer their end users the ability to sort the results based on their year of publication. OJD also offer graphical charts of year wise publication frequencies for articles containing the search terms identified in the search queries. For example, Figure 2.1 shows the year-wise publication frequencies of articles that contain the terms psychological contract. As is apparent from this chart articles containing the term psychological contract started to appear just before 1960.

Sorting the results retrieved from Jsotr year-wise so that the oldest records appear first reveals that the term psychological contract first appeared on JSTOR in the article authored by Argyris (1959). A simple text search performed on the article shows that Argyris used the term psycho-

logical work contract (instead of psychological contract) six times in this article and that it appeared for the first time in the following paragraph:

> The importance of the informal employee culture is communicated by the employee through what might be called a psychological work contract. This contract binds the employee to produce satisfactorily and to remain loyal, if the management fulfils his predispositions and respects the informal culture. (Argyris, 1959, p. 163)

The graph in Figure 2.1 show that the interest in the topic of psychological contracts witnessed a surge somewhere between the mid 80s and early 90s. It was in year 1989 that Rousseau published her ground breaking study and introduced a new definition for the term psychological contract. She defined the construct as follows;

> The term psychological contract refers to an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal-person and another party. Key issues here include the belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations (Rousseau, 1989, p. 123) .

The frequency of publications relating to psychological contract theory have seen a significant fall since 2010. This is indicative of waning research interest in psychological contract construct as a viable research topic. Conway and Briner (2005) identify a number of issues related to the conceptualisation of the psychological contract construct, and note that these issues represents a significant challenge for those interested in the concept of psychological contract and if left unresolved could lead to researchers loosing interest in this topic. Two of the key issues that they raised were that its is still not clear who are the parties to the psychological contract, and secondly, researchers are not applying new research methodologies to investigate issues related to the psychological contract formation and breach. The current thesis aims to address these

Figure 2.1: *Year-Wise Article Publication Frequencies for Items Hosted on JSTOR*

issues by focusing on foci-specific psychological contracts and using a vignette based instrument for data collection.

The meta-data retrieved from OJD can be used to generate maps of science, that allow extracting new findings, connect the interrelated concepts, and make sense of the large quantities of data (Börner et al., 2012). Maps of science are informative tools that facilitate the process of writing up a literature review. Researchers can use them to get an overview of their specific knowledge domains. These maps are also useful in identifying major research areas, experts within a specific domain, influential publications, and most active research institutions (Börner et al., 2012). Figure 2.2 shows a map of science for the psychological contracts research domain. The map was generated using Science of Science Tool (Sci Team, 2009). The map depicts the major subject areas within which the psychological contract concept has been used. Table 2.2 show the data associate with the map. It is evident from the map that most of the research on psychological contracts has been conducted within the discipline of social science, followed by health professionals.

Porter et al. (2002) propose that a traditional literature reviews can be enhanced by analysing the contextual literature (referred to above as meta-data) associated with that literature. This can be done by identi-

fying the various sources of informations (relevant journals), and active institutions and authors within a given research area. This information can be used to measure the interest in a given research area, determine new trends or how innovation is progressing in a give research domain. In line with the ideas proposed by Porter et al. (2002) the following section will provide details of top authors in the domain of psychological contract research. Authors are ranked by the number of articles available on the individual OJD. A brief review is also provided of the most cited papers for the top authors.

Table 2.3 shows the top authors on JSTOR for each individual query. The first query searched for all articles containing the phrase "psychological contracts" anywhere in their bodies. The query results showed that Rousseau had most articles published (15) followed by Caldwell (12), and Pavlou who has published 8 articles. The second query searched for articles that contained the phrase "psychological contracts" in their abstracts. The results from this query also showed that Rousseau was the top published author with 7 articles, followed by Robinson with 6 articles, and Lester with 5 articles. The top three author ranking did not change for the third query, which was the most restrictive, and searched only for articles that had the phrase "psychological contracts" in their titles.

Rousseau's most cited (CiteRank[4] = 0.9663), sole-authored, paper is based on her study to investigate the content of psychological contracts (Rousseau, 1990). The contents of psychological contracts are based on the perceptions of the employees of what their employers are obligated to offer them in return for what they perceive their own obligations are towards their employers. For her study Rousseau used a sample of 224, recently employed, graduating MBA students. The study's results indicated that there were two types of perceived obligations that the participants attributed to their employers and to themselves (as employees). Rousseau categorised these obligations into the categories of transactional (high pay and career advancement in exchange for hard work) and relational (exchanging job security for loyalty and a minimum length of

[4]CiteRank is the ranking algorithm used by JSTOR which measures an articles citation network (King, Simboli, & Rom, 2012)

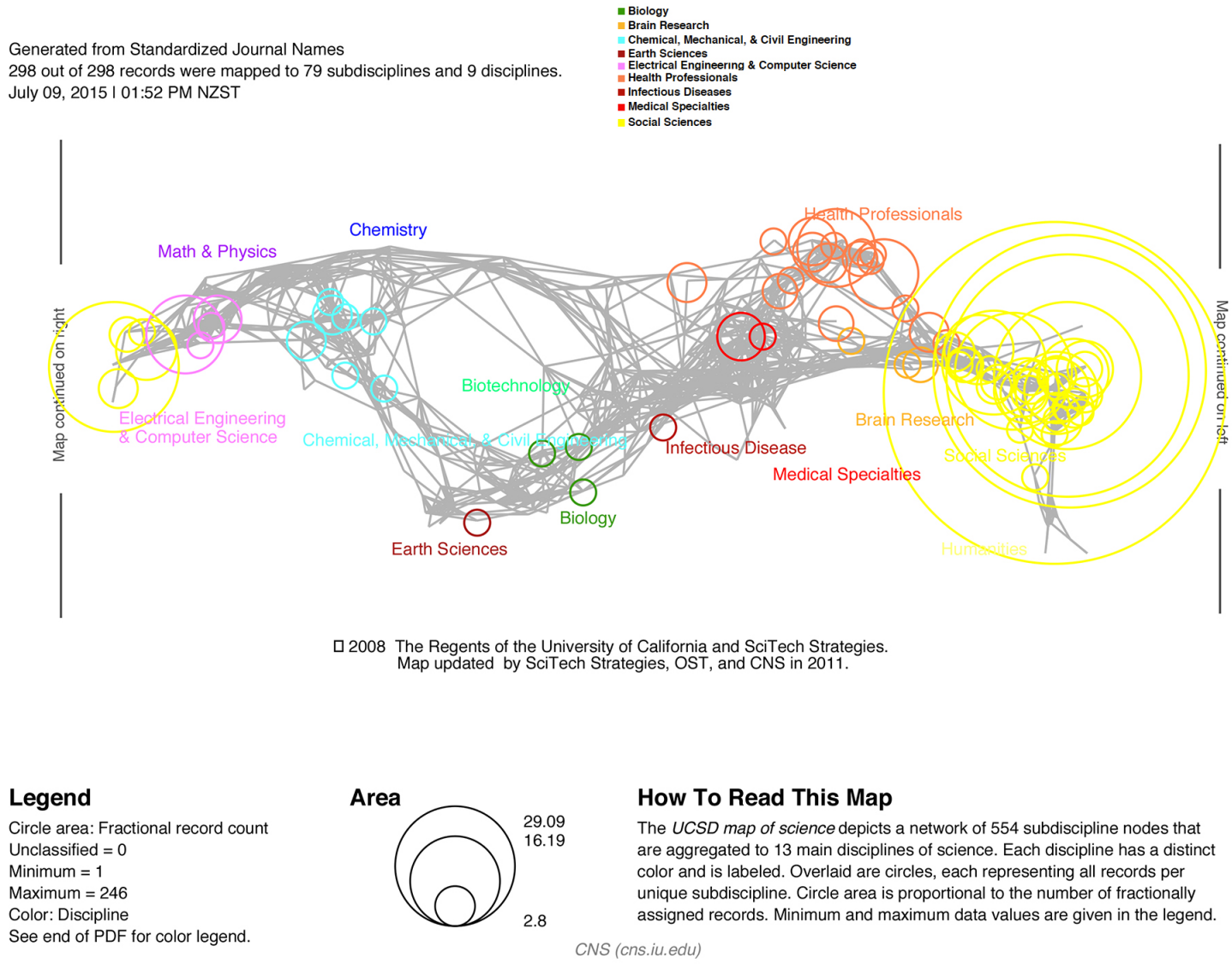


Figure 2.2: *UCSD Map of Science Visualisations for Psychological Contracts Domain*

Table 2.2: *Discipline Wise Distribution of Articles on psychological contracts Across Journals*

Discipline	Counts		Cumulative Percentages	
	Journal	Articles	Journal	Articles
Social Sciences	239	766	80.20	89.07
Health Professionals	34	51	11.41	5.93
Electrical Engineering, & Computer Science	8	18	2.68	2.09
Chemical, Mechanical, & Civil Engineering	7	11	2.35	1.28
Biology	3	3	1.01	0.35
Brain Research	3	4	1.01	0.47
Medical Specialties	2	5	0.67	0.58
Earth Sciences	1	1	0.34	0.12
Infectious Diseases	1	1	0.34	0.12

stay) obligations. This categorisation was then extended to define transactional and relational psychological contract. The contents of the transactional psychological contracts were the transactional obligations, and the contents for the relational psychological contracts were the relational obligations that the employees attributed to their employers and themselves.

The results for the first query indicate that Caldwell had the second most articles published. Due to the unrestricted nature of the query it returned results containing articles that did not deal specifically with psychological contracts. The same is true with regards to the Cladwell's work. His areas of interest are business ethics and trust, this is why most of his publications are in the Journal of Business Ethics. He does allude to the concept of psychological contracts in his writing, but this is mostly to elaborate the exchange nature of relationship between employees and the employers. For example, in his most citied article (CiteRank = 0.6208) Cladwell cites Rousseau's work on psychological contracts to support the argument for establishing a covenantal relationship between the leader and followers (Caldwell & Karri, 2005).

The results in Table 2.3 show that Pavlou's had the third highest number of publication. His primary interest is in researching the role of trust in on-line relationships. Out of the eight articles, that the first query returned, he is primary author in five of the articles. In his 2005 article (which has been cited almost 400 times) Pavlou applied the concept of psychological contract breach to on-line market places (Pavlou & Gefen, 2005). He looked at the psychological contracts between buyers and sellers in on-line markets. The results from this study indicate that the buyers' perceptions of psychological contract breach will negatively influence their transaction behaviour, will erode their trust in the market place, and will positively influence the perceptions of risk. This study also reports that the buyers' previous positive experiences and the sellers' track record of favourable performance reduce the perceptions of psychological contract breach.

Robinson has co-authored a number of key articles on the subject of psychological contracts with Rousseau. She, in her own right, is consid-

Table 2.3: *Query Based Ranking of Top 10 Authors by Number of Articles on JSTOR*

Query 1 : Term "psychological contract" anywhere in article		
	Author Name	Articles
1	Denise M. Rousseau	15
2	Cam Caldwell	12
3	Paul A. Pavlou	8
4	Daniel C. Feldman	6
5	Sandra L. Robinson	6
6	Scott W. Lester	6
7	William H. Turnley	6
8	Deborah L. Kidder	5
9	Douglas T. Hall	5
10	Elizabeth Wolfe Morrison	5
Query 2 : Term "psychological contract" in the article abstract		
	Author Name	Articles
1	Denise M. Rousseau	7
2	Sandra L. Robinson	6
3	Scott W. Lester	5
4	Ans De Vos	3
5	Deborah L. Kidder	3
6	Elizabeth Wolfe Morrison	3
7	Jeffery A. Thompson	3
8	Jill Kickul	3
9	Lois E. Tetrick	3
10	M. Susan Taylor	3
Query 3 : Term "psychological contract" in the article title		
	Author Name	Articles
1	Denise M. Rousseau	6
2	Sandra L. Robinson	6
3	Scott W. Lester	4
4	Ans De Vos	3
5	Elizabeth Wolfe Morrison	3
6	Jeffery A. Thompson	3
7	William H. Turnley	3
8	David E. Guest	2
9	David W. Hart	2
10	Gary Johns	2

ered to be an authority on the subject matter of psychological contracts. Her 1996 paper, which looked at the influence of trust on psychological contract breach, is cited more than 2500 times and has a CiteRanking of 0.9805. Key findings from this study include that psychological contract breach is negatively related to performance and civic virtue behaviour, and positively related to turnover intentions. More importantly, the results from this study show that trust has a strong influence on the magnitude of adverse reactions to psychological contract breach. Employees who have high initial trust in their employers tend to overlook small breaches of their psychological contracts, and are less vigilant of such breaches. Employees who have lower levels of trust in their employers are always on the lookout for events that might constitute a breach of their psychological contracts and react more harshly to psychological contract breachs.

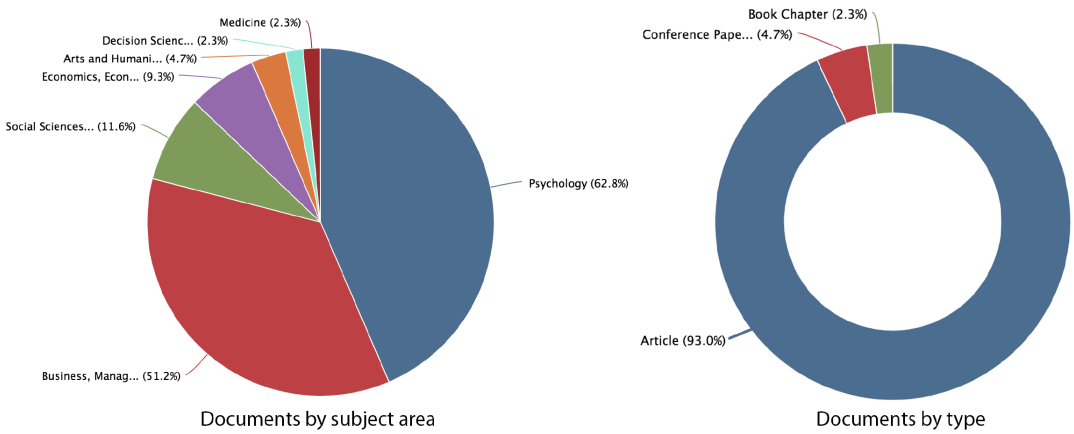
The results in Table 2.3 show that Lester had the third highest number of publications when the result was filtered for articles that contained the the phrase "psychological contracts" in their abstracts (query 2) and titles (query 3). In his most cited article (CiteRank 0.6482) Lester and his colleagues (Lester, Turnley, Bloodgood, & Bolino, 2002) compared the supervisors and subordinates perceptions of psychological contract breach and the reasons they attributed for the breach. Their findings indicate that the supervisors and employees have different perceptions of psychological contract breach. Furthermore, they report that employees are more likely to perceive that their organisations have breached their psychological contracts than their managers. More specifically there was a discrepancy between the supervisors' and employees' perceptions regarding specific expectations with regards to pay, advancements opportunities, and quality of employment relationship. The supervisors' and employees' attributions regarding the reasons for psychological contract breach also varied, with the employees attributing the breach to intentional organisational actions. On the other hand, the supervisors attributed the breach to factors which were out of the control of the organisations.

Table 2.4 reports the results for the three queries from Scopus. Feld-

man, Restubog, and De White where the top three published authors when the search query was for articles containing the term psychological contracts anywhere in their bodies. Shalk, Restubog, and Bordia were the top three published authors for query two which searched for articles that contained the term psychological contracts in their abstracts. Finally, for query one which searched only for articles that contained the term psychological contracts in their titles, the top three authors were Restubog, Bordia, and Shalk.

Restubog featured among the top three most published authors for all three search query results presented in Table 2.4. Figure 2.3 shows that most of his work falls in the subject area of psychology and business management and that his published work primarily consists of peer-reviewed journal articles. In his most cited paper (citations = 112) Restubog and his colleagues (Restubog, Hornsey, Bordia, & Esposo, 2008) looked at the moderating effect of trust on the relationship between psychological contract breach and an individuals desire to engage in OCBs. Their results confirm that trust does play an important moderating role in this relationship and that this effect is more prominent for relational psychological contracts than for transactional psychological contracts.

Figure 2.3: *Restubog's Articles by Subject Area and Type of Article*



Fledman had the highest number of articles published when the search query retrieved articles that contained the term psychological contracts anywhere in their bodies. The word-cloud in Figure 2.4 (extracted from

Table 2.4: *Query Based Ranking of Top 10 Authors by Number of Articles on Scopus*

Query 1 : Term "psychological contract" anywhere in article		
	Author Name	Articles
1	Feldman, D.C.	47
2	Restubog, S.L.D.	43
3	De Witte, H.	59
4	Rousseau, D.M.	38
5	De Cuyper, N.	50
6	Schalk, R.	33
7	Ng, T.W.H.	32
8	Baruch, Y.	29
9	Peiro, J.M.	27
10	Liden, R.C.	22
Query 2 : Term "psychological contract" in the article abstract		
	Author Name	Articles
1	Schalk, R.	19
2	Restubog, S.L.D.	19
3	Bordia, P.	17
4	Rousseau, D.M.	17
5	Bal, P.M.	17
6	Turnley, W.H.	11
7	Coyle-Shapiro, J.A.M.	10
8	Chambel, M.J.	10
9	De Witte, H.	12
10	Suazo, M.M.	8
Query 3 : Term "psychological contract" in the article title		
	Author Name	Articles
1	Restubog, S.L.D.	18
2	Bordia, P.	16
3	Schalk, R.	15
4	Bal, P.M.	16
5	Rousseau, D.M.	12
6	Turnley, W.H.	11
7	Coyle-Shapiro, J.A.M.	9
8	Tang, R.L.	8
9	Chambel, M.J.	8
10	Bordia, S.	8

the list of article titles authored by Fledman) shows that his major research interest includes topics such as organisational embeddedness, idiosyncratic deals, psychological contracts, careers, innovation related behaviours, and the effects of ageing on different work related behaviours. He is the second author in all the papers which specifically deal with psychological contracts, in the aforementioned search query results. In one such article, Turnley and Feldman (1999) looked at the effect of psychological contracts violation on exit, voice, loyalty, and neglect. Their results confirmed the psychological contracts violation resulted in increased levels of exit, voice, and neglect and inversely influenced loyalty to the organisation. The results from this study also showed that situational factors, such as the availability of employment alternatives, moderated the effects of psychological contracts violation on these outcomes.

Figure 2.4: *Fledman's Research Focus Word-Cloud*

Schalk also featured among the top published authors in the results the result was filtered for articles that contained the the phrase "psychological contracts" in their abstracts (query 2) and titles (query 3). Figure 2.5 shows that most of his work is published in the areas of business manage-

ment and psychology, and that most of his work consists of peer-reviewed journal articles. The word-cloud (extracted from the list of titles of the articles authored by Schalk) featured in Figure 2.6 shows that Schalk has conducted research on topics including psychological contracts, voice, temporary employment, and organisational commitment. de Vos, Buyens, and Schalk (2003) looked at the formation of psychological contracts as a sense-making process occurring during the socialisation period. The results from this study indicate that psychological contract formation is a dynamic process whereby new-comers compare their expectations of their employers against their own contributions, and against what they actually receive from the employer. Through this sense-making process individuals arrive at more realistic expectations of their employers and this is then reflected in the content of their psychological contracts.

Figure 2.5: *Schalk's Articles by Subject Area and Type of Article*

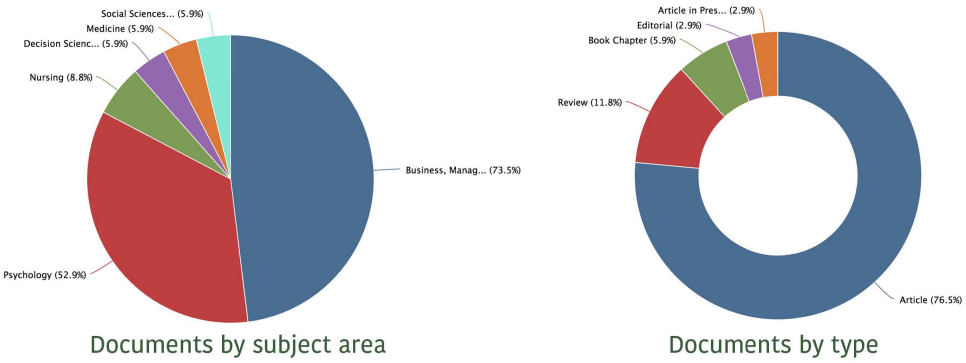


Table 2.5 show the top 10 journals by number of publications for each individual search query hosted on JSTOR. The results show that most of the articles were published in the Journal of Organizational Behavior (JOB). Figure 2.7 shows the yearly publication rate of articles which at least cite the concept of psychological contracts in JOB, and the subject wise division of these articles. Among these articles published in JOB the study reported by Robinson and Rousseau (1994) has the highest CiteRanking (0.9762). For this study the authors surveyed 128 MBA graduates once immediately following their recruitment and then two years later. This study confirms that individuals formed perceptions about their own obligations to their employers and the employers' obligations towards

them through out the recruitment and selection process. A majority of respondents for this study had experienced psychological contract breach. The results from this study also show that psychological contract breach had a significant effect on a number of work-related outcomes such as turnover, trust, satisfaction and intentions to remain with the organisation.

Table 2.6 shows the top 10 journals by number of publications for each individual search query hosted on Scopus. The results show that most of the articles were published in the International Journal of Human Resource Management (IJHRM). Figure 2.8 shows the yearly publication rate of articles which at least cite the concept of psychological contracts in IJHRM, and the subject wise division of these articles. The most cited article in IJHRM that specifically deals with the issues of psychological contractformation and breach is that by Flood, Turner, Ramamoorthy, and Pearson (2001). Through this study the authors looked at the psychological contracts of knowledge workers and reported that psychological contract breach directly influenced their organisational commitment and intention to remain with the organisation. Their results also indicate that psychological contract breach moderates the effects of procedural justice on these work-related outcomes.

Figure 2.6: *Schalk's Research Focus Word-Cloud*

Table 2.5: *Query Based Ranking of Top 10 Journals by Number of Articles on JSTOR*

	Journal Name	Articles
Query 1 : Term "psychological contract" anywhere in article		
1	Journal of Organizational Behavior	197
2	Journal of Business Ethics	129
3	The Academy of Management Review	62
4	Journal of Business and Psychology	59
5	The Academy of Management Journal	46
6	Relations Industrielles / Industrial Relations	42
7	Journal of Managerial Issues	36
8	Organization Science	36
9	Managementrevue	32
10	Administrative Science Quarterly	28
Query 2 : Term "psychological contract" in the article abstract		
1	Journal of Organizational Behavior	36
2	Journal of Business and Psychology	12
3	Journal of Business Ethics	11
4	Journal of Managerial Issues	6
5	The Academy of Management Journal	5
6	The Academy of Management Review	5
7	Organization Science	5
8	Zeitpers	4
9	The Academy of Management Executive (1993-2005)	3
10	Indian Journal of Industrial Relations	3
Query 3 : Term "psychological contract" in the article title		
1	Journal of Organizational Behavior	30
2	Journal of Business and Psychology	10
3	The Academy of Management Review	5
4	The Academy of Management Journal	3
5	Journal of Business Ethics	3
6	Journal of Managerial Issues	3
7	Voluntas: International Journal of Voluntary and Nonprofit Organizations	3
8	Indian Journal of Industrial Relations	2
9	Information Systems Research	2
10	The Academy of Management Executive (1993-2005)	1

Figure 2.7: *Journal of Organizational Behavior; Articles per Year and Subject Area.*

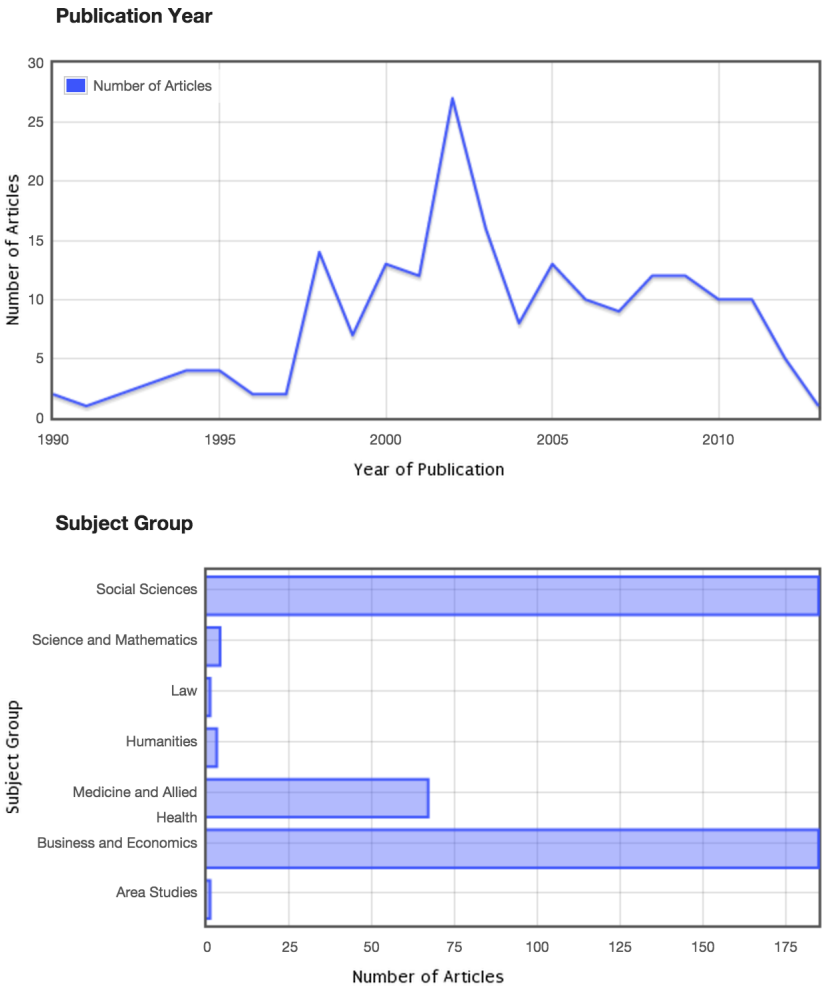
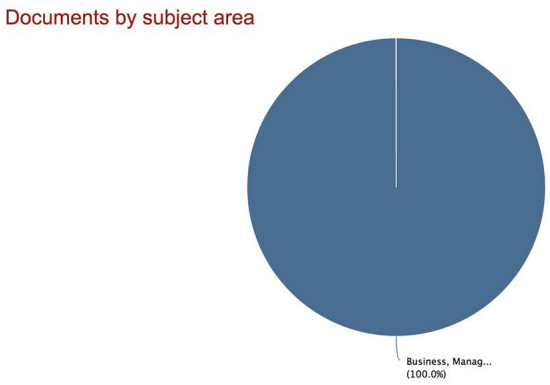


Table 2.6: *Query Based Ranking of Top 10 Journals by Number of Articles on Scopus*

	Journal Name	Articles
Query 1 : Term "psychological contract" anywhere in article		
1	International Journal of Human Resource Management	320
2	Journal of Business Ethics	157
3	Journal of Applied Psychology	157
4	Journal of Organizational Behavior	157
5	Personnel Review	115
6	Journal of Vocational Behavior	110
7	Human Resource Management	93
8	Journal of Managerial Psychology	92
9	Journal of Management	91
10	Human Resource Management Review	86
Query 2 : Term "psychological contract" in the article abstract		
1	International Journal of Human Resource Management	48
2	Journal of Organizational Behavior	32
3	Journal of Managerial Psychology	28
4	Journal of Vocational Behavior	17
5	Journal of Applied Psychology	17
6	Personnel Review	17
7	Journal of Business and Psychology	17
8	Journal of Business Ethics	16
9	Employee Relations	16
10	Journal of Occupational and Organizational Psychology	14
Query 3: Term "psychological contract" in the article title		
1	International Journal of Human Resource Management	31
2	Journal of Organizational Behavior	25
3	Journal of Managerial Psychology	15
4	European Journal of Work and Organizational Psychology	13
5	Journal of Business and Psychology	13
6	Journal of Vocational Behavior	13
7	Journal of Applied Psychology	11
8	Personnel Review	11
9	Employee Relations	11
10	Journal of Occupational and Organizational Psychology	10

Figure 2.8: *IJHRM; Articles per Year and Subject Area.*



2.2 Psychological Contract Historic Developments

The history of Psychological contracts is divided into two distinct eras, the pre-Rousseau era and the post-Rousseau era. The key authors from the pre-Rousseau era include Argyris (1960), Menninger (1958), Levinson, Price, Munden, Mandl, and Solley (1962), Schein (1965, 1970, 1980). Following is brief review of their work, this will be followed by a brief review of prominent studies from the post-Rousseau era.

2.2.1 The pre-Rousseau era

Argyris (1960) is wieldy considered to be the first to coin the term psychological contract. There were writers before him who indirectly referred to a similar relationship between the employees and their employers, but they did not use the label of psychological contract. Prominent among these writers is Barnard (1938), who theorised that employees will remain in the citizenry of an organisation as long as that organisation is affording them inducements that are greater in value than the contributions they are asked to make into the organisation. March and Simon (1958) also contributed to this discussion by arguing that employees join organisations willingly and declare to abide by the explicit and the implicit limitations set forth by the organisation, in return for inducements.

Menninger (1958) also hints in this writing towards the concept of psychological contracts. He proposed that the relationship between psychotherapists and their patients involved both tangible and intangible expectations, and when these expectations are not met by one of the parties to the contract; the other party takes steps to break the contract. In his later work, Menninger (1973) did explicitly use the term psychological contract to describe this relationship. Menninger was also one of the first to discuss the role of unconscious motives in shaping the psychological contract (Conway & Briner, 2009).

Argyris (1960) is credited with being the first to use the term "psychological work contract" to describe the relationship between a group of employees and their foreman. His premise was that there was an implicit understanding that a foreman will respect the informal culture of

the group in exchange for high productivity and minimal grievances. Although, Argyris is credited with labelling the construct, he did not build upon his conceptualisation any further (Conway & Briner, 2009).

One of the first studies that comprehensively employed the concept of the psychological contract, for the purpose of understanding employee-employer relationships, was conducted by Levinson et al. (1962). Levinson et al. (1962) defined the psychological contract as "a series of mutual expectations of which the parties to the relationship may not themselves be even dimly aware but which nonetheless govern their relationship to each other" (pp. 21-22). Among the early conceptualisation of the psychological contract, Levinson's and his colleagues' operationalisation of the construct is the most relevant to the current conceptualisation of the construct, albeit some conceptual difference have emerged over time (Conway & Briner, 2005).

Levinson et al. (1962) saw the psychological contract as a reciprocal exchange of needs, whereas the contemporary theorising of psychological contract sees the psychological contract as a perceived exchange of promises. This distinction between needs and promises has great implications for what is considered as the content of the psychological contract, as needs represent a much broader concept than perceived promises. For example, employees who might have a need for learning and development might perceive a breach of their psychological contract if the organisation fails to meet this need. Under the contemporary definition of the psychological contract, the need for learning and development will be included as part of the psychological contract only if the organisation has somehow implicitly or explicitly promised to offer such opportunities.

Levinson et al. (1962) highlighted reciprocity as a key element of the exchange between the parties to the psychological contract, whereas Rousseau (1989) emphasises on the perception of mutuality, rather than mutuality per se, as governing the exchange between the two parties. This distinction between reciprocity and perceived mutuality is important when considering the formation of the psychological contract. For Levinson et al. (1962), the psychological contract is established when one

party deems the other party capable of meeting its needs and offers to meet the second party's needs in return. When employees join an organisation they do so out of their own needs; such as earning a livelihood or to gain social recognition and so forth. In return, the employees agree to meet the needs of the employing organisation, such as the needs for sustainment and growth. This psychological contract between the employee and the employer will remain fulfilled as long as each party to the contract meets the needs of the other party (Levinson et al., 1962). Where this condition of reciprocity is not met, the psychological contract will be considered as breached.

Like Levinson, Schein (1965, 1970, 1980) was of the view that needs (unlike the contemporary focus on expectations) played a vital role in understanding the mechanics of psychological contracts: such as how they are formed, what are their contents and how they are breached (Conway & Briner, 2009). Schein was an ardent believer in the utility of psychological contract as a means of understanding employee behaviour. In Schein's view a healthy psychological contract was dependent on the fulfilment of two important conditions, which he describes as:

- The degree to which his (*the employee's*) own expectations of what the organisation will provide him and what he owes the organisation matches what the organisation's expectations are of what it will give and get.
- Assuming there is agreement on expectations, what actually is to be exchanged - money in exchange for time at work; social-need satisfaction and security in exchange for work and loyalty; opportunities for self-actualisation and challenging work in exchange for high productivity, quality work and creative efforts in the service of organisational goals; or various combinations of these and other things (Items in parentheses added, Schein, 1965, pp. 64-65).

As is evident from the previous passage, Schein gave an ample description of how psychological contracts influenced work-related outcomes. Schein was of the view that the smaller the discrepancy between employee's and employer's expectations, the more likely that the employee

would report a higher level of job satisfaction and productivity and lower level of turnover (Conway & Briner, 2009). Schein also gave importance to the role of needs fulfilment. This implies that the parties to the exchange (the employees and employers) would be satisfied with the exchange as long as it meets their needs. This last assertion by Schein resonates the position taken by both Argyris and Levinson (Conway & Briner, 2009).

Although Schein's and Levinson's views seem to be in congruence, Conway and Briner (2009) noted some distinctions between the two. For example, both Schein and Levinson viewed psychological contracts as being a reciprocal exchange, which undergoes constant renegotiation. But both of them disagree on the mechanics of how the terms of the contract are renegotiated. Levinson saw the renegotiation of the psychological contract terms as a balancing act. Parties would try to maximise their own benefits while ensuring that the other party would receive the minimum amount of benefit possible to ensure the viability of the contract. On the other hand, Schein lays more emphasis on the role of explicit communications channels and power sources within the organisation in shaping the renegotiations process. According to him renegotiation of the terms of the contract is achieved "through mutual influence and mutual bargaining to establish a workable psychological contract" (Schein, 1965, p. 65).

To conclude, these earlier studies have had a great influence in shaping our current understanding of the key concepts of psychological contract theory. But, as Conway and Briner (2009) note, they failed on the scale of inspiring further research on the construct. An indicator of this, albeit a crude measure, is the search result returned by Google Scholar when filtering for all articles published between 1960 (the year Argyris coined the term) and 1988 (a year before Rousseau's seminal work was published), with the phrase psychological contract appearing in them returns only 490 entries. Out of these only 28 had the term psychological contract included in their titles. Comparatively, a similar query for the period starting from 1989 till 2016 returns 14,500 with the phrase appearing anywhere in the entry. 1370 of these entries had the term psy-

chological contract appearing in their titles. This in itself is a testament to Rousseau's contribution in establishing the psychological contract theory as a viable subject for research. The next section now explores this Rousseau era.

2.2.2 The post-Rousseau era

As was mentioned above, most of the current interest in the construct of psychological contract can be attributed to Rousseau's own work and the work of her colleagues. Reiterating the importance of her contribution to the field Conway and Briner (2009) list some important areas where this contribution is most evident: in redefining the psychological contract (Rousseau, 1989), the introduction and reconceptualisation of the concept of breach and violation (Robinson et al., 1994; Rousseau, 1989), proposing the dichotomy of relational and transactional psychological contracts (Rousseau, 1990), and the development and validation of measures of psychological contracts (Rousseau, 1989, 2000).

(Rousseau, 1989) redefined the psychological contract as "an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal-person and another party. Key issues here include the belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations"(pp. 123). For example, a person in their pre-employment interview believes that training and development of employees is a key focus of the organisation, and thus once they accept the job offer they will see this as a promise they will be expecting. Extrapolating from this definition, one can clearly see how Rousseau's reconceptualisation of the construct differs from its conceptualisations by previous researchers. The first assertion that is made is that what is important is the it is the the individual's perception regarding the terms and conditions with of the reciprocal exchange that are important. Rousseau sees psychological contracts as idiosyncratic, where it is of no consequence that there is an agreement between the employee and the employer on the content of the contract. Rather, for Rousseau, what matters is what the employees believe was implicitly or explicitly offered to them. Corollary to

this, Rousseau and the researchers that adhere to her definition of psychological contracts make a common assertion that organisations cannot themselves have psychological contracts. This assertion is supported by invoking the issues that would be associated with anthropomorphizing organisations, which would otherwise be required if organisations are said to hold subjective beliefs regarding the psychological contracts (Conway & Briner, 2009).

In Rousseau's (1998) view, the psychological contract exists at the individual's level, where the focal-person adopts a two party view of the contract by defining what is expected of him/her and what is perceived to have been offered in return by the organisation.For example, the employee promised training and development in my example earlier. Researchers who have investigated the employer's perspective of psychological contracts have included different levels of supervisors to represent the organisation. For example, Tekleab and Taylor (2003) looked at the dyadic relationship between the a supervisor and his/her subordinate to determine how a breach of their psychological contracts would effect the quality of their relationship. Similarly Guest and Conway (2002) employed a sample of 1,306 senior HR managers to determine the supervisors' perspective of psychological contract breach. The current study will also contribute to the literature on psychological contract by looking at the multi-foci perspective.

Another important aspect of Rousseau's redefinition was her emphasis on the promissory nature of psychological contract beliefs (Conway & Briner, 2009). She was of the view that the relationship between the contracting parties is a social exchange where obligations are assigned to each party to the contract. Importance is given to the perceived obligations rather than expectations. This is because, all expectations held by a person are not promissory in nature and do not constitute a belief in mutuality or reciprocity (Rousseau, 1998). To elaborate, consider the example of individuals who expect that their organisations should afford them training opportunities. This is a justified expectation, but this will only become a part of those individuals' psychological contracts that have been implicitly or explicitly promised that such opportunities will

be provided to them. This notion of promise narrowed the concept of expectation from general needs. Whether implicit or explicit, promises are based on observations of patterns of behaviour and the way others are treated (Conway & Briner, 2009).

Lastly, the other major factor that made Rousseau's work inspirational was the way she linked the psychological contract to work-related outcomes. The notion of contract violation (Rousseau, 1989) that she introduced was well accepted by the academia, primarily due to its proximity to the notion of legal contract violation (Conway & Briner, 2009). Conway and Briner (2009) note that the concept of violation provided a much clearer linkage between the psychological contracts breach and work-related outcomes, than the previous concepts of matching and *need thwarting* as proposed by Levinson and Schein. She defined violation as the "failure of organisations or other parties to respond to an employee's contribution in ways the individual believes they are obligated to do so" (Rousseau, 1989, p. 128). Violation, within the context of psychological contracts, leads to the deterioration of the employee-employer relationship, which can act as an antecedent to undesirable work-related outcomes (Conway & Briner, 2009).

In the previous section we discussed the contributions Rousseau made in making the psychological contract a viable research topic. The following section will further elaborate on what constitutes a psychological contract, i.e. as with traditional work-related contracts, what are the important contents, terms and clauses of the psychological contracts.

2.3 Obligations - the Content of the Psychological Contract

A psychological contract is established the moment an individual decides to join an organisation. As part of the socialisation process, individuals develop expectations about how the organisations' needs will fit their own schema of needs, beliefs and values (Werner & DeSimone, 2006). At the end of the socialisation process, the individual is said to have established his/her psychological contract, after discounting for rhetoric and

basing it on realism about the organisation. Embedded within this discussion on socialisation and the formation of the psychological contract, is a key attribute of such contracts, their dynamism. Individuals continuously evaluate their psychological contracts and re-adjust their expectations concerning the actions of the organisation (T. A. Wright, Larwood, & Doherty, 1996). Thus, psychological contracts can be viewed as being fluid and non-static.

Unlike formal contracts, it is very difficult to pinpoint the contents, terms, or clauses of an individual's psychological contract (Cable, 2008). Cable (2008) concluded that this difficulty in arriving at the content of the psychological contract stems from the idiosyncratic nature of the psychological contract. The psychological contracts are idiosyncratic because there is an interplay between a magnitude of factors that are local, unique and personal to the focal-person. Researchers have tried to go around this problem by identifying generic contents of the psychological contract. Table 2.7 illustrates examples of such efforts.

As discussed earlier, the dynamic nature of the psychological contracts is such that employees are continuously assessing the state of their contract, that is, whether the employers are fulfilling their part of the bargain or not. When employees perceive that the employers have met their end of the deal, they reciprocate by fulfilling their own obligations to the organisation. A psychological contract is violated when an organisation is perceived as reneging on its promises. Hence, in my example, if the employee is given training courses then the obligation is met and they'd reciprocate with positive job outcomes such as loyalty and not looking for another job. Conversely, violation is perceived if after six months, their 'promised' training does not eventuate and they feel the promise has been reneged. This then leads to detrimental outcomes such as looking for a new job.

2.4 The Types of Psychological Contracts

The efforts to identify contents of different psychological contracts has allowed for the creation of psychological contract typologies. Rousseau

Table 2.7: *Content of Psychological Contracts (adopted from Cable, 2008)*

Study	Psychological Contract Content.	
	Employees' Obligations	Employers' Obligations
1. Csoka (1995)	> Commitment to business objectives > Shared responsibility for success > Quality performance > Performance based compensation > Judgement > Strategic skills > Continuous improvement	> Employability > Learning > Performance based compensation > Greater participation and involvement > Interesting and challenging work
2. Herriot, Manning, and Kidd (1997)	> Hours worked > Honesty > Loyalty > Property > Self-presentation > Flexibility	> Training > Fairness > Needs > Consult > Discretion > Humanity > Recognition > Environment > Justice > Pay > Benefits > Security
3. Hutton and Cummins (1997)	> Getting the job done > Flexible citizenship > Loyalty	> Support > Respect and fair practice
4. Rousseau (1990)	> Overtime > Loyalty > Extra-role behaviours > Minimum stay > Willingness to accept transfers	> Advancement >High pay > Training > Job security > Development > Support

(1990; 1995) categorised into two categories: (1) transactional, and (2) relational. Rousseau created these categories based on the timeframe and tangibility of their content. Transactional psychological contracts are very close to formal contracts, in that their content are tangible and generally economic in nature (Janssens, Sels, & Van Den Brande, 2003). A focal-person perceives a transactional psychological contracts with entities with which s/he expects to have a short-term relationship. In contrast a focal-person who expects to have a long-term psychological contract with his/her employer or any of the various organisational foci, will perceive a relational psychological contract. The content of relational psychological contracts reflects this long-term relational aspect and their description is more ambiguous than tangible.Rousseau (2000) further adds that relational psychological contracts are open-ended employment arrangements, and they are built upon the the mutual trust between the contracting parties. The focal-person also perceives that his/her rewards are somewhat dependent on his/her performance, and more so on his/her continued membership of the organisation and participation in its affairs.

Rousseau (2000) further built upon the classification of transactional-relational psychological contracts and included two new forms: balanced and transitional psychological contracts s to the psychological contract inventory. She described the balanced psychological contracts as dynamic and open-ended employment contract, where there is fit between the individuals need for career development and the organisations performance goals. This sort of psychological contracts is most likely to be developed by individuals working for organisation that have an established training and development function and where performance is directly linked to performance.

The transitional psychological contracts refer not actual psychological contracts but representative of transitory stage where old agreement between the firm and the worker is being renegotiated (Rousseau, 2000). These stage is experienced by workers who associated with organisation that are undergoing a change process which will influence the terms of engagement between the worker and the firm.

Shore and Barksdale (1998) also proposed a taxonomy of psychological contracts, one that moved away from the situation-specific description of psychological contracts to a more general description of terms of the contracts. Shore and Barksdale (1998) differentiated between the psychological contracts on two dimensions: (1) the degree of balance in employee and employer obligations, and (2) the level of obligations. The degree of balance is a measure of how much the parties to the contract agreed upon their own and the other parties perceived obligations. Whereas the level of obligation is a measure of the extent to which the parties to the contract are committed to fulfilling their obligations.

Figure 2.9: *Exchange Relationships. Adopted from Shore and Barksdale (1998)*

		Employer Obligations	
		High	Moderate to Low
Employee Obligations	High	Mutual High Obligations	Employee Over-obligation
	Moderate to Low	Employee Under-obligation	Mutual Low Obligations

Based on the dimensions of balance and degree of obligation Shore and Barksdale (1998) identified four types of psychological contracts (Figure 2.9). The *mutual high obligation* psychological contracts are characterised by situations where both the parties to the contract have high obligations. Whereas employees and employers have low level of obligations toward each other have a *mutual low obligation* psychological contracts between them. The remaining two types of psychological contracts described by Shore and Barksdale (1998), i.e. *the employee under obligation* and *the employee over obligation,* are akin to the transitory psychological contracts described by Rousseau (2000) in that they are also temporary contracts. Both these contracts represent situations where there is an imbalance between what the employees expect their obligations are to their employers and what their employer owe them. If

the employees feel that they are contributing more than what they are receiving they will reduce their effort. Likewise if they feel that the employer is providing them more than what their effort is that will strive to increase their own efforts. This would be inline with Blau's (1964) social exchange theory in that social actors strive to maintain balance in their social transactions.

Finally, Janssens et al. (2003) also proposed a taxonomy of psychological contracts. They built upon the works of Rousseau (2000) and Shore and Barksdale (1998). They developed their taxonomy by clustering together psychological contracts based on their features of: (1) time-frame, (2) tangibility, (3) scope, (4) stability, (5) contract level, and (6) exchange symmetry. They adopted the first four parameters from Rousseau and McLean Parker (1993) and the remaining two from cross-cultural research on psychological contracts.

Janssens et al. (2003) described time-frame as a feature of psychological contracts that measures the longevity of the employment relationships. As with Rousseau and McLean Parker (1993), Janssens et al. (2003) also noted that short time-frames are a feature of transactional psychological contracts and longer time-frames represent relational psychological contracts. Tangibility was used to describe as a measure of how explicitly the employees perceived the terms of their psychological contracts. The scope of psychological contract was described as the extent to which factors outside of the work relationship influencing the psychological contract between the employees and their employers.

The stability feature of psychological contracts is a measure of how easy it is for the parties to the contract to change the terms of the contract without any form of renegotiation. When individuals perceive that the terms of their psychological contracts will remain constant over a prolonged time, they would have a stable psychological contracts with their employers. The exchange symmetry dimension of psychological contracts that Janssens et al. (2003) describe is reflective of what Hofstede (1980) labelled as an important feature of national cultures. Janssens et al. (2003) opine that individuals from high authority distance cultures would be willing to take up more obligations on themselves and attribute

a lower level of obligations to their employers. Finally, Janssens et al. (2003) distinguished between psychological contracts on the idea that in some cases these contracts are individually regulated and in other instances they are collectively regulated by a group of employees. The labelled this feature as the contact level. This feature is inline with Hofstede (1980) description of individualistic and collectivistic societies.

Janssens et al. (2003) constructed to scales based on these six dimension of psychological contracts. The first of these scales measured the employers' obligations and the second one for measuring the employees' obligations. They administered these scales to 1106 Belgian employees of various organisations. The data collected from these scales was then analysed using a clustering technique based on which Janssens et al. (2003) identified six types of psychological contracts.

Janssens et al. (2003) identified the first type of psychological contracts as 'instrumental' psychological contracts. Individuals who perceived to have a instrumental psychological contract tended to attribute lower obligations to themselves and more obligations to their employers. The second cluster of individuals scored very low on all six dimensions of psychological contracts. Janssens et al. (2003) aptly labelled this cluster of psychological contracts as 'weak' psychological contracts. Individuals in the third cluster described their preference for long-term relationship in exchange for loyalty from their employers (Janssens et al., 2003). This cluster of psychological contracts was labelled as 'loyal' psychological contracts. The fourth cluster consisted of individuals who had registered high scores on all the six dimensions of psychological contracts. The psychological contracts represented by this cluster was identified as the 'strong' psychological contracts. The fifth cluster that Janssens et al. (2003) described as 'unattached' consisted of responses by individuals who did not perceive to have a long-term relationship with their employers and also did not expect any loyalty from them. Finally, the sixth cluster was represented by individuals who perceived an imbalance in their relationship in favour of their employers, but who at the same time saw their employers as treating them equally. Janssens et al. (2003) saw these people as investing in their relationship with their employers and

as such labelled their psychological contracts as 'investing' psychological contracts.

The previous section highlighted efforts to determine what are the contents of psychological contracts. Although these efforts have not yielded a universal list of psychological contract content, they have informed our understanding of the various types of psychological contracts that can exist between an employee and his/her employer. In addition to this line of enquiry, researchers have also invested significant effort to studying the outcomes of psychological contract breach. The next section will discuss some of the more important ramifications of a psychological contract breach, specifically with regard to its effect on organisational citizenship behaviours.

2.5 Breach and Violation of the Psychological Contracts

As with formal contracts, psychological contracts become dysfunctional when either of the parties to the contract fails to discharge its obligations. In legal terms such instances are referred to contract breach or violation. A sizeable portion of the literature on psychological contracts focuses on the consequences of the breach or nonfulfillment of the contract. The reason for this emphasis is its perceived impact on the behaviour of the workforce and ultimately on the performance of the organisation (Pate, Martin, & McGoldrick, 2003). The psychological contract entails a continuous assessment of the employment relationship by the focal employee (Robinson et al., 1994), where such assessments leads the focal employee to the conclusion that the organisation is not honouring its promises, the contract is said to be breached or vice versa.

Early work on psychological contracts have used the terms contract breach and violation interchangeably. On the other hand, Morrison and Robinson (1997) drew a distinction between breach and violation of psychological contracts. In their opinion contract breach represented all the instances where the employees perceived that the employer failed to meet an expectation that was part of the psychological contract. Whereas

contract violation, represents those instances of contract breach which are followed by adverse emotional reactions. A breach is perceived when an employee feels that what has been offered is diminutive compared to what was promised.

Conway and Briner (2005) note that employees might face a number of contract breaches over the period of their association with a specific employer. But only a few of these instances will be followed by intense emotional reactions that qualify as contract violations. Thus, violations are more powerful and destructive than psychological contract breaches. The intensity of these reactions is moderated by a number of factors including the perceived importance of the broken promise to the focal-person's own goals (Zhao, Wayne, Glibkowski, & Bravo, 2007), the perceived cause for the breach, and perceptions of organisational justice (Conway & Briner, 2005). Figure 2.10 represents these moderators in the form of continuums.

The first in this series of continuums is the perceived importance, to the focal-person, of the promise that has been breached. Although support of this postulate can be drawn from the theories of motivation; very few studies, from within the realm of psychological contract research, have bothered to empirically test its moderating effect (Conway & Briner, 2005). What this implies is that if the organisation failed to deliver on a promise that was important to the focal-person, the reaction would be intense and might even lead to a contract violation. For example, a focal-person who perceived a relational psychological contract, would react adversely if his organisation moved towards short-term contracts and stopped guaranteeing continued employment. Whereas, faced with the same scenario, individuals who value employability over employment continuity will react more subtly, if at all, to this change.

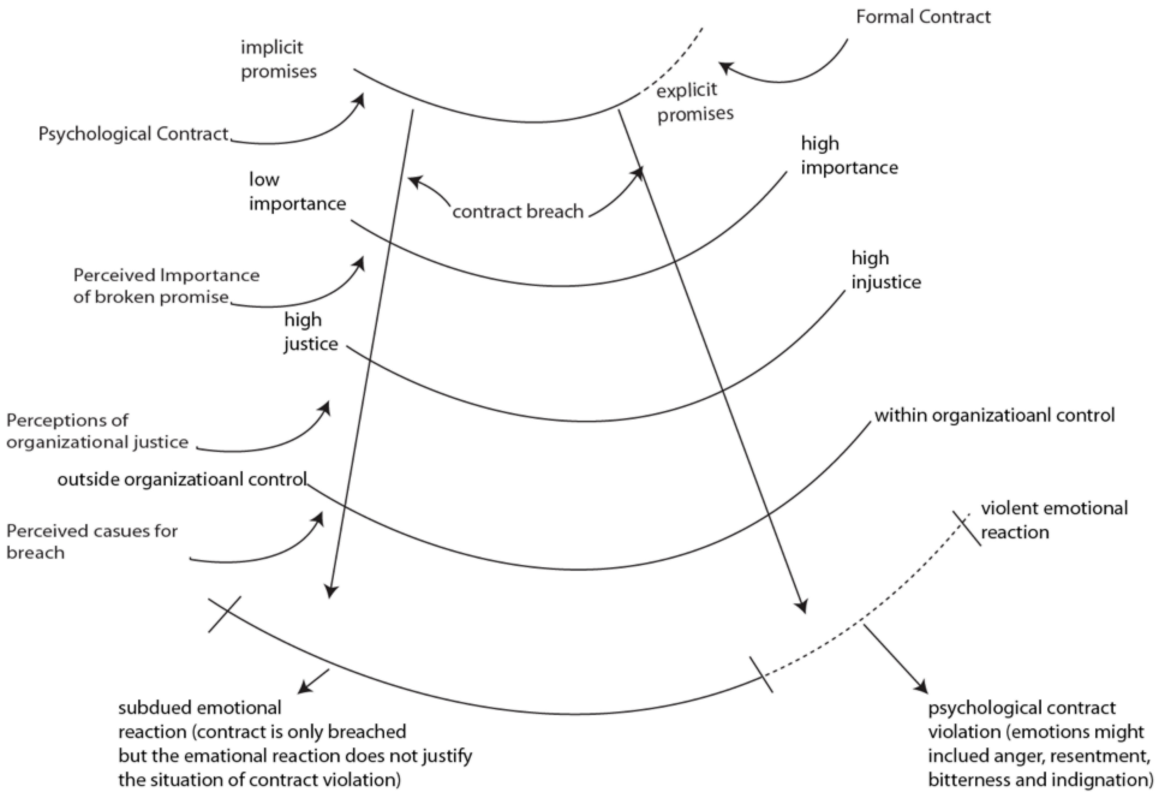
The second factor moderating the intensity of reaction to psychological contract breach is the perception of organisational fairness (Conway & Briner, 2005). Individuals who work for organisations, which are perceived to be fair in their treatment of their employees, tend to overlook minor incidences of the psychological contract breach. Robinson and Morrison (1995) reported that violation of psychological contracts

may lead to perceptions of distributive or procedural injustice. If the employees feel that their employers have breached the terms of the contract by not offering equitable returns for their discretionary efforts, the psychological contract is said to be violated on the grounds of distributive injustice. On the other hand, if the employees perceive a breach of the psychological contract on the grounds that their organisation is not treating them well, or they have doubts about the fairness of the organisational processes, the psychological contract is said to be breached on the grounds of procedural injustice. Whether the psychological contract breach is followed by extreme emotional reactions is also moderated by the focal-person's attribution of the causes of the breach. If the focal-person perceives that the organisation breached the psychological contract due to reasons that were in the control of the organisation, he/she may exhibit emotional reaction that might lead to undesirable work-related outcomes.

2.6 Outcomes of Psychological Contract Breach

Previous research has shown that that psychological contract breach has a greater effect on attitudinal outcomes rather than on behavioural outcomes (Cantisano, Domínguez, & Depolo, 2008; Pate et al., 2003). Behavioural outcomes, compared to attitudinal outcomes, are more visible and might result in punitive reactions from the employers (Pate et al., 2003). Employees, who might be constrained by the availability of alternative employment opportunities, tend to self-regulate their emotions (Rosenberg, 1990) and react to psychological contracts violations by altering their attitudes towards their assigned responsibilities. Using a case study design, Pate et al. (2003) investigated the relationship between the psychological contract violation and employees' attitudinal and behavioural outcomes that might have an effect on organisational performance. In their study Pate and her colleagues used a theoretical model that incorporated aspects of organisational justice as triggers of psychological contract breach. The outcomes of the model were measured in terms of attitudinal outcomes and behavioural outcomes. Re-

Figure 2.10: Psychological contract breach, violation, and their moderators



sults from the study showed statistically significant linkages between organisational justices and attitudinal outcomes. The study also supported the linkage between autonomy and citizenship behaviour, but did not support any other linkage between psychological contract violations and behavioural outcomes. Explaining this poor correlation, Pate et al. (2003) argued that this might be caused due to the power disparity between the employee and employer, which might lead to employees avoiding any display of negative behaviours, as this may result in their plausible redundancy. Furthermore, they believed that employees might have higher commitments for their job than toward their organisation and this might also play a role in employees overlooking possible violations of their psychological contracts. Coyle-Shapiro and Kessler (2000) arrived at a similar conclusion after conducting a survey, which included 703 managers

and 6953 employees from a British local government body. The two significant findings that emerged from their study were that, both the employees and managers were in agreement that the employees were experiencing contract breaches and that this was having a negative impact on employees' perceived organisational support, organisational commitment and organisational citizenship behaviour.

Robinson and Morrison (1995) found empirical support for their hypothesis that trust plays an important mediating role between perception of psychological contract violation and civic virtue. Their findings were also supported by two recent meta-analytic studies (Cantisano et al., 2008; Zhao et al., 2007). When employees perceive that their organisation have failed to honour their promises, they tend to stop trusting the organisation and have fewer expectations that the organisation will honour its other commitments (Rousseau & McLean Parker, 1993). With regards to the importance of the role trust plays in the formation of the psychological contract, Morrison and Robinson (1997) are of the view that individuals assess occurrences of breach of psychological contract based on the level of trust they have with their employers. Individuals with high-levels of trust usually tend to overlook such incidences by looking for rationale in the managerial decision and concluding that such actions were not in the control of the organisation. Whereas individuals with low levels of trust are keen to seek out and are more likely to label incidences as breaches of the psychological contract.

Zhao et al. (2007) applied meta-analysis to determine the effects of the psychological contract breach on work-related outcomes. Zhao and his colleagues based their model on affective events theory (Weiss & Cropanzano, 1996). The basic postulate of affective events theory is that significant workplace events are followed by affective emotional reactions. In line with Morrison's and Robinson's (1997) views, Zhao et al. (2007) draw a distinction between psychological contract breach and violation, where the psychological contract breach is a significant workplace event and violation is the manifestation of the affective emotional reaction of the focal-person experiencing the contract breach.

The model presented by Zhao et al. (2007) incorporates psychological

contract breach, influence, attitude, and individual effectiveness. They extracted two key factors from each of the studies that they analysed. This included (1) the method used by the studies to measure the psychological contract breach; and (2) from the studies that they analysed, they drew information regarding the content of the psychological contract that was breached. They used these two factors as moderators in their model. Zhao et al. (2007) analysed a number of models using structural equation modelling, to test for moderating effects. Their results reinforced findings of previous studies, in that psychological contract breach influences work-related outcome. Furthermore, this effect is more visible on the attitudinal outcomes than the behavioural outcomes. They also found support for their hypothesis that studies which utilised global measures of content exhibited a greater effect size than those that relied on composite scales. Additionally, their study suggests that there was greater probability that individuals will perceive a psychological contract violation with the type of contract was a transnational rather than a relational one.

Cantisano and her colleagues also used the meta-analysis technique on a sample of forty-one independent studies which had measured the outcomes of psychological contract breach on work-related outcomes (Cantisano et al., 2008). Their study reaffirmed the findings of previous studies that the perceptions of psychological contract breach had a medium effect size on both desirable and undesirable work-related outcomes. They also concluded that this perception of contract breach had a greater impact on the attitudinal work-related outcomes rather than behavioural ones. Furthermore, Cantisano and her colleagues also tested for moderation effects using different variables. They found support for their hypothesis that trust and organisational commitment mediated the effect of perceived contract breach on work-related outcomes.

The important conclusions that can be drawn from the above discussion on the breach of the psychological contracts and its outcomes are that such breaches do influence desirable and undesirable work-related outcomes. Research indicates that such violations influence attitudinal outcomes more than behavioural outcomes, and this can be attributed

to the fact that people tend to maintain their in-role effectiveness in order to avoid redundancy or the threat of redundancy. Corollary to this, individuals tends to disinvest from extra-role discretionary effort in order to express their disappointment as that is less visible. Finally, trust mediates the effect of the violation on the work-related outcomes, and it can be argued that that the strongest repercussion of the violation of the psychological contract is the deterioration of trust, which serves as the base for the employee-employer relationship.

2.7 Critic of Rousseau's Conceptualisation

Conway and Briner (2009) acknowledge Rousseau's contribution in reinvigorating interest in psychological contract, but they see her reconceptualisation as tethering a number of conceptual issues to the construct. Conway and Briner (2009) argue against the wholesale dismissal of the literature that pre-dates Rousseau's work. They point to a number of gaps in the current literature on psychological contracts and argue that future researchers should approach the subject with an inclusive approach, where the differing views on the psychological contract theory are acknowledged and worked into their relevant research efforts.

Conway and Briner based some of their criticisms of Rousseau's conceptualisation of the psychological contract on the debates between the Guest (1998) and Rousseau (1998), and Meckler, Drake, and Levinson (2003) and Rousseau (2003). Guest (1998) objected to the drawing of parallels between legal contacts and psychological contracts and relegated the later by labelling them as hypothetical construct, drawn, probably inappropriately, from a legal metaphor" (p. 650). Rousseau (1998) responded to Guest's objections by contradicting his claim that she or other researcher, who base their work on her conceptualisation, try to equate psychological contracts with legal contracts. She further asserts that both legal scholars and social scientists benefited from the theory of psychological contract when it came to explaining how observations shaped the interpretation of the agreements.

Paraphrasing Macneil she notes that:

> "All legal contracts are fundamentally psychological, even those formally written and executed with a roomful of lawyers surrounding the principals. In effect, all agreements between people are subject to interpretation. Therefore, psychological contracts that are, the beliefs individuals hold regarding exchange agreements can arise in a myriad of circumstances, from employment to customer–firm relations to doctor–patient interactions, where there are written as well as unwritten agreements (Rousseau, 1995). In this manner, psychological contract research can inform legal scholars about the psychological processes underlying the behaviour of contract parties" (Rousseau, 1998, p. 666).

A far more sensible criticism of Rousseau's conceptualisation was asserted by Meckler et al. (2003). They sought to correct the chronological record by rebuking the general perception that Levinson et al. (1962) in their original work borrowed the term Psychological contract from Argyris (1960). They contend that Levinson's use of the term was original and was intended to emphasise the psychological aspect of work life. For these authors, the current concept of psychological contract was such that had divorced the concept of the psychological contract from its foundation in clinical psychology. To this extent they put forward a definition of psychological contract, which firmly places it in the realm of clinical psychology:

> The psychological contract is an agreement between management and an employee that the employee will be placed in situations where his or her needs for affection, aggression, dependency, and achievement of ego ideals can be adequately met. As long as these goals remain reasonably attainable, the employee is naturally motivated to work to fulfil these needs. In exchange for the opportunity to fulfil these psychological needs, the employee puts forth effort toward productive work that benefits the firm" (Meckler et al., 2003, pp. 217-218).

Meckler et al. (2003) propose to view the psychological contract as a

tool to assess how ensuing organisational changes influence individuals within the organisation. Individuals resist change because they fear that it will adversely influence their organisation's ability to meet their psychological needs to achieve their "ego-ideal". The "ego-ideal" describes the desires of individuals of who they want to be. This idea of who a person should be is shaped by one's family, friends, society in general and the organisations at a later stage. To achieve their ego-ideals individuals volunteer their productive efforts to organisations who they feel would meet their needs in achieving this state. The attainment of ego-ideal is seen as a motivator that is associated with self-esteem and self-efficacy. People with high-self-efficacy tend to believe in their abilities to bridge the gap between who they think they are and who they want to be. Alternatively, individuals who believe that the gap between their current state and their ego-ideal is too wide will suffer from low self-esteem.

Describing how the psychological contracts are formed, Meckler et al. (2003) write that:

> In Levinson's model, a psychological contract is formed from the mutual expectations of the person and a company. Each person brings to the organisation preexisting expectations regarding how his or her psychological needs are going to be met in the organisation. These expectations change over time and may be largely unconscious. They include (a) core expectations that influence the person's evolving needs for affection, dependency, and aggression; (b) process expectations that allow for changing self-identity and continuing growth into new occupational roles as they mature; and (c) a range of other assorted work and relational expectations. The company also has expectations regarding its own role and demands in relation to the behaviour and performance of the employee. An implicit psychological contract results when the individual and the organisation achieve a mutually beneficial working arrangement that satisfies each other's psychological needs (Meckler et al., 2003, p. 222).

Rousseau (2003) asserts that Meckler et al. (2003) have overempha-

sised the importance of self-esteem as a motivational driver. Citing the work of Dawes (1994) she argues that self-esteem might be a good thing but it is not absolutely essential for mental wellbeing. She notes that even individuals with low self-esteem can live better lives, become good parents and exhibit other attributes associated with mental health. Furthermore, Rousseau also argues against confining psychological needs to the four factors (dependence, aggression, affection, and achievement) listed by Meckler et al. (2003). She attributes this misconception to attribution bias, where the underlying cause of the phenomenon is misconstrued (Rousseau, 2003). She notes that:

> Now that the pervasiveness of attribution biases has been recognised, we should be skeptical of generalised frameworks of human motivation that are based on narrow populations or particular points in time, and reluctant to impose a framework on one group if it was derived from another. The core ideas here are bias and lack of generalisability. That Maslow's seminal research was largely grounded in the psychic distress of affluent New Yorkers in the 1950s is one explanation for the failure of subsequent research on the need hierarchy to account for the behaviour of women and minority men (Rousseau, 2003, p. 232)

Rousseau (2003) is of the view that the psychological aspects of psychological contract formation can be best understood if they are considered as mental schemas. A schema (from Latin; plural schemas or schemata) is a mental framework of interrelated concepts, that grows with experience and which is used to make sense of everyday occurrences (Sternberg, 1999). With time individuals will as they mature and observe different behaviours, encounter situations of conflict or agreement, and undertake retrospective analyses of their own behaviours construct these cognitive structures to account for their experiences. Schemas are also important to understanding the concept of learning (Sherwood & Lee, 2003), which is seen as a process through which schemas are formed or rearranged.

Describing psychological contracts as schemas can improve our understanding of a number of key concepts related to Rousseau's conceptualisation of the term. For example, Rousseau and her colleagues emphasise on the importance of implicit promises, which they define as 'interpretations of patterns of past exchange, vicarious learning (e.g. witnessing other employees' experiences) as well as through various factors that each party may take for granted (e.g. good faith or fairness Robinson et al., 1994, p. 246), and beliefs 'based upon both inferences and observations of past practice' (Rousseau, 1990, p. 390).

Schemas that persist over time become entrenched and are thus hard to be changed. This becomes problematic considering the fact that certain schemas are shaped by the organisations themselves (Rousseau, 2003). This explains the resistance organisational change initiatives encounter when it comes to changing these core assumptions. The underlying reason for this resistance is that individuals start to rely on their old schemas to discern the occurrences they face in the workplace. Furthermore, individuals fall back on these schemas to predict future contexts and to how they will deal with them (Rousseau, 2001).

Continuing her discussion on how a deeper understanding of psychology can be helpful for the psychological contract research, Rousseau (2003) discusses the social and cognitive psychology of 'agreement'. Rousseau parted from the previous conceptualisation of agreement by proposing that perception of mutuality was more important than a mutually held agreement. Rousseau concedes that this aspect of her conceptualisation is the most under researched. Very few studies have looked at how the different parties to the psychological contract come to a consensus with regards to the contents of the contract. Those that have been carried out (see for example Dabos & Rousseau, 2004; Tekleab & Taylor, 2003) fall short at explaining how the parties to the contract come to an agreement (Rousseau, 2003).

It is a well-known fact that individuals generally function under the assumption that others hold beliefs similar to their own. This can lead to perception of agreement, but which are based on a false sense of consensus (Rousseau, 2003). As for mutuality 'in fact' the parties to the

contract have to have access to equal and similar amount of information. They should be able to apply a similar interpretation to the information presented and arrive at similar conclusions (Rousseau, 2003). In real life this is hard to come by, because of the difference in relational factors of the parties. Rousseau lists these factors as 'relative differences in experience, power, and expertise'. These factors can influence the level of access to information the different parties to the contract would enjoy, and the meanings they will attribute to the information available to them. Research does indicate that organisations can overcome these hurdles, at arriving at a consensus, by undertaking efforts to maintaining open communication links and giving equal and transparent access information to all its agents (Wanous, 1982).

Mutuality can also be understood from the relational practices point of view. The proponents of the relational view (Fletcher, 2001) point to the helping behaviours employees undertake to help others and in return create outcomes that lead towards common benefits for all those involved in the effort. These extra role efforts form the basis of mutuality as they result in strengthening the relationship bonds between the different agents within the organisation. Rousseau (2003) argues that this way of looking at the relationship is more akin to a 'we approach'. Whereas the traditional view of looking at the relationship with the organisation was more rooted in the Freudian view of individualism, or the 'I approach'.

The previous section discussed one of the main concerns raised by Conway (2009) that the current conceptualisation of the psychological contract has moved too far away from how it was initially conceived. The following section will cover the other two important issues that Conway and Briner (2009) point to, which are central to the current study. The first of these is a conceptual issue and has to do with the parties to the psychological contracts. Conway and Briner (2009) ask an important question, "Who or What Are the Parties to Psychological Contract?". The second issue involves the choice of research methodologies that are in vogue with the contemporary researcher of psychological contracts. Conway and Briner (2009) note that there has been an over reliance on

a single research method (the quantitative survey method) and this lack of diversity in methods selection cast a negative light on the viability of psychological contracts as a construct worthy of attention. The issue of methodology will be addressed in a later chapter, the following section will present the foci-specific conceptualisation of psychological contracts as a possible answer to the question of who are the parties to the psychological contract.

2.8 Making the Case for a Multi-Foci Conceptualisation of Psychological Contracts

A majority of the current psychological contract research has predominantly focused on the unitary employer as the counter-party of the employees' psychological contract. This has led to most studies identifying the organisation/employer as the source of psychological contact breach and also the target of the adverse reactions associated with psychological contract breach (Conway, Kiefer, Hartley, & Briner, 2014; Dawson, Karahanna, & Buchholtz, 2013). This is surprising considering that most organisations are multilevel structures where different agents (such as the managers at different level, co-workers, and clients), and policies (such as the HR policies) interact with an individual employee, which can in return shape his or her psychological contract. A key conceptual question, as Conway and Briner (2005) rightly ask, is who, or what, do employees perceive to be the organisation? This is a question that has yet to be addressed by the literature on psychological contract theory.

Conceptualising the psychological contract as a reciprocal exchange between the focal-person and a unitary employer negates the structural makeup of the modern organisations (Cullinane & Dundon, 2006). Organisations are nested-structures whereby a larger group (the organisation as a whole) contains a sub-group (departments, units, and project-teams), which in return might themselves be made up of yet smaller groups. The more bureaucratic the organisation the more levels it would have. Flatter organisations are organised into fewer levels. Each upper level group provides the context for the lower-level group. For ex-

ample, the performance of two different teams will be dependent on the leader-member exchange (LMX) between the team-leaders and the team-members (Herman, 2014). This relationship between team performance and LMX would also be subject to another important contextual variable that is POS, a measure of how much support the team-leaders perceive that they are receiving from the organisation (Guchait, Cho, & Meurs, 2015).

In the following paragraphs a conceptualisation of the psychological contract as a multi-foci construct is presented. This conceptualisation is based on the target-similarity model presented by Lavelle et al. (2007). Marks (2001) also calls for a foci-specific conceptualisation of the psychological contract construct. This review will start with an introduction of the target-similarity model, focusing on its theoretical underpinnings. This is then followed by a brief review of literature that supports the target specificity argument. This review will touch upon studies on constructs grounded in social theory, including constructs such as organisational commitment, organisational citizenship behaviour, job satisfaction, and the various organisational support constructs, that support the target-similarity model.

2.8.1 Target-similarity model

The target-similarity model, proposed by Lavelle et al. (2007), is grounded in social exchange theory (Blau, 1964). The premise of this model is that individuals form different exchange relationships with different entities in the organisation (the organisation itself, supervisors, peers, and customers), and that the employee differentially behave towards these foci based on the quality of their relationship with the respective foci (Conway et al., 2014). Explaining the target-similarity model in the context of psychological contract breach, Conway et al. (2014) posit that if an individual perceives that his/her psychological contract has been breached by the organisation, his/her reaction will be targeted towards the organisation rather than towards co-workers or clients. This differential response can be explained by the concept of reciprocity embedded in social exchange theory. When employees perceive that an entity has breached

their psychological contract, they will try to bring balance into that specific social exchange, by withdrawing any reciprocal benefits that were being directed towards that entity. The individual would not be willing to risk the quality of his/her social exchange relationship with organisational agents that have not breached his/her psychological contract, because doing so would risk the reciprocal benefits that they are receiving from those agents (Conway et al., 2014).

Lavelle and his colleagues also refer to the theory and research on attitudes-behaviours relationships (Lavelle et al., 2007). The research on attitudes-behaviours linkages is a long standing strain of research which focuses on establishing a relationship between attitudes and behaviours. Although both these terms seem conceptually related, the empirical evidence to support the linkages between these two is limited. Faced with this conceptual challenge researchers set forth important conditions, under which they were able to arrive at some significant findings in this regard. They posited that the attitudes and behaviours that were being researched should have similar scope (Lavelle, Brockner, Konovsky, Price, & Henley, 2009). This idea is embedded in Fishbein and Ajzen (1975) theory of reasoned actions (TRA), which stipulates that a behaviour can be accurately predicted based on attitude towards it, if both the predictor and outcome constructs share the same context, timing, and targets (Lavelle et al., 2009).

In order to explain the concept of similarity of scope (Lavelle et al., 2009) posits that an individual's behaviour towards a target can only be predicted by attitudes towards that specific target, and not by attitudes towards different targets or groups of targets. For example, a person's willingness to share knowledge (a kind of OCB) with his peers can be best predicted by that person's attitude towards his peers, and not by his attitudes towards his supervisor or the organisation as a whole. The present thesis aims to build on this argument that target specific work-attitudes (satisfaction in specific) and work-related behaviours (OCBs in specific) can best predicted by a target specific or foci-specific psychological contract breach or fulfilment.

In setting the theoretical foundation for their model Lavelle et al. (2007)

also refer to Lawler's (1992) theory. Lawler's theory is based on theories of motivation, more specifically on the principle that individuals value self-determination, choice, and discretion. Lawler also adopts from the work of Kanter (1972) the idea that the relationships individuals form with collectivities (person-to-collectivity attachments) are theoretically and empirically different from the person-to-person attachments that they might have. Inherent in this is Lawler's proposition that individuals can distinguish between the sources of choice and are thus able to reciprocate affective attachment to those entities that afford them this choice, and weaken their ties with those limiting their choice. Lawler further adds that in nested structures, where groups are made up of subgroups, the proximal groups command an advantage over distant groups in that they have far more face-to-face interaction with the focal-person. Corollary to this, Lawler (1992) proposed that individuals who experience their need for choice fulfilled will show greater positive intent towards the proximal subgroups (for example, a team-member or immediate supervisor) than towards the distant larger groups (the team-leader or the organisation as whole). Furthermore, that the non-fulfilment of this need will reduce the affective commitment to the distant larger group (for example, the team-leader or the organisation as whole) more than it will with the proximal sub-group (team-member or immediate supervisor).

The ideas put forward by Lawler (1992) are tangentially related to the concept of psychological contracts. Lawler's premise is that individuals are motivated to strengthen their sense of control over decisions and outcomes that might influence them. In return for this, they are willing to show affective commitment towards entities that provide them with this sense of control. This forms the basis of social exchange relationship between the focal-person and the other party to the exchange whereby choice is exchanged for affective commitment. Furthermore, within the context of an organisation (as a nested-structure) the focal-person can distinguish between entities (both proximal and distant) that are contributing to or curtailing their choice. As such, it becomes logical to view each individual social exchange between the organisational entities

(both proximal and distant) and the focal-person as distinct psychological contracts (Mueller & Lawler, 1999).

Using their model Lavelle et al. (2007) were able to show a positive foci-specific relationship between organisational commitment and organisational citizenship behaviour (OCB). They found support for their hypothesis that commitment had a mediating effect on the relationship between procedural fairness and OCB. They conceptualised OCB as a foci-specific construct and measured OCBs that were directed at the organisation and OCBs that were directed toward the work-group members (which they labeled as OCBI). Similarly, they also used a foci-specific measures of commitment to measure commitment towards the organisation and commitment toward the work-group. Lavelle et al. (2009) acknowledge that having a multi-foci/target specific model helped them at arriving at better results and were able to provide a new perspective to their overall research area.

A number of research studies, in the broader area of social exchange relationships within an organisational setting, have reported effects similar to those described by target-similarity model (Lavelle et al., 2007). This stream of research has helped in developing foci-specific conceptualisation of some of the most important organisational constructs, such as commitment, support, social exchange, OCBs, and Justice. Salient among these are studies focusing on foci-specific support constructs that are Perceived Organisational Support (Kurtessis et al., 2015; Maertz, Griffeth, Campbell, & Allen, 2007; Settoon, Bennett, & Liden, 1996a; Stinglhamber & Vandenberghe, 2003), Perceived Supervisor Support (Liaw, Chi, & Chuang, 2009; Maertz et al., 2007; Stinglhamber & Vandenberghe, 2003), and Perceived Coworker Support (Liaw et al., 2009; **?**). In the following sections we provide some examples of these studies.

2.8.2 Foci-specific commitment studies

Organisational commitment was one of the first constructs to be conceptualised to reflect different targets of attachment within an organisational setting. Reichers (1986) was one of the first proponents of this conceptualisation. Her basic argument was that the traditional con-

ceptualisation of organisational commitment focused on organisations as singular entities and overlooked the multiple constituencies within the organisations with which individuals' formed independent attachments. These may include the supervisor, work-group or team members, unions, customers, and the organisation itself. She also goes on to explain that individuals formed stronger attachments to psychologically proximal entities such as the supervisors and peers, than to entities such as unions and customers (Lavelle et al., 2007).

Riketta (2005) draws support from multiple sources in favour of the argument that individuals establish stronger attachments with proximal entities (such as work-groups) than with distal entities (such as the organisation). From Brewer (1991) optimal distinctiveness theory she extrapolates that individuals strive to retain their individual identity and at the same time also desiring to be a part of a social group. These mutual needs can be best attained by seeking membership of smaller groups than larger ones. Due to this advantage that the small groups (such as teams or work-groups) offer, individuals form stronger attachments with them than with larger groups (that is the organisation). Additionally, Riketta (2005) argues that individuals feel more similar to individuals within their workgroups than with individuals from other parts of the organisation and that overtime the workgroups exerts far more power on its members than the organisation. Riketta also posits that the flattening of organisation has also increased the attachments of the individuals to the work-groups more so than with the organisations. Finally, Riketta adopts from Lawler (1992) the concept of 'cognitive proximity' to argue that individuals tend to be strongly attached to proximal entities such as the workgroup because they attribute a greater sense of control to them.

Taking advantage of the multi-foci conceptualisation of commitment, Morin et al. (2011) were able to prove the target-similarity effect between foci-specific commitment and OCBs across four foci: (1) organisations, (2) supervisors, (3) co-workers, and (4) customers. They found support for their main hypothesis that commitment to co-workers, customers, and supervisors had a strong influence on OCBs directed towards these foci. They gathered the commitment data from the respondents

and the OCBs data from the respondents' supervisors. By doing so they could match a respondent's level of attachment to a specific foci and compare that against their willingness to direct OCBs towards that foci. Based on their findings, Morin et al. (2011) recommended that organisations should work towards strengthening their employees' local attachments, to the supervisor, peers, and customers as these were better predictors of OCBs directed at these foci than the global commitment to the organisation. Becker, Billings, Eveleth, and Gilbert (1996) had also arrived at a similar conclusion with their study and proclaimed that commitment to the supervisor was a better predictor of individual's performance than commitment to organisation.

Bishop and Scott (2000) were able to prove that commitment to the work-group was distinct from commitment to the organisation. Their model incorporated two dimensions of conflict i.e. inter-sender conflict and resource-related conflict. Inter-sender conflict occurs when a person receives conflicting instructions from different sources, or when the instruction is against the organisation's policies. Resource-related conflict occurs when a person perceives that he is not receiving sufficient resources to fulfil the requirements of his role. Bishop and Scott (2000) also incorporated into their model satisfaction with co-workers and satisfaction with supervisors. Their final model predicted inter-sender conflict and satisfaction with co-workers having a stronger influence on commitment with the team than with the organisation. Similarly , their model predicted that resource-related conflict and satisfaction with the supervisor would have a stronger influence on commitment to the organisation than on commitment to the team. An interesting aspect of their study is that they used the supervisors as proxy for the organisation and thus were able to identify only two foci of commitment.

Askew, Taing, and Johnson (2013) tested three competing hypotheses to test the relationship between multi-foci commitment and foci-specific work-related outcomes. The first of these hypotheses was based on the target-similarity effect predicting that each foci-specific commitment will have a greater influence on the work-related outcomes associated with that foci. Their second hypothesis was based on Lewin's (1943) field the-

ory, which stipulates that an individual's behaviour is shaped by proximal environmental elements than by distal elements. This is also the base for the *salience hypothesis* which argues that employees' behaviours can be best predicted by their commitment to the most proximal organisational foci. This is owing to the greater role these entities play in the employees' work-life (Lawler, 1992). The third hypothesis that Askew et al. (2013) tested was that the commitment to the supervisor would have a stronger influence on the outcomes relating to the peers and the organisation. Furthermore, this influence will be greater than the influence the commitment to these foci will have on these outcomes. This elevated *supervisor effect* is attributed to the formal authority that supervisors have over the peers (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002), and because organisations function and implement most of their strategies and polices through the supervisor (Chen, Tsui, & Farh, 2002).

The sample used by Askew et al. (2013) included 279, full-time employed, students registered in an undergraduate program. The participants were requested to distribute surveys among their supervisors and co-workers. The supervisors were used as raters for the participants' task performance, and OCB measures directed to the organisation and the supervisors. The co-workers rated the participants' OCB measure directed to the co-workers. From their analysis Askew et al. (2013) concluded that the supervisor hypothesis was the one that best explained the relationship between foci-specific commitment and foci related work outcomes. Their results indicate that commitment to the supervisors was not only a better predictor for the supervisors related work outcomes, but it had a stronger influence on the organisation and co-workers related work outcomes than the commitment to these foci. In essence, data collected by Askew et al. (2013) indicates that there is a strong spillover effect of commitment to supervisor on work outcomes that are related to the organisation and the co-workers (Conway et al., 2014).

Chen et al. (2002) conducted a study to determine the relationship between target specific commitment and performance. Their study provided an international expansion to sample settings by using a Chinese

sample. They focused on the organisation and the supervisors as the targets of the commitment and operationalised performance as in-role and extra-role performance. An extended version of the loyalty to supervisor scale developed by Becker et al. (1996) was used for this study, which included some items that were further developed for this study. They used two different scales to measure the different dimension of organisational commitment i.e. values commitment and commitment to stay.

The key findings from this study by Chen et al. (2002) were that commitment to the supervisors is a better predictor of both in-role and extra-role performance. Furthermore, that employees' performance was strongly related to their dedication to, and their desire to go the extra mile for their supervisors. Chen et al. (2002) categorically point out that this increased relevance of the commitment to the supervisor was not due to the intrinsic characteristics of Chinese culture but that similar results could be replicated in other cultures also. They do acknowledge that these effects would be more evident in cultures which can be rated high on the authority distance measure i.e. cultures where those in positions of authority are respected and by virtue of their position demand obedience.

In addition to the commitment literature the support literature has also introduced constructs that focus on specific sources of support within the organisational setup. Previous research has established the positive relationship between perceived organisational support (POS) and job satisfaction (Ndiwane, 1999; Rhoades & Eisenberger, 2002), organisational commitment (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002; Wayne, Shore, & Liden, 1997), citizenship behaviour (Coyle-Shapiro & Conway, 2005; Lavelle et al., 2009; Wayne et al., 1997) , voice behaviour (Loi, Ao, & Xu, 2014), and and negatively influence intentions to quit (Rhoades & Eisenberger, 2002; Wayne et al., 1997), and turnover (Eisenberger et al., 2002; Maertz et al., 2007). Similarly the perceived supervisor support (PSS) has been shown to have negative influence on turnover (Eisenberger et al., 2002; Maertz et al., 2007), and positive influence on commitment to the supervisor (Stinglhamber & Vandenberghe, 2003), job satisfaction (Chou & Robert, 2008;

Shacklock, Brunetto, Teo, & Farr-Wharton, 2014), and citizenship behaviours (Chen & Chiu, 2008). Studies have also proven that perceived coworker support (PCS) has a positive influence on job satisfaction (Chou & Robert, 2008; Ndiwane, 1999), promotive voice (Loi et al., 2014), and and negative influence on turnover intentions (Karatepe, 2012). Overall, studies exploring differences in foci at the organisation (POS) and supervisor (PSS) are similarly related to job outcomes. Following is a brief summary of some of the multi-foci support studies.

2.8.3 Foci-specific organisational support studies

The central tenet of the organisational support theory is that employees develop beliefs regarding the extent their employers value their effort and are concerned about their well-being (Rhoades & Eisenberger, 2002). This reinforces the employees commitment to the organisation; because they develop a relationship of trust where they believe that the organisation will provide them with the required support to carry out their job functions and to counter any job related stress. Studies have shown that employees can distinguish between the sources of support and adjust their work-related outcomes towards a particular source of support. For example, Stinglhamber and Vandenberghe (2003) used their study to empirically prove that employees view supervisors as a distinct source of support and target for commitment. They conducted a longitudinal study using a sample of 238 employees. They report that commitment to the supervisors mediated the influence of perceived supervisor support on turnover. On the other hand they could not prove any significant relationship between turnover and affective commitment to the organisation or perceived support from the organisation. Guchait et al. (2015) also reported a similar relationship between perceived supervisor support and the employees' intent to leave. They concluded that perceived supervisor support contributed to the positive perception of perceived organisation support, which in return ensured the fulfilment of the employees' relational psychological contract. Guchait et al. (2015) concluded that fulfilment of the relational psychological contract decreased the employees' intention to quit. Similarly, in their meta-analysis, Kossek,

Pichler, and Bodner (2011) found supervisor support was an antecedent to organisational level support constructs.

Co-workers are also an important source of support and the support they provide is distinct from the support provided by the organisation and the supervisors (Sanchez, Pastor, & Rodriguez, 2012). Using a longitudinal data sample from 141 participants, Loi et al. (2014) were able to show that co-workers support influences employees' voice and that this effect is distinctive from the effect perceived organisational support has on employee's voice. They operationalised voice as promotive and prohibitive voice, and were able to show that perceived organisational support had a stronger influence on promotive voice as compared to perceived coworker support. They also report that perceived coworker supportwas not related to prohibitive voice, but was significantly related to the workers' psychological stress. On the other hand, Perceived organisational support was significantly related to prohibitive voice but had no influence on the workers' psychological stress. Similarly (Tucker, Chmiel, Turner, Hershcovis, & Stride, 2008) reported that co-workers support positively influenced employee voice.

Sloan (2012) reported that individuals who enjoyed co-workers support felt less stressed out in the face of mistreatment by others, as compared to those individuals who reported low level of co-workers support. For their study, Sloan (2012) tested the stress-buffering hypothesis using a sample of more the 1500 public service employees. The results from these study shows a positive correlation between perceptions of being treated unfairly and increased psychological distress. Confirming the results from previous research studies on the stress-buffering effect of co-workers support, the data from the study by Sloan (2012) also confirmed that individuals with supportive co-workers tend to have lower levels of psychological distress when faced with unfair treatment by the supervisors.

In addition to these foci-specific support constructs the quality of relationship between the employees and their supervisors and co-workers has also be analysed using the constructs of leader-member exchange (LMX), and team-member exchange (TMX). Both these constructs are

grounded in the theory of social-exchange (Blau, 1964) and describe the quality of the employees' relationship to these proximal organisational entities. These constructs also provide a clear reference to the target-similarity effect because of their focus on the employees' relationship with a specific targets (i.e. the supervisor and co-workers). Following is a brief review of the foci-specific social-exchange literature.

2.8.4 Foci-specific social exchange literature

Studies on LMX have provided empirical evidence of its influence of a number of important work-related outcomes such as performance (Scandura & Schriesheim, 1994; Wayne et al., 1997), favour doing (Wayne et al., 1997), perceptions of psychological contract fulfilment (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008) and target specific OCBs (Ilies, Nahrgang, & Morgeson, 2007; Wayne et al., 1997). In addition to this direct effect, previous studies have also proven the mediating influence of LMX on the relationships between personality traits on the perceptions of psychological contract breach (Kunze & Phillips, 2012), and between i-deals and OCB (Anand, Vidyarthi, Liden, & Rousseau, 2010). Liao, Liu, and Loi (2010) also report that LMX and TMX can have mediating effects on the relationship between self-efficacy and creativity.

Wayne et al. (1997) conducted a study to prove the that LMX was distinct construct from perceived organisational support (POS). Their sample was based on 570 employees and 289 managers of a large US organisation. Employees' performance was recorded using their most recent performance ratings. Data was collected to measure important antecedents for both POS and LMX which included developmental experience, promotions, organisational tenure, liking, and expectations. Data was also collected to measure important work-related outcomes associated with the two constructs. The outcome measures included affective commitment, intention to quit, performance ratings, OCBs, and favour doing (a kind of OCB directed at the supervisor).

Through the use of confirmatory factor analysis, Wayne et al. (1997) were able to prove that LXM and POS were two distinct and important constructs while both being related to key work-related outcomes. Their

results also support the target-similarity effect for example, they found support for their hypothesis that LMX will be a better determinant of favour doing (a behaviour targeted at the supervisor) than POS. On the other hand, POS had registered a stronger influence of outcomes which could be clearly directed towards the organisation as a whole, such as effective commitment to the organisation and intentions to quit. They were also able to show that in addition to being distinct from POS, LMX also contributed to favourable POS among the employees.

Similar to LMX, TMX is also target-specific social exchange construct which represents an individuals quality of relationship with his/her peer group (Seers, 1989). Seers (1989) bases his argument on the importance of co-workers as role-senders as highlighted by the research on role-making. This line of enquiry suggests that employee occupy a specific role within the organisation framework. Thus, that role in return interacts with other roles, as defined by the organisational policies. It then follows that the behaviours of an occupant of a specific role are shaped by the interactions with the occupants of the roles that interact with the focal role. These roles, that the focal role interacts with, are labelled as role-senders, and the most important role-senders are supervisor and team-member (Seers, 1989). The role of TMX becomes even more important in self-managed teams, where the authority for major decision making is transferred from the supervisor to the team.

Seers (1989) collected data from an organisation in the industrial manufacturing sector. The organisation was undergoing a change process and had initiated a process of empowering the teams. A quasi-experimental design was used to compare teams that had been empowered against a control group of teams which functioned in the traditional manner. Data were gathered to measure for group dynamics, decision locus, autonomy, intrinsic satisfaction with work itself, overall satisfaction, and supervisory satisfaction. The take-away from Seers (1989) research is that members of self-directed teams exhibit improved TMX, in that members of these teams frequent in reciprocating positive behaviours, they experience greater cohesion, and decision making becomes a group activity rather than an individual prerogative. All these feature help the teams

with greater TMX improve their group effectiveness.

In the previous sections we discussed studies and research that provided support for the target-similarity model as presented by Lavelle et al. (2007). The underlining argument of this body of research is that behaviours towards a specific entity can be best described by attitudes towards that entity and not by the individuals general attitudes. Researchers within the field of psychological contract research have started taking interest in the target-similarity model, and work has started to appear that looks at foci-specific psychological contracts. This line of research is in its nascent stage and has yet to be adopted wholesale into the literature on psychological contract. The following section presents literature that looks at foci-specific psychological contracts. Initially, studies that have called for the adoption of this conceptualisation will be presented, followed by examples of studies that have used foci-specific constructs of psychological contracts.

2.8.5 Multi-foci psychological contracts

Theoretically, the current conceptualisation of psychological contracts by Rousseau has provisions that support the formation of multiple psychological contracts between the focal-person and the various agents of the organisation, contracts that go beyond the employee-employer relationship (Rousseau & Tijoriwala, 1998). This is apparent from Rousseau's (1989, p. 123) definition of the construct as 'an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal-person and another party'. Attention should be directed to her use of the term 'another party', which can imply with any agent of the organisation. Nevertheless, this aspect of psychological contract theory has yet to receive consideration from researchers. To this end, Rousseau sees a need for researchers to explore how employees form psychological contract with parties such as team members, outsourced relations, guest workers from other firms, clients, and patients (Rousseau & Tijoriwala, 1998). Similar calls has been made by Marks (2001) and Conway and Briner (2005).

Shore et al. (2004) also argue for the inclusion of the multi-foci conceptualisation into the psychological contract theory. All these authors draw parallels between psychological contracts and the constructs of LMX (Leader Member exchange), TMX (Team Member exchange), and POS (Perceived Organisational Support). They posit that these constructs explain aspects of the overall employee-organisation relationship (EOR). The construct of LMX represents the social relationship between the leaders and their followers, whereas the construct of TMX is representative of the quality of an individual's relationship with his/her team-members (Seers, 1989). Lastly, POS represents an individual's perceptions with regard to what has been received from the organisation in the form of resources and support (Shore et al., 2004). Building on the apparent similarities in these constructs and psychological contracts, Shore et al. (2004) propose that individuals may develop foci-specific psychological contracts with each of these three foci (organisation, supervisors, and peers), similar to the foci-specific social exchanges that they have with these parties (POS, LMX, TMX). The present thesis uses these three parties as the logical expansion of foci-specific psychological contract relationships.

Studies have started to look at psychological contracts beyond the traditional employee-employer contracts. For example, Sverdrup and Schei (2013) provide a strong case for conceptualising the psychological contract at the group level and focusing on the peers as the second party to the contract. They label these contracts as horizontal psychological contracts, which are in contrast to the traditional vertical psychological contracts. They base their argument on the increasing trend within organisations to decentralise their operations and of replacing their bureaucratic structures for flatter setups. These developments have led to the organisations relying on specialised teams or work-groups to achieve their functions. The performance of these team depends on how well the members of these teams cooperate with each other. Mutual cooperation results in the reduction of tension, conflicts are not only avoided, but when they arise the group resolves these conflicts promptly (Tjosvold & Tjosvold, 1995). This provides support to the above authors regarding

psychological contracts aimed at peers.

They also point to the power imbalance between the employees and the organisations, and even between the employees and the supervisors. This according to Sverdrup and Schei (2013) influences the formation of psychological contracts and cite the following from Rousseau to make their point:

> "Is the psychological contract truly a voluntary commitment to a set of obligations in circumstances where employees are very low in power relative to their employer?... At the very least, power differences can function as a boundary condition, limiting the circumstances in which the construct of psychological contract might apply" (Rousseau, 2011, p. 213).

The issue of this power-imbalance has also been discussed by Conway and Briner (2009) and alluded to by Coyle-Shapiro (2001). Building on this argument Sverdrup and Schei (2013) elaborate that horizontal psychological contracts, that are based on peer-to-peer interactions, resolve the theoretical issue of power-imbalance among the parties to the contract. This is, they argue, because peers and co-workers generally tend to have no authority over their fellow co-workers, and authority is the source of power-imbalance in vertical relationships. Thus, the aspect of voluntarism is more evident when conceptualising the psychological contract between peers rather than their traditional definition as governing the employee-employer relationship.

Sverdrup and Schei (2013) collected their primary data from the farming industry by interviewing members of different work-groups. Their primary research question were related to the content of the psychological contracts between the group members, the state of these contracts (whether they were fulfilled or breached), and the outcomes of the breach or fulfilment of these psychological contracts. Their analysis showed that in terms of content these horizontal psychological contracts had both functional and relational contents. They also concluded that for most part the functional contents of these psychological contracts were breached and not so much the relational contents. Finally, they concluded that the state of the horizontal psychological contracts influenced

the level of cooperation with the group, commitment to the group, team viability, and to some extent team performance.

Conway et al. (2014) explicitly used the target-similarity model to understand the effect of austerity policies on psychological contracts of public sector employees, and how this influenced their behaviours towards their organisations, co-workers and customers. The context for their research was the announcement of public sector austerity measures by the UK government. They conducted a longitudinal study and took measure prior to the implementation of the policies and after they were put in place. Conway et al. (2014) wanted to answer whether the austerity policies being introduced by the government (which constituted a psychological contract breach by the employer) would influence the public service workers OCBs directed towards their co-workers and customers. The two possible answers that they could have arrived at were that (1) there would be no effect of the psychological contract breach on the public sectors employees OCBs towards their co-workers and customer. This would have been in line with target-similarity model. The other possible outcome (2) would have been that the psychological contract breach will influence the public sector's employees OCBs towards their co-workers and customers. Conway et al. (2014) labelled this outcome as the spillover effect.

Conway et al. (2014) collected their longitudinal data on two occasion, six months apart. This stretch of time was aligned with the period of introducing the austerity policies and when they would eventually start to show their effect on the working of the study's participants. The results indicated that there will be no spillover effect of the psychological contract breach on the public sector employees' OCBs towards their co-workers and customer, and that the target-similarity model held. Offering an explanation for these results, Conway et al. (2014) noted that employees realise that it was the organisation which breached their psychological contracts and not their co-workers, in fact they will identify even more with their co-workers because they are also facing this psychological contract breach. Furthermore, the employees would not want to reduce their OCBs towards their co-workers because their co-workers

might reciprocally reduce the OCBs that they were directing towards them. With respect to the customers, Conway et al. (2014) argue that public sector employees feel a calling to help the public, and this keeps them intrinsically motivated to continue directing OCBs towards their customers even faced with the psychological contract breach by their employer.

Turnley, Bolino, Lester, and Bloodgood (2003) conducted a more specific study on whether the fulfilment of the relational and transactional aspects of the psychological contracts had distinct effect on OCBs directed at the organisation, and OCBs directed at the individuals within the organisation. Their scale for measuring psychological contract fulfilment only included items relating to the supportive employment relationship and pay. These items were adopted from the original scale developed by Robinson and Morrison (1995). The fulfilment of the relational aspects of the psychological contract were found to have a greater influence on the individuals OCB and performance related outcomes, than the fulfilment of the transactional aspects of the psychological contract. Furthermore, Turnley et al. (2003) reported that the fulfilment of psychological contract had a greater influence on the OCBs directed at the organisation than on the OCBs directed towards co-workers. A similar conclusion was also reported by (J. L. Johnson & O'Leary-Kelly, 2003), who reported that the psychological contract breach by the organisation will not influence the OCBs directed towards the co-workers.

Studies that have looked at the psychological contracts of temporary or contingency workers have inherently used a target-similarity model to explain the effects of psychological contract breach by the agency that employs the workers and the breach of their psychological contract by the clients of the agency to which they are contracted to. Most of these studies have shown that individuals respond to the breach of their psychological contracts, by targeting the firm that they perceive has breached their contract. In line with the target-similarity model, work-related outcomes of the individuals do not change for the non-breaching firm. For example, Dawson et al. (2013) reported that the breach of the psychological contract by either the agency or the client organisation will not influence

the OCBs directed towards the non-breaching organisation. Similarly, Lapalme and Simard (2011) reported that the breach of psychological contract by the agency or the client is related to the temporary worker's affective commitment to the party breaching the contract. Furthermore, data from the study by Lapalme and Simard (2011) reveals that the commitment towards the client organisation resulted in OCBs directed at the client.

In line with previous research findings, Lapalme and Simard (2011) concluded that workers' trust (in the agency and in the client firm) played a mediating role in the relationship between the perceived contract breach by the agency or the client, and the temporary workers' affective organisational commitment to their agency and the agency's clients. They also noted that the temporary workers' commitment to the client was directly related to the demonstration of discretionary behaviours on the client's site. Furthermore, they concluded that the commitment to the employing agency was directly related to commitment to the client, and finally, that psychological contract breach by the client is directly related to discretionary behaviours on the client's site.

Most of the studies reported above support the target-similarity effect. Some of these studies have also tested for the spillover effects of psychological contract breach on work-related outcomes (for example Conway et al., 2014). The spillover effect is the effect of psychological contract breach by one party on the behaviours towards the other non-breaching parties. The studies mentioned above could not find evidence for the spillover effects. The study by Bordia, Restubog, Bordia, and Tang (2010) is among the few which found support for the spill over hypothesis. They looked at cascading psychological contracts between a manager and subordinate and between the subordinate and clients. They were able to prove their hypothesis that the breach of supervisor's psychological contract by the organisation will lead to the supervisors breaching their psychological contracts with their subordinates, which in return results in a deterioration of customer service provided by the subordinates. Bordia et al. (2010) used social exchange theory to explain their findings. Inline with previous research on psychological contract, they conclude

that when the managers perceive that their organisation has violated their psychological contract they disinvest from discretionary behaviours that they use to direct towards their organisation and their subordinates. In return when the subordinates feel that their managers are no longer partaking in discretionary efforts they respond by reducing their own discretionary behaviours that were directed towards the customers. A salient feature of their study is that they included the breach of one psychological contract (manager and organisation) as the antecedent of a number of other psychological contract breaches (manager-subordinate and subordinate-customer). To this extent they added to the literature on psychological contract breach antecedents and outcomes.

In summary the target-similarity model, proposed by Lavelle et al. (2007), provides an opportunity to further our understanding of social exchange relationships at various organisational levels. This psychological contract theory can also greatly benefit from including the target-similarity model into its framework. This represents the next logical step in the evolution of the psychological contract theory which seems to be loosing researchers interest due to the staleness that is being experienced in its theoretical development.

Chapter 3

Developing the multi-foci hypothesis

3.1 Introduction

A number of studies were conducted for the current PhD. I address each one of these separately as studies 1 and 2 were slightly different, and study 3 was markedly different from the first two.

3.2 Study-1: Multi-Foci OCBs

Organisational citizenship behaviours are activities that are not assigned to any role description, but are nevertheless essential for the effective functioning of the organisation (Organ, 1988). Studies have started to emerge which are conceptualising OCBs as target-specific behaviours (Lavelle et al., 2007; Willenbrock & Grohmann, 2013). The rational being that most social exchange relationships are established with specific entities, and that individuals can differentially direct their behaviour towards these entities based on the quality of their relationships (Cropanzano & Rupp, 2008). Thus, organisational citizenship behaviours are not generic behaviours but can target co-workers or the organisation as a while (K. Lee & Allen, 2002).

Successive meta-analytic studies on the outcomes of psychological contract breach (Cantisano et al., 2008; Zhao et al., 2007) have confirmed its negative effect on OCBs. Thus, a breach in psychological contracts leads to lower engagement in helping behaviours. Very few studies exist that

have looked at the effect of foci-specific psychological contract breaches on foci-specific OCBs. The following contributes to the literature in this regard by looking at the influences of foci-specific psychological contract breach on foci-specific OCBs. To the best of my knowledge, the present study is the first attempt at empirically testing hypotheses relating foci-specific psychological contract breach to foci-specific OCBs, by simultaneously focusing on the organisation as whole, the supervisors, and the co-workers as the sources of psychological contract breach and targets of its outcomes. The following section will present a review of the literature which has incorporated the foci-specific conceptualisation of OCBs —

3.2.1 Review of studies focusing on foci-specific measures of OCBs

The social support literature provides and extensive coverage of organisation specific construct of support at different levels of a persons life, including the organisation. For example, this includes perceived organisational support (POS) and supervisor specific construct such as leader member exchange (LMX), and perceived leader support (Cropanzano & Rupp, 2008). A number of studies have looked at the effects of these constructs simultaneously on different work related outcomes. Findings from these studies indicate that POS influences organisational commitment, affective commitment, OCB, turnover intentions (Settoon, Bennett, & Liden, 1996b; Wayne et al., 1997) whereas LMX is shown to influence OCBs and job performance, doing favour's for one's manager (Kraimer, Wayne, & Jaworski, 2001; Settoon et al., 1996b; Wayne et al., 1997). Hence, support from different areas within an organisation might influence job outcomes differently.

With regards to the influence of POS on OCB different studies have yielded different results. For example, Settoon et al. (1996b) did not find any linkages between POS and OCB, whereas Wayne et al. (1997) did find that POS influenced OCB. Cropanzano and Rupp (2008) explain this contradiction in the results by pointing to the difference in the way OCB has been operationalised. Settoon et al. (1996b) used a measure of

OCB which only captured the altruism aspect of OCB, which are far more related to LMX then to POS, and hence their results indicated that POS had no influence on OCBs.

Similar results were obtained for the study conducted by Masterson, Lewis, Goldman, and Taylor (2000). They posited that individuals attributed different aspects of organisational justice to different foci within the organisation. From their results they concluded that individuals attributed procedural justice to the organisation and interactional justice to the supervisors. Their results also indicated that perceptions of interactional justice influenced supervisors related outcomes and this relationship was moderated by LMX. Whereas procedural justice accounted for the organisation related outcomes and this relationship was moderated by perceived organisation support.

In addition to the organisation and the supervisors, co-workers can also be an important source of social support and parties to social exchange. The literature on social exchange has introduced a number of coworker specific constructs such as TMX and perceived coworker support to understand the influence co-workers' behaviours have on work related outcomes (Chou & Robert, 2008; Karatepe, 2012; Loi et al., 2014; Ndiwane, 1999). Hence. We might understand support in the workplace to be global and over-arching from the whole organisation (i.e., perceived organisational support), as well as being specifically from the immediate leader (i.e., perceived supervisor support) as well as being from those in the immediate vicinity (i.e., perceived co-worker support).

Willenbrock and Grohmann (2013) developed a model of the influence of procedural justice on multi-foci OCBs, and incorporated the serial mediating effects of foci-specific trust and commitment. They used a time lagged survey design to survey 204 industrial workers over three years. Their results indicated that organisational trust and commitment to organisation mediated the effect of procedural justice on OCBs directed at the organisation, whereas trust in the coworker and commitment to the co-workers mediated the effect of procedural justice on OCBs directed at the co-workers. Their results reaffirmed the results of Lavelle et al. (2009), in that the mediating effect of commitment on the positive re-

lationship of organisational justice on OCBs is more evident when the targets of the commitment and the sources of justice were the same.

Kamdar and Van Dyne (2007) conducted an interesting study by looking at the interactive effect of personality and quality of exchange relationships on foci-specific outcomes. Relevant to the current discussion Kamdar and Van Dyne (2007) results confirm that individuals differentially reciprocate behaviours towards the peers and supervisors based on the quality of their exchange relationships with them. A notable finding from this study is that high quality of exchange relationships with the supervisor (measured with LMX) and the team (measure with TMX) can buffer the negative effects of certain personality traits on different work-related outcomes. They report that task performance is influenced by personality trait conscientiousness and LMX and not by TMX and the personality trait agreeableness. Furthermore, they reported that personality and LMX were the best predictors of OCBs directed at the supervisors, whereas personality and TMX were best predictors of OCBs towards the team-members.

The common theme that emerges from the studies that have been listed above is that OCB might be best predicted by models that incorporate the target-similarity effect (Lavelle et al., 2007). This pattern is also emerging in foci-specific psychological contract breach studies that have looked at OCB as an outcome. Most of these studies have been referred to in the previous sections, and overall findings suggest that target specific effect of psychological contract breach of foci-specific OCBs has been proven by Bordia et al. (2010); Conway et al. (2014); Dawson et al. (2013); Sverdrup and Schei (2013); Turnley et al. (2003). The conclusion that can be drawn from these studies is that relationship between psychological contract breach and OCBs can be better explained by adopting a multi-foci view of both constructs. In line with this research the primary hypothesis for this thesis is that when employees perceive that their psychological contracts have been breached by a specific agent or foci (i.e. the organisation, supervisor, or the peers), they will reciprocate by divesting from the OCBs that were directed towards them.

The premise for this hypothesis finds support from constructs such as

leader-member exchange (LMX), and team-member exchange (TMX) that are embedded in the social exchange theory (Cole, Schaninger, Harris, et al., 2002). It is also supported by the organisational support constructs i.e. the perceived organisational support, perceived supervisor support, and perceived coworker support (Ng & Sorensen, 2008). The Job Demands–Resource Model proposed by Bakker, Demerouti, and Verbeke (2004) also distinguishes between the organisation, the supervisor, and the co-workers as independent sources of job resources that are required to meet the resource factor in job demands and resources model. In combination these constructs include most of the content for a psychological contract, and the content can be distinguished on foci-bases. The above main hypothesis can then be represented by the following set of sub-hypothesis:

H_1 : Psychological contract breach by the organisation will be negatively linked to OCBs directed at the organisation (target-similarity effect).

H_2 : Psychological contract breach by the organisation will be negatively linked to OCBs directed at the (a) the supervisor and (b) peers (spillover effect).

H_3 : The target-similarity effect of psychological contract breach by the organisation on OCBs directed at the organisation will be greater than the spillover effect of psychological contract breach by the organisation on OCBs directed at the supervisor, and OCBs directed at the peers.

H_4 : Psychological contract breach by the supervisor will be negatively linked to OCBs directed at the supervisor (target-similarity effect).

H_5 : Psychological contract breach by the supervisor will be negatively linked to OCBs directed at the (a) the organisation and (b) peers (spillover effect).

H_6 : The target-similarity effect of psychological contract breach by the supervisor on OCBs directed at the supervisor will be greater than the spillover effect of psychological contract breach by the supervisor on OCBs directed at the organisation, and OCBs directed at the peers.

H_7 : Psychological contract breach by the peers will be negatively linked to OCBs directed at the peers (target-similarity effect).

H_8 : Psychological contract breach by the peers will be negatively linked to OCBs directed at the (a) the organisation and (b) supervisor (spillover effect).

H_9 : The target-similarity effect of psychological contract breach by the peers on OCBs directed at the peers will be greater than the spillover effect of psychological contract breach by the peers on OCBs directed at the organisation, and OCBs directed at the supervisor.

The focus for this study were multi-foci psychological contracts. Because more than one parties can breach their psychological contract with the focal-person at the same time, it would be logical to expect that these breaches will intensify each others effect on the work-related outcomes. As such, in addition to direct effects of psychological contracts negatively influencing OCBs, the present study also tests for interaction effects. In this regard, it explores the multiple effect of psychological contract breaches. Imagine an employee who perceives a breach from their organisation over a promise but then also a similar breach by their supervisor. While one form of foci-specific breach might dominate the influence on the same foci-specific OCB (i.e., supervisor specific psychological contracts breach to supervisor specific OCBs), what influence does the additional breach from the organisation play? The present study suggests that additional breaches from the other foci-specific psychological contracts will provide additional influence ultimately leading to lower foci-specific OCBs. Thus, an employee who perceives a breach from the

organisation, supervisor and co-workers is likely to engage in OCBs that are less than fellow workers who perceive only one type of psychological contracts breach (e.g., the organisation only). The present study suggests the multiple detrimental effects will be at both the two-way interactions and three-way interactions levels. Thus, two or three of the foci-specific psychological contracts breaches towards each foci-specific OCB.

Additional hypotheses were tested to determine the existence of these interaction effects.

> H_{10} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the OCBs directed at the organisation.
>
> H_{11} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the OCBs directed at the supervisor.
>
> H_{12} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the OCBs directed at the peers.

3.3 Study-2: Multi-Foci Job Satisfaction

Research into the outcomes of psychological contract breach has yielded results confirming its effects on important work-related attitudes and behaviours. Job satisfaction is an important work-related attitude that is influenced by psychological contract breach (Cantisano et al., 2008; Zhao et al., 2007). There is a gap in the literature with regards to the effects of foci-specific psychological contract breach on a focal-person's satisfaction with the various organisational foci. Adhering to the target-similarity

model proposed by Lavelle et al. (2007), psychological contract breach by a specific party, for example, the supervisor should influence the focal-person's satisfaction with that party, and should have a lesser effect (in case of spillover), or no effect at all on the satisfaction with other foci, such as the peers or the organisation. This line of enquiry represents the next logical progression in both the literatures on psychological contract theory and also job satisfaction.

Studies that have tested for the target-similarity effect have relied on the use of instruments that measure foci-specific work-related attitudes and behaviours. For example, Morin et al. (2011) used separate scales to measure affective commitment to the organisation, supervisors, co-workers, and customers. They also separately measured for OCBs directed at these foci. They were able to prove the target-similarity effect because they could map the foci-specific effects of the determinant variable (affective commitment) to foci-specific outcome variables (OCBs). Similarly, Bishop and Scott (2000) used foci-specific items to measure commitment to the organisation and team, and satisfaction with the supervisors and team. Using these measures they were able to prove their main hypothesis that commitment to workgroup was distinct from commitment to the organisation. Conway et al. (2014) used foci-specific measures of OCBs directed at the organisation, co-workers, and customers to prove that a psychological contract breach by the organisation will only influence the OCBs directed at the organisation and will not influence the OCBs directed at the peers and customers.

The target-similarity model has already been tested with regards to OCBs and commitment, but, to the best of my knowledge, this model has yet to be tested with regards to job satisfaction. A major challenge in this regard is posed by the lack of a foci-specific scale to measure job satisfaction. Previous research studies have used a number of different instruments to measure job satisfaction (Astrauskaitē, Vaitkevicius, & Perminas, 2011). Some important instruments that have been used in previous studies to research job satisfaction include the Job Descriptive Index (JDI, Roznowski, 1989); the Minnesota Satisfaction Questionnaire (MSQ, Weiss, Dawis, & England, 1967); the Job Diagnostic Survey (JDS,

Hackman & Oldham, 1974); the Job in General Scale (JIG,); the Global Job Satisfaction (GJS, Pond & Geyer, 1991); and the Job Satisfaction Survey (JSS, Spector, 1985).

Ironson, Smith, and Brannick (1989) categorise the instruments that have been used to measure job satisfaction into two broad categories i.e. (1) facet and (2) general scales. Facet scales measure satisfaction with specific aspects of a job. An example of a facet scale is the Quality of Employment Survey (Quinn & Staines, 1979) which is a measure of six features of job that include: Comfort, Challange, Financial Rewards, Relation with co-workers, Resource Adequacy, and Promotions. Ironson et al. (1989) distinguishes general scales from facet scales, as scales that are used to measure an individual's overall satisfaction with the job. An example of general scale is the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1974). Following is a brief review of studies that have employed the facet scales and the general scales of job satisfaction.

3.3.1 Review of studies using global measure of job satisfaction

One of the key antecedent of job satisfaction is the social support received by the focal-person (Babin & Boles, 1996; Chou & Robert, 2008) from the various agents of the organisation and the organisation itself. This support is classified into two distinct types: (1) emotional and (2) instrumental support (Chou & Robert, 2008). Instrumental or functional support is required by individuals to carry on with their jobs. This includes the access to resources, knowledge (training), and assistance with certain job functions. Emotional support on the other hand fulfils the psychological requirements of individuals. This can take the shape of showing concern for one's well-being, reaffirming trust in them and in their abilities, and listening to their concerns (Fenlason & Beehr, 1994).

Using a sample of direct care workers Chou and Robert (2008) tested the linkages between sources of support, type of support provided and job satisfaction. Their results supported their basic hypothesis that the three support sources (organisation, supervisors, and co-workers) independently contributed to job satisfaction. Furthermore, they concluded

that the organisational support had the strongest influence on job satisfaction. Their findings also corroborated previous research findings that the emotional support received from co-workers had an influence on job satisfaction but the instrumental support received from the co-workers did not register any significant effect on job satisfaction. Confirming that nature of support provided by the different source influenced job satisfaction in differing ways. Of relevance to the current study, Chou and Robert (2008) used a global measure of job satisfaction. They had one item each measuring the job satisfaction with the managers and the co-workers. Whereas the remaining 6 out to the total 8 items measured what can be seen as representing the effective of support provided by the organisation. One limitation of the Chou and Robert (2008) approach is the heavy weighting towards organisation and the very small (one item only) towards supervisors and peers. Perhaps a better approach that might have yielded more interesting results would have been had they conceptualised job satisfaction as a multifaceted construct and used an instrument that would have captured job satisfaction attributed to each individual source of support.

Babin and Boles (1996) tested for the effects of perceived co-workers involvement and supervisor support on service providers work related outcomes including job satisfaction. Babin and Boles (1996) highlighted the infleuences co-workers can have on the job satisfaction of their peers. But it is not through offering support but by being involved in their own jobs. They note that both the supervisory support and co-workers work involvement contributed to the formation of an organisation's work-environment. Furthermore, a supportive work environment is generally associated with improved work-related attitudes and more productive behaviours. Using statistical analysis, Babin and Boles (1996) found support for both their main hypothesis in that co-workers' work involvement, and supervisory support had a significant positive relationship with job satisfaction. Babin and Boles (1996) study reinforces the current study's focus on a multi-foci conceptualisation of psychological contracts. The two factors that they chose to focus on were co-worker's involvement and supervisor support. Both these factors are mutually exclusive of

each other. Therefore, they should be considered as important contents of two separate psychological contracts, one with the co-workers and the other with the supervisor.

3.3.2 Review of studies based on facet-specific measures of job satisfaction

Boles, Wood, and Johnson (2003) mapped the effects of different types of stress to the individual facets of job satisfaction. They focused on two role related stresses i.e. role conflict and role ambiguity, and additionally the stress caused by work-family conflict. Arguing against the use of global measures of job satisfaction, Boles et al. (2003) note that these measure imply that individuals are equally satisfied with all aspects of their jobs, whereas the reality of matter is that individuals can be differentially satisfied with different facets of their job. The sample Boles et al. (2003) selected for their study was based on 129 sales employees. The facets of job satisfaction they measured included satisfaction with work, co-workers, pay, promotion,supervisor, policy, and customers. As such, there is empirical evidence for the exploration of multi-foci job satisfaction in the broad employee literature.

Summarising their findings Boles et al. (2003) report that, role ambiguity and role conflict were negatively related to male participants's satisfaction with work, co-workers, supervisors, promotion, and satisfaction with policies. Additionally for the male participants, work-family conflict was negatively related to the levels of satisfaction with pay, supervisor, promotion, and policies. Their findings were different for the female participants in their sample. For the female participants role ambiguity and role conflict were negatively related to their satisfaction with supervisors, co-workers, promotion, and satisfaction with policies. The difference being that the females reported a positive relationship between role ambiguity and their satisfaction with the supervisors. Similarly, stress that was generated due to the work-family conflict was negatively related to the female participants’ satisfaction with work, co-workers, and with policies.

The study by Boles et al. (2003) highlights the advantages of using a

facet specific measures of job satisfaction rather than the global measures. They reported that different sources of work and family related stress influenced different aspects of job satisfaction and this influence was also different for the males and females. McCormack, Casimir, and Djurkovic (2006) also report that job satisfaction with supervisor and co-workers uniquely contributed to affective organisational commitment. Edwards, Bell, Arthur, and Decuir (2008) also conducted a similar study, but they looked at how different facets of job satisfaction were related to the contextual and the task aspect of job performance. They differentiated their study from previous studies linking job satisfaction to job performance by mapping the specific relationships between the components of job satisfaction and the aspects of job performance. They argued that previous research conducted to determine the relationship between job satisfaction and performance did not return any strong correlation between the two because both these factors had been conceptualised and operationalised at a global level, rather than at the facet level.

Edwards et al. (2008) based their study on the theory proposed by Ajzen (2005), which predicts that relationship between job satisfaction and job performance can be better explained if both these constructs are taken at the same level of specificity. For their study they used a facet-specific measures of job satisfaction. Using these measures they found that employee distinguish between different facets of their job satisfaction, which are related to different aspects of their job. These include the satisfaction with work, pay, opportunities for promotion, supervision, and co-workers. For job performance they used the conceptualisation proposed by Borman and Motowidlo (1993), whereby the total performance is distinguished into task and contextual facets. Where task performance represents the aspect of performance that has been traditionally measured and has been used by organisation as basis for measuring performance. This encompasses the in-role behaviours that are job specific, distinguish one role from the other, and require a specific set of technical competency to perform. Contextual performance, on the other hand, has been described by Borman and Motowidlo (1993) as the set of behaviours that support the broader organisational, psychological and

social environment in which the technical core operates (Edwards et al., 2008). These behaviours are role independent and have generally been overlooked as bases of performance evaluations.

Edwards et al. (2008) confirmed that studies that were based on the global measures of job satisfaction do not show any difference in terms of their relationships with the task and contextual aspects of performance. On the other hand, when the same relationship is looked at using the multifaceted conceptualisation of job satisfaction new and interesting details emerge. For example, their results indicate that satisfaction with work has a stronger relationship with the task component of performance than with contextual performance. Additionally, that the satisfaction with supervision has a stronger relationship with contextual performance than with task performance. They could not confirm their hypothesised relationship between pay and task performance, although satisfaction with promotion opportunities was significantly related to task performance.

The relationship between satisfaction with co-workers and contextual performance, as hypothesised by Edwards et al. (2008), is most relevant to the current study. Edwards et al. (2008) could not find support for their hypothesis, and offered a credible reason for this. They argued that the contextual performance was rated by the supervisor, and this could have introduced a rater-bias. It is worth nothing that Edwards et al. (2008) could have benefited from conceptualising contextual performance as a multifaceted construct by distinguishing between the targets of the contextual performance. Studies such as that by Lavelle et al. (2007) have taken advantage of looking at foci-specific OCBs, which is a construct that is very similar to contextual performance (Motowidlo, 2000).

In two separate studies Hoffman and Ingram (1992) and Snipes, Oswald, and LaTour (2005) mapped the effects of specific job satisfaction facets to customer-related outcomes. Findings from these studies concluded that the different facets of job satisfaction contributed differently to the customer related outcomes. Results from the study conducted by Hoffman and Ingram (1992) indicated that job satisfaction with supervision, co-workers, work, and promotion had a positive influence on customer oriented behaviour and satisfaction with pay did not

show any significant correlation with customer oriented behaviour. Hoffman and Ingram (1992) concluded that intrinsic facets of job satisfaction exerted positive influence on customer oriented behaviour, whereas extrinsic facets (satisfaction with pay) registered no influence. Snipes et al. (2005) also hypothesised a similar relationship between the intrinsic and extrinsic facets of job satisfaction to the customers' perception of service of quality. Their data did not prove this hypothesis as satisfaction with pay was seen as having a positive influence on the outcome. They do point out that the size of effect for extrinsic facets of job satisfaction was less than the effect size of the intrinsic facets of job satisfaction. Regardless of the results arrived at, both of these studies confirm the value of using facet specific measures of job satisfaction, rather than using a global measure. This has important implications for the current thesis by supporting a multi-foci approach to job satisfaction.

The central theme emerging from the studies present above is that measuring job satisfaction as a multi-facet measure offers significant advantages over measuring a global or aggregate job satisfaction. Although studies are starting to emerge that take this into account, most of the research on job satisfaction still relies on global measures of job satisfaction. The present study contributes to the literature on job satisfaction by going beyond the facet-specific measures of job satisfaction and looking at foci-specific job satisfaction. This would allow ascertaining the satisfaction with the supervisor, co-workers, and with the organisation as a whole. In the following section we present studies that have reported on global measure of job satisfaction but are nevertheless relevant to the present study.

3.3.3 Psychological contract breach and job satisfaction

A number of previous studies have confirmed the negative relationship between psychological contract breach and job satisfaction (Bal, De Lange, & Jansen, 2008; Coyle-Shapiro & Kessler, 2000; Robinson et al., 1994; Taylor & Tekleab, 2004; Tekleab, Takeuchi, & Taylor, 2005; Zhao et al., 2007). Rayton and Yalabik (2014) list unmet expectations,loss of trust, loss of inducements, feelings of inequity and impediments to goal pro-

gression as major reasons why psychological contract breach influences job satisfaction. They further note that when faced with psychological contract breach individuals reciprocate by curtailing their input into the exchange relationship. It is proposed that the relationship between psychological contract breach and job satisfaction would be better explained by adopting a multi-foci view of both constructs. This hypothesis implies that when a focal-person perceives that his/her psychological contract has been breached by a specific party (i.e. the organisation, supervisor, or the peers), he/she will reciprocate and thus feel less satisfied towards that specific party.

The premise for this hypothesis finds support from constructs such as leader-member exchange, and team-member exchange that are embedded in the social exchange theory (Cole et al., 2002). It is also supported by the organisational support constructs i.e. the perceived organisational support, perceived supervisor support, and perceived coworker support (Ng & Sorensen, 2008). The job demands–resource model proposed Bakker et al. (2004) also distinguishes between the organisation, the supervisor, and the co-workers as independent sources of job resources that are required to meet the job demands. In combination these constructs include most of the content for a psychological contract, and the content can be distinguished on foci-bases. Ultimately, the current study hypothesises that when there is a psychological contract breach with a specific foci (organisation, supervisor or peer) then that will reduce the job satisfaction related to the specific foci (organisation, supervisor or peer). Beyond the target-similarity effect, it is also expected that spillover effect will occur. Thus, breaches by the organisation-specific psychological contract might also influence the job satisfaction of supervisors and peers, albeit to a lesser degree than effects that are target specific (i.e., organisation based job satisfaction).

The above main hypothesis than can be represented by the following set of sub-hypothesis:

H_{13} : Psychological contract breach by the organisation will

be negatively linked to focal-person's satisfaction with his/her organisation (target-similarity effect).

H_{14} : Psychological contract breach by the organisation will be negatively linked to satisfaction with (a) the supervisor and (b) peers (spillover effect).

H_{15} : The target-similarity effect of psychological contract breach by the organisation on Ali's reported satisfaction with his organisation will be greater than the spillover effect of psychological contract breach by the organisation on Ali's reported satisfaction with his supervisor, and Ali's reported satisfaction with his peers.

H_{16} : Psychological contract breach by the supervisor will be negatively linked to Ali's reported satisfaction with his supervisor (target-similarity effect).

H_{17} : Psychological contract breach by the supervisor will be negatively linked to satisfaction with (a) the organisation and (b) peers (spillover effect).

H_{18} : The target-similarity effect of psychological contract breach by the supervisor on Ali's reported satisfaction with his supervisor will be greater than the spillover effect of psychological contract breach by the supervisor on Ali's reported satisfaction with his organisation, and Ali's reported satisfaction with his peers.

H_{19} : Psychological contract breach by the peers will be negatively linked to Ali's reported satisfaction with his peers (target-similarity effect).

H_{20} : Psychological contract breach by the peers will be negatively linked to satisfaction with (a) the organisation and (b) supervisor (spillover effect).

H_{21} : The target-similarity effect of psychological contract breach by the peers on Ali's reported satisfaction with his peers will be greater than the spillover effect of psychological contract breach by the peers on Ali's reported satisfaction with his organisation, and Ali's reported satisfaction with his supervisor.

The focus for this study were multi-foci psychological contracts. Because more than one party can breach their psychological contract with the focal-person at the same time, it would be logical to expect that these breaches will intensify each others effect on the work-related outcomes. Similar to study one, the present study explores the potential interaction effect of additional psychological contract breaches across other foci. In this regard, additional breaches will intensify the reduction in job satisfaction (foci-specific). Additional hypothesis were tested to determine the existence of these interaction effects.

H_{22} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the focal-person's satisfaction with his/her organisation.

H_{23} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the focal-person's satisfaction with his/her supervisor.

H_{24} : The two-way, and three-way interactions between the psychological contract breach by the organisation, supervisors, and peers will negatively influence the focal-person's satisfaction with his/her peers.

3.4 Study-3: Determining the Content of Peer-To-Peer Psychological Contracts and Their Influence on Satisfaction with Co-Workers

Work-teams play an important role in improving the performance of organisations (Banker, Field, Schroeder, & Sintia, 1996). Their role has become even more prominent considering the current context of global hyper-competition, consumers demanding higher standards of quality of products and services, and rapid innovations in various technologies (Douglas & Gardner, 2004). Realising the importance of teams academicians have also developed constructs to explain the behaviour of individuals within the teams. Two of the most prominent constructs in this regard have been team-member exchange (Seers, 1989) and perceived co-worker support (Thoits, 1985). Both these constructs are grounded in the theory of social exchange (Blau, 1964), and rely on individual team members to report ’how "well" or "ill" the team is performing’ (Senior, 1996, p. 26). Both these constructs have help to further our understanding the group behaviours of work-teams, but they fall short on providing a framework for understanding the influences of the social exchange break-downs that might occur in these teams i.e. explaining what happens if a focal-person perceives low or high levels of co-worker support, and or what happens when a focal-person experiences good or bad team-member exchanges. The construct of psychological contract breach does provide this framework Rousseau (1989).

Rousseau (1989) defines the psychological contract as ’an individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal-person and another party’(p. 123). Although peers are an important party, within the organisational context, with whom a focal-person establishes social exchange agreements (Chiaburu & Harrison, 2008), the literature on psychological contracts has mostly ignored them Marks (2001). The existing literature of psychological contracts primarily focuses on the social exchange relationship between a focal-person and a ’unitary employer’ (Conway et al., 2014; Dawson et

al., 2013) or between the focal-person and his/her supervisor, who acts as a proxy for the organisation (Guest & Conway, 2002; Tekleab & Taylor, 2003).

Although researchers, such as Marks (2001) and Conway and Briner (2005), have since long advocated for reconceptualising psychological contracts to account for the peer-to-peer social exchange relationships, efforts in this regard seem to be nonexistent. The only example of a such a study (that has been published in a worthwhile journal) is that by Sverdrup and Schei (2015). An extensive search for such studies only yielded two studies, one from a well reputed journal and the other from well established conference. These studies by Galvin and McKinney (2005) and Sverdrup and Schei (2015) looked at the peer-to-peer psychological contracts and their role in work-team formation and effectiveness. Both these studies were explorative in nature, Galvin and McKinney (2005) only proposed a model of how psychological contracts play a role in team formation, and Sverdrup and Schei (2015) conducted interviews to determine the content of peer-to-peer psychological contracts and clustered the teams based on the content and features of their psychological contracts .

The purpose for third study in this thesis was to empirically test the effects of the breach of the psychological contract a focal-person has with his/her co-workers on the focal-person's satisfaction with his/her co-workers. Previous research has shown that satisfaction with co-workers is an important facet of job-satisfaction which influences a number or work-related outcomes. For example, the results from the study conducted by Edwards et al. (2008) indicate that there is a significant negative relationship between satisfaction with co-workers and task performance. Similarly, Bolon (1997) report that satisfaction with coworkers is an important determinant of OCB. Marks (2001) also provides a valuable observations regarding operationalisation of psychological contracts at the team level. She notes that "proximal, collective psychological contract that occurs in workgroups has a greater effect on employee behaviour than any contract employees have with other organizational entities" (Marks, 2001, p. 464).

The primary object for this third study was to provide empirical evidence that the breach of peer-to-peer psychological contract will negatively influence the focal-person's satisfaction with his/her co-workers. The premise for this hypothesis finds support from work-group level constructs such as team-member exchange(Cole et al., 2002) and perceived coworker support (Ng & Sorensen, 2008). Both these constructs are embedded in the social exchange theory. The job demands–resource model proposed Bakker et al. (2004) also also view the co-workers as an important sources of job resources that are required to meet the job demands. In combination these constructs include most of the content for a peer-to-peer psychological contract. The current study hypothesises that when there is a breach of peer-to-peer psychological contract that will reduce the job satisfaction related to the co-workers. The above main hypothesis than can be represented as follows:

> H_{25} : The breach of the peer-to-peer psychological contract will have a negative influence on the focal-person's satisfaction with the co-workers

In summary, the three studies that make up this thesis were are conducted to test the target-similarity effect of foci-specific psychological contract breach on foci-specific work-related outcomes. This represents the next logical progression in the theory on psychological contract theory, and is something that previous researchers, such as Marks (2001) and Conway and Briner (2005) have been calling for.

Chapter 4

Methodology

Overall, three studies were conducted and analysed for this thesis. While all three studies test psychological contracts, they are presented separately because they involve distinct groups, approaches, and different outcome variables. Study 1 used a sample drawn from students enrolled in an evening MBA program at a university located in the capital city of Pakistan, Islamabad. Study 2 was based on a sample that was drawn from the researchers Linkedin network (using snow-balling approach), and the sample for Study 3 was obtained using a snowballing method utilising the researchers personal network.

The first two studies used the vignettes technique to gather data. Before proceeding to discuss what vignettes are and how they are used, an outline would be presented of research philosophy under which this research was conducted. Following this is a discussion on what vignettes are and how they are used in research. Also discussed are the key design considerations. Finally, the sampling and research procedures adopted for each independent study will be presented in detail.

4.1 Philosophical Assumptions and Paradigms

Researchers strive to create new knowledge within their respective research areas. This process of creating new knowledge is dependent upon the researcher's beliefs and assumptions regarding what knowledge is and how it is created (Saunders, Lewis, & Thornhill, 2012). These beliefs and assumptions constitute the researcher's research philosophy. Researchers who reflect upon their own research philosophy are in a better

position to ask the right research questions that are needed in a given research area. Making the research philosophy explicit also allows the consumers of the research to contextualise the findings from a research study within the researcher's defined assumptions.

Saunders et al. (2012) categorise the types of assumptions that a researcher makes while creating new knowledge into three categories. First there are the assumptions regarding nature of human knowledge, which are referred to as epistemological assumptions. The second category is that of ontological assumptions, which are concerned with how researchers view the realities that they are investigating. Finally, there is the set of axiological assumptions that researchers make which describe the researchers' beliefs regarding the extent to which their values shape the research process. Following is a detailed description of these assumptions.

4.1.1 Ontology

The ontological assumptions that a researcher holds represent his/her understanding of the nature of reality. Under these assumptions researchers can either view the reality that they are studying as being objective and independent of the social actors who shape this realty. Or, on the other hand, view reality as being a product of the social actors' interactions with each other and with their surroundings. These debates, which might seem inconsequential to the uninitiated, have played a vital role in shaping our understanding of the social science constructs (Delbridge, 2006).

Based on the ontological assumption, a researcher might adopt either a 'subjectivist' or 'objectivist' orientation to conducting research (Table 4.1). Researches with objectivist orientation tend to view social entities as independent objects occupying their own space in realty along side the social actors. Subjectivist, on the other hand, view social entities as owing their existence to the social actors, who shape the reality that surrounds them. Researchers vary on their interpretations of these ontological assumptions. Some (the pragmatists) would argue that their can be multiple facets of a reality and no single facet could be used to de-

scribe the entirety of the reality. Then there are those (the realists) that do not believe in the extremes of both objectivity and subjectivity and place themselves in the middle. These researchers believe that reality can be interpreted through social conditioning (Kutaula, 2014). Lastly their are researchers (interpretivists) who hold the opinion that reality is the manifestation of the interactions between the social actors, and that reality can be changed and interpreted in different ways.

The literature on constructs relating to work-psychology have received contributions from various disciplines such as HRM, and organisational psychology (Kutaula, 2014). This has also been the case with the development of the psychological contract construct, as Rousseau (2005) notes that her formulation of the psychological contract theory was influenced by a number of different subject matters including theory of psychological measurement, organisational behaviour, sociotechnical systems, and HRM. The dominant research paradigm within these fields of research has been positivism. Commenting on this preference for positivistic paradigm P. Johnson and Cassell (2001) note that "the tacit adoption of a theory neutral observational language by work psychologists allows the settling of knowledge claims through appeal to empirical facts and thus protects it from metaphysical dogmatism" (p. 128).

Researchers investigating the antecedents and outcomes of psychological contract breach have predominantly adopted the positivistic paradigm (Conway & Briner, 2005). This is evident in the fact that most of research on the construct has employed questionnaire surveys as their preferred means of collecting data. The number of studies that have employed data gathering techniques that confer to the subjectivist paradigm (such as interviews critical incident technique and interviews) are in comparison very few. The current thesis will also adopt the model of psychological contracts proposed by Guest and Conway. Guest (1987) argued that "if the concept is to have any social scientific value, it should be defined in such a way as to . . . allow the development of testable hypotheses about its impact" (p. 503). In line with Guest's and Conway's advice it was considered appropriate that the current thesis adopts a positivistic stance.

Table 4.1: *Ontology and Epistemology of Research Paradigms (Saunders et al., 2012, p. 140)*

	Pragmatism	Positivism	Realism	Interpretivism
Ontology	External, multiple, view chosen to best enable answering of research	External, objective and independent of social actors	Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist)	Socially constructed, subjective, may change, multiple
Epistemology	Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data	Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements	Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Focus on explaining within a context or contexts.	Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions

4.1.2 Epistemology

The second set of assumptions that researchers work with are with regards to their views on what constitutes credible knowledge (Saunders et al., 2012). According to Saunders (2009) researchers who adopt the Pragmatists paradigm are interested in applied research and engaged in deriving multiple interpretations from their data (see table 4.1). Social scientist who adopt the positivistic paradigm hold epistemologically views similar to researchers from natural science fields. They rely on using hypothetico-deductive approach for conducting their research (Kutaula, 2014). Researchers with realists orientation consider data gathered from observing social phenomenas as acceptable knowledge. Finally what distinguished interpretivism from positivism is that researchers who adhere to the philosophy of interpretivism do not perceive knowledge as being objective. For these researchers knowledge is subjects and is based on the meaning that individuals assign to events and realities that they encounter. Knowledge creation is seen as an outcomes of sense making process employed by individuals who want to give meaning to the realities that they experience in their day to day life. These researchers with finding generalisable outcomes, they are concerned with meanings that hide within the data, and they offer multiple reasonings for their findings.

The current study also adopts the positivistic paradigm. Although this paradigm has been criticised in recent time P. Johnson and Cassell (2001), a majority of studies still adhere to this paradigm. Defending the use of positivistic paradigm Truss et al. (2011) note that modern quantitative data analysis techniques have become increasingly sophisticated, and that this allows for providing better insights to the debates that are relevant to the field of social sciences (Kutaula, 2014). (Kutaula, 2014) also contends that using positivistic paradigm can help to advance our understanding of the psychological contracts.

4.1.3 Approach to theory development

Most research activity can be categorised as attempts at theory development, or testing of already established theories. To this end Saunders et al. (2012) list three approaches that researchers use for theory development (Figure 4.1). The first is deduction, this is the most akin to scientific research, where researchers develop their theories and then subject them to extensive testing through the use of a series of propositions. The steps involved in the deduction process included the identification of causal relationships between concepts and variables, development of hypothesis to test the causal relationships. By this stage the researcher would have operationalised the concepts of interest in order to allow for their measurement. This will be followed by the data collection and analysis stage, the results from this last stage will help the researcher to either prove the hypothesis that were developed or reject them.

Figure 4.1: *Deduction, Induction and Abduction: from Reason to Research (Saunders et al., 2012, p. 145)*

	Deduction	Induction	Abduction
Logic	In a deductive inference, when the premises are true, the conclusion must also be true	In an inductive inference, known premises are used to generate untested conclusions	In an abductive inference, known premises are used to generate testable conclusions
Generalisability	Generalising from the general to the specific	Generalising from the specific to the general	Generalising from the interactions between the specific and the general
Use of data	Data collection is used to evaluate propositions or hypotheses related to an existing theory	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth
Theory	Theory falsification or verification	Theory generation and building	Theory generation or modification; incorporating existing theory where appropriate, to build new theory or modify existing theory

The deduction approach is commonly associated with research in the domain of natural science. Social scientist, who are interested in determining how social actors define the surroundings, prefer to use the induction approach to theory development rather than deduction. Using the induction technique allows the researchers to provide multiple explanations of the social phenomenons that they are studying. As opposed to the deduction method, the induction method relies on the use of smaller sample and their findings are context specific so generalisability of results in not of concern.

The third and final approach to theory development is abduction, whereby the researcher first observes a phenomenon and then develops a plausible theory to explain why that phenomenon occurred Saunders et al. (2012). Under this approach there is researcher moves theory formulation towards data analysis (the deduction part of abduction) and then back from data analysis toward theory formulation (the induction part of abduction).

Saunders et al. (2012) list two important benefits of choosing a proper research approach. First, it enables researchers to take a more informed decision about their research design including what kind of evidence they will gather and from where that data will be collected, how the researchers will go about analysing the data and forming their interpretations of data which will provide the best plausible reasoning for social phenomenon that they were studying. Second, choosing a proper research approach allows the researchers to chose the research strategies and methodological that are suited to their particular line of research

Research conducted within the areas of Business and management typifies the use of abduction Saunders et al. (2012). Most of this research builds upon existing theories to either modify these existing theories or build new ones based on them. The current study also has similar objective, it will be building upon the theory of psychological contracts and to include the multi-foci operationalisation of psychological contracts.

4.1.4 Choice of research methodology

Researchers chose research methodologies which reflect their research philosophy and approach to research that they want to adopt (deductive, inductive, or abductive). As was noted earlier the present thesis was undertaken using the positivistic view and based on the abductive approach. In terms of methodologies research can be conducted using quantitative, qualitative or mixed methods Saunders et al. (2012). The difference between quantitative and qualitative research methods are illustrated in Table 4.2.

Quantitative methodologies are typically used by researchers with positivistic orientation, who want to arrive at objective, replicable, and generalisable conclusions by analysing large samples of data. These researchers are generally interested in testing the validity of their theories using data analysis, and as such follow the deductive approach to research. Their primary efforts involve operationalising their constructs, to build specific instruments for collect data to measure each construct, and finally to empirically prove the relationship between the constructs.

Qualitative methodologies are the choice of researchers who want to go beyond the data and who want to unearth the subjective meanings that individuals attribute to the their surroundings. These methodologies are typically associated with an Interpretivistic orientation. These methodologies are typically associated with smaller samples but extensive textual data. The primary task that the researcher performs, while using qualitative methods, is to organise the large chunks of textual data into meaningful themes and use these themes to offer multiple explanations about social reality that the social actors shape through their actions and interactions with each other.

Both quantitative and qualitative methods have their proponents and detractors, who list detailed advantages of the methodology that they support and also provide convincing critics of the one that they oppose. An increasing number of researches have starting using multiple methods to overcome the shortcoming of using a mono method. Within multi-methods design researchers can use multiple data collection tools which are either quantitative or qualitative. Other researchers have employed

both quantitative and qualitative data collections methods in their research, this is what is referred to the use of a mix-method strategy (Kutaula, 2014).

The current thesis includes three independent studies, the first of these two used a mono-method quantitative survey based method to collect data. The third study which was conducted to determine the content of peer-to-peer psychological contracts mixed-method design which included the use of focus groups (a qualitative method) and an online survey (a quantitative instrument. Qualitative research, on the other hand, is associated with a number of research methods which share their share ontological and epistemological roots (Saunders et al., 2012), such as action research, case study research, ethnography, Grounded Theory and narrative research.

4.1.5 Research Strategy

The choice of research method (quantitative, qualitative, or mixed-method) has a direct bearing to the research strategy that the researcher will

Table 4.2: *Differences between Quantitative and Qualitative Research (Adapted from Saunders Et Al. (2012)*

	Quantitative	Qualitative
Research philosophy	Positivism. May be used within the realist and pragmatist philosophies.	Interpretivism. May be used within the realist and pragmatist philosophies.
Research approach	Predominantly deductive	Predominantly inductive
Research objective	Examines relationships between variables.	Studies participants' meanings and relationships between them.
Position of researcher	Seen as independent from respondents	Plays a more active role
Research strategy	Principally associated with experimental and survey research	Key strategies used include case study, grounded theory and narrative inquiry.

employee for caring out his/her particular research activity Saunders et al. (2012). Therefore, quantitative research is generally conducted using experimental or survey research methods. Researchers who employ mixed-methods can chose to use any of the aforementioned quantitative and qualitative research methods in combination.

Within survey research the most common form is the use of single source, self-report, cross-sectional survey design (Kutaula, 2014). Researchers can also opt to use a repeated-measure design whereby the same respondent fills out multiple survey form, either at the same time (if the study is cross-sectional) or over different time intervals (if the study is longitudinal in nature). The research on psychological contracts is dominated by the use of self-report surveys, according to Conway and Briner (2005) 90% of empirical studies on psychological contracts have used the self-report questionnaire surveys.

Kutaula (2014) lists a number of advantages of using the survey method, including that the use of surveys facilitates the testing of hypothesis. They are easier to implement and comprehend. If implemented properly, using appropriate sampling techniques, survey methods can provide results which can be generalised across wider populations. They are also time saving and researchers can gather data from a large sample at low costs.

The questionnaire based survey strategy was adopted for all three studies that constitute this thesis. For the first two studies the survey tool included vignettes and the respondents were asked to play the role of observers to report of the behaviour of a factitious character. The third survey used a self-report form in order to determine the content of individuals peer-to-peer psychological contracts. The first survey was administered using the traditional paper format where as the surveys for the second and third study were distributed electronically. All three surveys were cross-sectional. The first two studies also adopted the repeated measure design, where each respondent had to answer the same question for 8 different scenarios. The use of the vignettes in the survey design will be discussed in detail in the following section.

4.1.6 Using Vignettes for Data Collection

Data was collected using vignettes. Vignette is a French word which means a short story. The vignette technique involves the use of stimuli to elucidate the perceptions held by the research participants. These stimuli can take the shape of text, images (Hughes & Huby, 2004) or sound clips. They can be used as standalone instruments or in a combination with other tools. Vignettes can be used to uncover the meanings, beliefs, and, judgements regarding the actions of other individuals (Wilks, 2004). Listing the benefits of using vignettes Schoenberg and Ravdal (2000) mention the flexibility that vignettes provide to the researchers for designing instruments that provide an accurate depiction of the phenomenon under study. As a data collection instrument, respondents find vignettes to be far more interesting than traditional survey based instruments. This is because the respondents are usually asked about the behaviours, and/or, feelings of factitious characters, and they are less hesitant to respond as there is a low risk for reprisal. Furthermore, the use of vignettes is also said to counter the Hawthorne effect, that while under observation, people tend to deviate from their normal practices (Schoenberg & Ravdal, 2000).

Vignettes have been employed in both qualitative and quantitative research. They have been used in isolation or as a part of a multi-method approach (Wilks, 2004; J. Wilson & While, 1998). An example of multi-method approach incorporating vignettes is known as Anchoring Vignettes. Studies that use this design (Barter & Renold, 2000) do so in-order to consolidate for the culture specific variation that might arise in the cross-cultural surveys. An example of such a study is that conducted by Kristensen and Johansson (2008) who concluded that cross-cultural research should take into account bias that might arise because of how different respondents from different geographic locations might respond to subjective questions. They cautioned that traditional survey instruments that are based on self-report questionnaire, might encounter respondents that have the tendency to inflate or deflate their responses. This can be attributed to a number of factors such the desire to give socially-acceptable answers, or the respondent emotional state. Kristensen and

Johansson (2008) used anchored vignettes to assess the responses to a job satisfaction survey. As a first step they asked their participants to rate the job satisfaction levels of a hypothetical character, as depicted by the situations in the vignettes. As a follow up step, these ratings were then used to re-scale their rating of their own job satisfaction. The results from this study showed that geographical divergent groups tended to rate job satisfaction level differently for similar jobs. Thus, instruments that show different job satisfaction levels for different geographic samples are in fact not a true reflection of actual job satisfaction levels across these samples.

Rost et al. (2007) employed vignettes as standalone method using a factorial design to conclude that organisational context can act as strong predictor of helping and sharing behaviour. Their vignettes incorporated ten independent factors, where each factor had two to three parameter values. The following grey-box provides an example of two contrasting work-contexts used by Rost and her colleagues. They grouped their vignettes into groups of high positive values, high negative values and intermediate values. For a high value group at least seven variable either had a high or low value. These vignettes were then administered to respondents as groups of four randomly selected vignettes in the following sequence: one extremely positive, one intermediate, one extremely negative, and another intermediate vignette. In order to improve the external validity of their vignettes, Rost and her colleagues conducted a pilot-study before their main study. The results from the pilot study were used to further shorten the vignettes by rewording them, and by dropping redundant variables. Figure 4.2 reproduces a portion of the instrument used by Rost et al. (2007).

Rousseau and Anton (1988) used a policy-capturing procedure, which is a method that is very similar to the one that was employed by Rost et al. (2007). They wanted to analyse the perceived fairness of an organisation's termination policy, by varying different attributes of the individuals being laid-off. These attributes included: time on the job, formal commitment, severance, reason for termination, employability, and previous history (see table 4.3). Using different combinations of these at-

Figure 4.2: Factorial vignettes (Rost et al., 2007, p. 27).

Vignette 1:

In your firm you usually work in projects. The organizational context usually…:
Work Context: Within the scope of the projects you most often have to do what has been **prescribed** with the time of execution and the way to solve the task also being mostly regulated. However, when working you very often get the **feeling of being good** at what you are doing. You can use your capabilities at full length most of the time.

Work Climate: In your daily project work you have to work closely with your colleagues. In general you have the feeling that quite **like** and respect you.

Wage:…

Supervisor:…

2	In this organizational context:				
… I will defend this project against criticism from outsiders, for example against critique of other departments. *Please estimate how vehemently you would defend the project?*	very vehe-mently	vehe-mently	middle	rather not so	not at all
	☐1	☐2	☐3	☐4	☐5

Vignette 2:

In your firm you usually work in projects. The organizational context usually…:
Work Context: Within the scope of the projects **you can determine** to a large extent what you do on which occasion and how you do it. When working you very often get the **feeling of being good** at what you are doing. You can use your capabilities at full length most of the time.

Work Climate: In your daily project work you have to work closely with your colleagues. In general you have the feeling that quite **like** and respect you.

Wage:…

Supervisor:…

2	In this organizational context:				
… I will defend this project against criticism from outsiders, for example against critique of other departments. *Please estimate how vehemently you would defend the project?*	very vehe-mently	vehe-mently	middle	rather not so	not at all
	☐1	☐2	☐3	☐4	☐5

tributes Rousseau and Anton (1988) generated twenty-seven vignettes, which were then presented to the participants.

The methodology used by Rousseau and Anton (1988) provides a number of design cues for the use of vignettes. The first of these being orthogonality, which means that the features or attributes making up the vignettes are combined in a manner that all combinations make sense. For example, if we are to generate vignettes and the two factors that we are varying are gender (male, female), and the reason for taking a leave (study, maternity), the combination of male-maternity does not

make sense, although it would be one of the combination generated if a 2X2 matrix is created. Secondly, measures be should taken to avoid the risk of order effect, and the possibilities for stereotypical or standardised rating, by randomly ordering of all the features.

Table 4.3: *Policy Analysis Vignettes (Rousseau & Anton, 1988)*

Stimuli	Values
Time on job	• 2 years, • 8 years, • 14 years
Formal commitment	• Was told that the company could not guarantee long-term employment, • Nothing was said one way or the other about prospects for long-term employment, • and Was told prospects for long-term employment were good.
Severance	• None given, • 2 weeks' severance pay, • 4 weeks' severance pay.
Reasons for Termination	• None given, • Economic factors cited, • Economic factors and changing technology were cited.
Employability	• Very difficult to get another job, • Somewhat difficult to get another job, • Fairly easy to get another job.
History	In the past, this firm has, • Not terminated a competent employee, • Occasionally terminated a competent employee, • and Often terminated a competent employee.

One of the key advantages of using the policy-capturing procedure is

that it provides the researcher the flexibility to introduce different factors in varying combinations(Conway & Briner, 2009). Among the drawback of this technique are its low ecological validity and its dependence of the high number of scenarios for generating any worthwhile statistical inferences (Conway & Briner, 2009). These shortcomings are common to the use of vignettes in quantitative arrangements in general. Therefor Conway and Briner (2009) caution against the use of this technique. A high number of factors and their associated values could would require the use of a large number of vignettes. This makes their development cumbersome for the researcher, and the process can become tedious for the respondents.

Landry (2006) conducted a qualitative exploratory study to determine if dentist, as professional group, perceived the 'internet' as an important source of information. Her study is a good example of contemporary research which has employed descriptive vignettes in a qualitative design. The participants of the study were asked to read a series of vignettes that describe realistic situations that a dentist could face. At the end of each vignette the participants were asked the same question for all the vignettes. Due to the qualitative nature of her study, Landry only produced a single distinguishable vignette for each context that she needed to simulate. Because the vignettes were comprehensive in their depiction of contextual information, only a small number of vignettes were written up. This is one of the primary difference of using vignettes in a qualitative design, as compared to using them in a quantitative design. Qualitative vignettes are more comprehensive and provide detailed contextual information. Whereas quantitative vignettes rely on varying the contextual information by varying the values for the control factors.

In the previous section we discussed a few examples of both qualitative and quantitative studies that have used vignettes, either as standalone methods or as part of a multi-method approach. The next section discusses the important design considerations that should be made for the proper implementation of vignettes within a research method that are ultimately adopted for the present study.

Vignette design

Using vignettes as part of research design offers a number of benefits. But, these benefits can all be rendered useless unless important design considerations have been made. These include the suitability of vignettes to answer the specific research questions that are being asked. Researchers then have to decide whether a single vignette will be used or a set of multiple vignettes will be used. This decision will depend on whether the researcher is interested in either or both the inter-observer and intra-observer variations. The Inter-observer variation represents the variation in the results obtained from two or more observers who have been presented the same vignette. Whereas, the intra-observer variation represents the difference in the observations of a single observer who has been presented multiple vignettes. Furthermore, if a set of vignettes will be used, whether they will represent the same or different contexts (static or moving vignettes). Also important is the question of the validity of the vignettes, i.e. the degree to which they accurately depict the reality. Other vignette design considerations include how conciseness and complete the vignettes are, whether the researcher has taken into account the participants' cognition level, and what stance or role the participants are asked to take with-regards to the vignette character. We will discuss all this considerations in detail in the following section.

Research Questions

The choice of using vignettes, just as with other choices involved in shaping a research methodology, should be driven by the particular research questions and the type of outcome required. Researchers, who adopt a positivist epistemology, and want to arrive at generalisable findings, will typically integrate vignettes into survey instrument. The vignettes designed for these studies are concise, have limited contextual information and rely on manipulating different variables which the researcher is interested in. Responses are limited to the pre-structured categories, which might lead to the exclusion of responses that are not covered by

the researcher (Landry, 2006).

Qualitative researchers, on the other hand, give little currency to the objective of generalisability. They seek to gather in-depth data from a smaller sample and arrive at findings that are context specific, but offer detailed information about the situation under study. Vignettes within a qualitative design are more elaborate, are often times static, and deployed through the use of interviews and focus groups. Qualitative data techniques are then used to extract common themes from the data that has been gathered.

Static or moving vignettes

Hughes (2008) classifies vignettes into two categories based on their content. According to him the content of the vignettes can either be static or moving. In a set of static vignettes, each vignette presents the participant with a scenario that easily distinguishable from other vignettes within the vignettes. When a series of static vignettes are used in the research, there is a possibility for the respondents to draw context from a vignette early in the series for a vignette that is later in the series. Hughes (2008) flagged this carry-over effect as a possible risk factor (for the research), but there could be situations where such effect might be desired; such as situations where the researcher wants the respondents to compare between the vignettes. On the other hand a series of moving vignettes are based on a single stretched scenario, with the researcher raising questions within the narrative of the vignettes. Moving vignettes tend to keep the participants interested, because of the uniformity of the contextual information. Hughes (2008) cautions that if these are too long then participants might tire of responding to them, lose their focus, and as a result might start giving casual responses. Again, this provides a potential risk for using vignettes.

Internal validity of vignettes

The internal validity of vignettes is a measure of the extent to which the vignettes are accurately depicting the reality that they were designed to

portray (Hughes, 2008). Vignettes depict hypothetical situations, even so, the respondents should feel that the situations being illustrated are plausible and can occur in real life. Enough detail should be provide to give the vignettes some verisimilitude (authenticity). Hughes and Huby (2004) caution against drawing-up vignettes which would fail the litmus test of conceivability. They argue that such vignettes will attract responses which are similarly hypothetical and that will not be reflective of how the participant will actually behave in similar situations.In contrast to the above Wilks (2004) argues that if the vignettes are being used in a qualitative design, being ambiguous, or leaving out certain aspects of the context purposefully, might be of benefit to the research. In a qualitative design the meaning that the participants ascribe to the situations illustrated by vignettes can offer worthwhile data. Researchers can then ask the participants to fill in the missing information. In doing so the participants highlight, what they perceive to be, important contextual information that was missing from the vignettes description. An increasing number of researchers are advocating this non-directional use of vignettes as an elicitation tool that should be used to decipher the meaning participants attribute to contextual information that is contained within them (see for example, Barter & Renold, 2000; Finch, 1987; Hughes & Huby, 2004; Wilks, 2004). Wilks summarises this reorientation when she notes that *"Questions about validity, where a vignette's 'realness' is understood in terms of veracity, are replaced by questions about the meaningfulness of a vignette to participants in research"* (Wilks, 2004, p. 83).

Jenkins, Bloor, Fischer, Berney, and Neale (2010) offer a detailed reasoning for avoiding the use of vignettes for reductionist purposes, i.e. to consider the participants' responses to the vignettes as representations of how they will act when faced with similar real life issues. Resonating Alfred Schutz's views, Jenkins, et al. (2010) elucidated that the motivational underpinnings that calibrate the participants' responses to the vignettes are distinct from how they will react to similar real life situations. Response to the vignettes might be motivated by the desire to reflect on the situation or to be paid for participating in the research. In real life situations the motivational drivers could be varied and would

also be context dependent. Furthermore, participants might find the situations, which are highlighted in the vignette, to be mundane in actual life or might have never paid attention to them before.

Drawing from the above discussion, when employing vignettes a researcher should from the onset set out the purpose for using the vignettes. If the purpose is to predict future behaviours, the researcher then should list all the activities which have been taken to ensure the internal validity of the vignettes. On the other hand, if the purpose for using the vignettes is to determine the meaning the participants attribute to different situations, then the requirement is to illustrate that the vignettes conveyed a meaning similar to the phenomenon under scrutiny. In the latter case the researcher might leave out some contextual information in order to determine how the participants will fill in that gap in the vignettes' narration. Researchers who have applied vignettes in a non-directional manner cannot claim to predict future behaviours or make claims of generalisability.

The internal validity of vignettes can be ensured by basing them on reliable sources. Such source can include existing literatures on the subject matter (Hughes & Huby, 2004), personal experiences (Hughes & Huby, 2004), observations of particular setting. Researcher can also use pilot testing to ascertain the internal validity of their vignettes . Pilot studies can be based on the review of a panel of experts on the subject member. Actual participants can also be used from the sample of the study. But these participants should not participate in the final study (Barter & Renold, 1999).The internal validity of vignettes can also be improved by avoiding the use of eccentric characters and disastrous events and keep them grounded in reality (Barter & Renold, 1999). In the current thesis, this might represent culturally appropriate character/s, engaging in psychological contracts that are typical of the workplace setting. This is discussed more in depth below.

Adjusting vignettes length

There are no universal guidelines on what should be the word count of a vignette (if they are text based), or their run time (in-case it is based

on a video or audio presentation). The objective should be to collect the maximum amount of information from the participants, and at the same time keeping them engaged for the minimum amount of time. Conducting a pilot studies can help researchers to attain this balance by allowing them to pre-test their vignettes on actual participants. Using the information of these pilot studies researchers can adjust the word-count or run-time of their vignettes. The amount of time the participants spend on an individual vignette can also be reduced by ensuring that they are comprehensible. Researchers also need to be mindful of their participants skill level (average reading speeds), and cognitive limitations (for example, attention deficit syndrome) that they might be suffering from.

Informant stances and nature of questioning

The quality and composition of responses gleaned from the use of vignettes will depend on the type of questions used and the interpretative stance the participants are asked to undertake. Depending on the research objectives, researchers can choose to use closed-ended or open-ended questions to elicit responses from the participants. The use of closed-ended questions is generally associated with quantitative studies such as factorial analysis (Wilks, 2004). The main drawback of employing closed-ended questioning is that the participants' responses are limited to the categories that have been predetermined by the researcher (Hughes & Huby, 2004). The use of open-ended questioning does not impose any constraint on the participants' responses thus allowing for a more detailed understanding of complex issues that could not have been achieved with closed-ended questioning (Barter & Renold, 2000). However, this then may require complex analysis to understand the responses.

The nature of participants' responses will also depend on the interpretative stance they undertake to respond to the questions posed to them (Wilks, 2004). Generally, respondent would be asked to take up the role of informants and to report on how the depicted characters will behave within the context of the vignettes. This, reporting on the behaviour of a fictional third party, distances the participants of the events under con-

sideration. Participants are less likely to become self-conscious, and are more willing to discuss potentially sensitive issues. They can freely pass judgement because there is no fear of reprisal (Hughes & Huby, 2004).

To further elaborate the above point, the vignette technique can be compared to an experiment where an individual or a set of individuals are assembled in a room and are asked to perform some sort of task. The room has window through which an observer is asked to describe the behaviour of the individuals within that room. The observer is external to the room and is not influenced by its context, the groups dynamics if and he/she is also detached from the subjects of the experiment who are inside the room. When individuals are asked to act as observers, the first this that they will do is to start searching their own memories for similar instances and to recall how they themselves felt and reacted at that instant. Once they have retrieved a memory, that resembles the situation that they have been asked to observe, they will then project their own feelings onto the vignettes and draw generalisations about how the vignette character will feel or respond to their context (Jenkins et al., 2010). As such, respondents are likely to answer as though they see themselves as the vignette third party but without any social desirability bias or other limitations in their responses.

Vignettes designed for the present study

The vignettes for the current study were generated using a 2x2x2 matrix based on the variations in the psychological contract states (breached verses fulfilled) for each of the three foci (see table 4.4). All the vignettes were variations of a single main storyline. There was a single protagonist in the vignette who was named Ali (this name is going to be used throughout this thesis to refer to the focal-person), which is a common name in Pakistan. This might be akin to 'John' in a typical Western setting. A generic name is used to allow the participants to better relate with the protagonist. This also added to the verisimilitude of the vignettes. The purpose for developing the vignette was to offer a context of psychological contract breach. The literature review provides important attributes of this context. The first of these is that there is highly

desirable need (felt by Ali) that has to be fulfilled, secondly, that someone has promised (the organisation, supervisor, and peers) to fulfil this need, and finally that the promising party reneged on their promise. The word promise has been used here for purpose of simplicity, the literature review (Chapter 2) discusses in detail that psychological contracts are not only established as a result of promise being made, but the perception of promise can also entail a psychological contract. Presenting a clear promise again enhance the verisimilar nature of the vignettes.

The main text of the vignette (contained within the following grey-box) establishes 'personal development' as the driving need of the vignette's protagonist. The foci-specific promises are established by highlighting different forms of verbal and non-verbal promises being made to fulfil the driving need i.e personal development. The vignette highlights that the organisation made the promise by acknowledging the existence of training policy. The supervisor is shown to be making a more verbal promise. With regards to the peers a mutual understanding to share knowledge is reported as the basis for the peer to peer psychological contract.

> Ali joined his current organisation a few months back. Ali has always placed great importance on his personal development. During the recruitment stage he was told that the company had a training policy in place and that employees were given every opportunity to improve their skills. The supervisor that was assigned to Ali had been with the organisation for a long time. He promised Ali that he will give him challenging tasks and will help him to attain his career goals. Ali was also assigned to a team. The team had both senior and junior members and there was an understanding among the team members that they will help each other by sharing knowledge with each other.

Each participant was offered this main text of the vignette followed by scenarios that varied in-terms of the which foci-specific psychological contract was being fulfilled or breached. The complete list of scenarios

is provided in table 4.4. The two extreme scenario are represented by vignette 1 and vignette 8. In vignette 1, all the foci-specific psychological contracts are portrayed as fulfilled. Whereas in vignette 8, the scenario is worded to show that all the foci-specific psychological contracts were breached. Vignette 2, 3, and 5 were worded to show that only one party had breached the vignette protagonist's psychological contract. In vignettes 4, 6, and 7 two of the three foci had breached the vignette protagonist's psychological contract.These combinations of vignettes allowed for the testing of both the target-similarity effect and spill-over effects simultaneously.

Table 4.4: *Vignettes and Foci-Specific Psychological Contract Status*

Vignette	PCO	PCS	PCP	
1.	F	F	F	• Ali's organisation has fulfilled its promise of offering a training policy. • Ali's supervisor has offered the support he had promised. • Ali's peers actively share knowledge with him.
2.	F	F	B	• Ali's organisation has fulfilled its promise of offering a training policy. • Ali's supervisor has offered the support he had promised. • But Ali's peers are not sharing knowledge with him.

3.	F	B	F	• Ali's organisation has fulfilled its promise of offering a training policy. • Ali's peers actively share knowledge with him. • But Ali's supervisor has not offered the support he had promised.
4.	F	B	B	• Ali's organisation has fulfilled its promise of offering a training policy. • But Ali's supervisor has not offered the support he had promised. • And Ali's peers are not sharing knowledge with him
5.	B	F	F	• Ali's organisation has not fulfilled its promise on pursuing an active training policy. • But his supervisor has offered the support he had promised. • And Ali's peers actively share knowledge with him.

6.	B	F	B	• Ali's organisation has not fulfilled its promise on pursuing an active training policy. • And Ali's peers are not sharing knowledge with him. • But Ali's supervisor has offered the support he had promised.
7.	B	B	F	• Ali's organisation has not fulfilled its promise on pursuing an active training policy. • And Ali's supervisor has not offered the support he had promised. • But Ali's peers actively share knowledge with him.
8.	B	B	B	• Ali's organisation has not fulfilled its promise on pursuing an active training policy. • And Ali's peers are not sharing knowledge with him. • And Ali's supervisor has not offered the support he had promised.

Key

PCO(Psychological Contract with Organisation)

PCS(Psychological Contract with Supervisor)

PCP(Psychological Contract with Peers)

B(Breached)

F(Fulfilled)

4.2 Sample and Procedure (Study 1)

The objective of the first study was to determine the foci-specific effect of psychological contract breach on organisational citizenship behaviour directed at specific foci. Data was collected from student enrolled at a MBA evening program at a University in the capital city of Pakistan, Islamabad. Considering the small target population size no sampling was performed, instead the census or complete enumeration method (Dillman, 2000) was used to gather data. In total 170 students were surveyed. Out of the total respondent pool (n=170), only 87 students (male = 73, females = 14) met the requirement of having some work experience. This was felt to be a necessary requirement for respondents to correctly articulate their perceptions around the vignettes on psychological contracts. Overall, the data from 87 respondents was included in the analysis. It is important to note that female workplace participation rates are low in Pakistan, thus the low number of female respondents is reflective of the marginal participation of females in the Pakistani workforce. This is primarily due the existence of both cultural and religious norms that discourage females taking up employment.

Previous studies on psychological contracts have also used MBA students as their sample. For example, Rousseau (1990) surveyed a total of 224 recently employed MBA students in order to determine what were the main employer and employee obligations. Similarly Rousseau (1998) used a sample of 116 evening MBA students in full-time employment. Their goal was to determine whether an employee's contributions to an organisation would influence a respondent's view on the morality of their termination. Shore and Barksdale (1998) also used a sample of 327 working MBA students to demonstrate their findings.

The advantage of using employed MBA students, as a sample, is that they are aware of organisational realities and thus constitute a 'reliable third party' (Rousseau, 1998) who can provide a relatively accurate and informed judgement about how different agents within the organisation

will behave under different contexts. Additionally, as a group MBA students are relatively accessible and most of them are willing to participate in research studies. The data collection process is also easy as the survey forms can be distributed and collected within the classroom, as was the case with this study. Surveys were distributed within classes that had previously agreed to participate (by their professor/lecturer) and the researcher had no personal involvement in any of the classes where surveys were distributed.

Each participant was asked to answer questions in context to eight different vignettes. Thus, the total size of the data set came to 696 responses (87 respondents multiplied by the 8 vignettes). The vignettes were treated as repeated-measures of the variation in psychological contract state and as such the answers to each scenario were entered as a separate response. Repeated measure data is entered into SPSS using the long format (Li & Baron, 2012), in contrast to the traditional wide format. Entering data into SPSS in the long format allows for using repeated measure analysis (Field, 2011). This allows to analyse and compare the responses of an individual participant for all eight vignettes, and to compare the responses of all participants with regard to each vignette. Not all respondents provided answers to the complete set of vignettes. There were cases where the respondents had failed to answer specific questions relating to certain vignettes. There were also cases where respondents had returned some vignettes without answering any questions in context to that vignette. Records with missing data were omitted.

After filtering for these cases the remaining dataset included a total of 656 records. The benefit of using a repeated-measure data analysis is that it allows focusing on the systematic variations within the data sets which were caused due to the introduction of experimental manipulation (Field, 2011). Which in the case of the current study was the variation of the state of psychological contracts across the vignettes.

One of the chief roles of statistical enquiries is to determine how much variation in data is caused due to systematic variations and what can be attributed to unsystematic variations (Field, 2011). Unsystematic errors in data are caused due to the difference in the characteristics of the par-

ticipants. These differences can include gender, age, employability, and personality traits. Additionally the effects of these variables on psychological contracts breach and outcomes are very well documented in the literature. For example, the study by Raja, Johns, and Ntalianis (2004) provides a strong account of how the personality influences psychological contracts. Worth noting is the fact that this important study was also conducted using a Pakistani sample, which is a seldom explored context in organisational behaviour research in general, and specifically towards psychological contracts. That said, psychological contracts have been researched and confirmed in such exotic locales (compared to traditional Western settings) so it is not assumed that the effects of psychological contract breach wont hold in the Pakistan context (Akhtar, Bal, Long, & Nickson, 2016).

Table 4.5: *Organisational Citizenship Behaviour Scales*

items measuring organisational citizenship behaviour directed at organisation
• Ali will attend functions that are not required but that help the organisational image. • Ali will offer ideas to improve the functioning of his organisation. • Ali will keep up with developments in the organisation
Items measuring organisational citizenship behaviour directed at supervisors
• Ali will be willing to accepts added responsibility when his supervisor is absent • Ali will assist his supervisor with his work (even if he was not asked to do so) • Ali will pass along work-related information to his supervisor
Items measuring organisational citizenship behaviour directed at peers
• Ali will be willing to give his time to help his peers who have work-related problems • Ali will show genuine concern and courtesy toward his peers, even under the most trying business or personal situations • Ali will shares his personal property with his peers to help their work

4.2.1 OCB Measures

Organisational Citizenship Behaviours (OCBs) directed at the organisation (OCBO) and those directed at the peers (OCBI) were measured using 3-items, for each, from the scale developed by (**?**). All the items were coded 1=Strongly Disagree, 5=Strongly Agree. The questions were rephrased to reflect the context of the vignettes that were designed for the present study. The questions that were asked are listed in table 4.5 .This scale was developed from a pool of previous OCB scales. C. Lee and Tinsley (2000) ensured that there was no overlap between the items measuring OCBO and OCBI. This was the problem associated with other prominent OCB scales, such as that developed by Smith, Organ, and Near (1983). According to McNeely and Meglino (1994), the scale developed by Smith and colleagues(1983) included an altruism sub-scale that was suppose to measure OCBI. But this included items such as 'making suggestion to improve the department', which can also be used to measures OCBO, thus resulting in a overlap in the OCBO and OCBI scales. In the present study, the OCBO ($\alpha = .78$) had adequate reliability, although the peer (OCBI) dimension was slightly less robust ($\alpha = .63$).

The three items measuring the supervisor directed OCB (OCBS) were adopted from (Rupp & Cropanzano, 2002). As with the OCBO and OCBI scales this scale draws from an original OCB scale, developed by Williams and Anderson (1991), items that measured OCBS as a distinct construct from OCBO. Rupp and Cropanzano (2002) reported a scale reliability of .88. The scale also provided a descent reliability for the present study ($\alpha = .71$). All the items were coded 1=Strongly Disagree, 5=Strongly Agree. The questions were rephrased to reflect the context of the vignettes that were designed for the present study. The questions that were asked are listed in table 4.5.

4.3 Sample and Procedure (Study 2)

The objective of the second study was to determine the foci-specific effect of psychological contract breach on a focal-person's satisfaction with his/her organisation, supervisor, and peers. Participants for the second

study were recruited from the researchers personal contacts on the on-line social network Linkedin. The introduction page on Linkedin describes the social network as 'the world's largest professional network with 300 million members in over 200 countries and territories around the globe' ("Linkedin", 2012).

On-line social networks (OSN), such as Linkedin, are becoming useful tools to recruit research participants (R. E. Wilson et al., 2012). The previous decade has seen great advances in information and communication technologies that have contributed towards an increase in the use of OSNs. The computing speed of current personal computers, the advent of the modern smart-phones, the emergence of tablet computers, and the availability of broad-band speeds have all contributed towards increasing OSN memberships number. All of this has also enhanced the profile of OSNs as subjects of research in themselves (R. E. Wilson et al., 2012) and as viable research tools (Evans & Mathur, 2005).

Using OSN has advantages over traditional email based surveys. Studies have reported that traditional email surveys have a lower rate of response as compared to traditional mail based surveys (Van Selm & Jankowski, 2006). This can be attributed to a number of factors. One of the major issues is that of spam mail. Individuals tend to flag emails from unknown sources as spam. So if there is no formal introduction between the researcher and the participants there is a high possibility that the respondents will flag the email as spam. Most modern email service providers have a built in feature that if an email is identified to be sending out spam mail it is then automatically filtered by the system. When this occurs the message is automatically moved to the spam box and does not even appear in the respondent's email in-box.

The issue of spam mail is somewhat mitigated by using OSNs. OSNs such as Linkedin only allow you to message individuals who are members of your network and who have allowed you to send messages to them. This acts as a sort of a formal connection which ensures that the participants will at least receive the message in their in-box. Further measures can also be taken to enhance the chances of avoiding being identified as a spammer. This includes sending out a small number of

emails each day rather than emailing the whole list in one day. For this study only 50 emails were sent out on a daily basis. This way the OSN does not flag the transmitting account as a spammer.

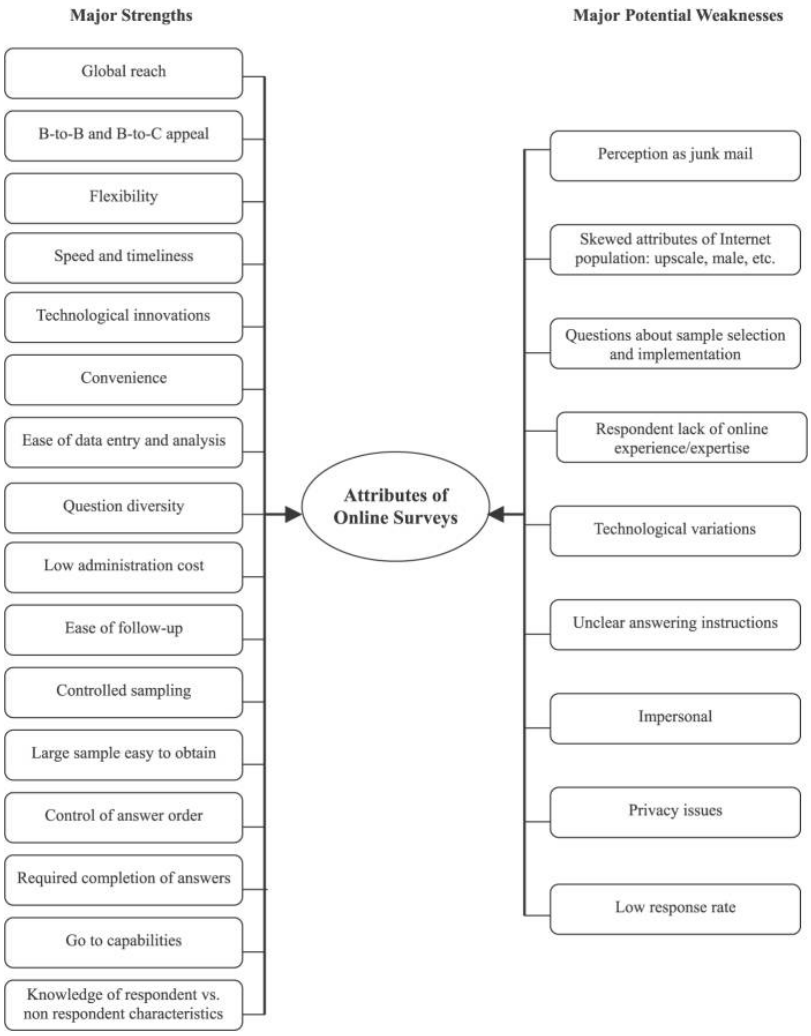
The recruitment process was initiated by sending out introductory emails that included a brief profile of the researcher, the research objectives, the confidentiality statement, and a link to the actual questionnaire. The message also included an instruction to contact the researcher in-order to remove the participants from the mailing list and avoid receiving future emails. This was important in following ways: firstly the respondents will have an option to opt out of the research activity without flagging the message as a spam, and secondly, it creates confidence in the respondent to participate in the research, and lastly even if they do not participate in the present research it establishes a good rapport with the respondents. This rapport might prove beneficial for future correspondence.

The use of OSNs for research also falls within the broader discussion of using internet surveys for conducting research. Internet based surveys offer a number of advantages over paper based surveys. R. E. Wilson et al. (2012) provides a comprehensive list of these advantages (figure 4.3). This list can be categorised into advantages that are offered to the researcher, versus those which are primarily of interest to the respondents. Researchers who choose to use on-line surveys are drawn to their ability to reach a greater number of people in shorter amount of time,their cost; which could be a fraction of conducting a paper based survey. Additionally, the on-line serves provide time saving in conducting and then in data entry process. Another advantage of using an on-line survey is that it can allow for the interaction between the respondent and the survey item. This allows the researcher to design survey instruments that can offer different items, based on set criteria. For example, a researcher might want to present a different set of items to individuals from different demographics.

As for the participants, on-line surveys provide a certain level of anonymity, this becomes very important if the participants are from a disenfranchised group (Browne, 2005; Yancey, Ortega, & Kumanyika, 2006). Participants of some demographics, e.g. younger people or professionals,

have an innate preference for participating in an on-line survey (Van Selm & Jankowski, 2006). On-line surveys also allow the participants to fill them out at a time and location of their convenience. On-line survey forms can also allow the participants to complete the survey over multiple sessions. This is very helpful if the survey is a long one. On-line survey can also allow their participants to fill out the survey in a language of their choice.

Figure 4.3: Strengths and weaknesses of using internet based surveys(R. E. Wilson et al., 2012).



The actual questionnaire was hosted on an on-line server independent

of Linkedin. The questionnaire consisted of an introduction page (which included ethics notification) and was followed by (1) a form to collect demographic information, followed by (2) a single page for each vignette (a total of 8 pages), and then (3) a "thank you" page. Each vignette page presented the vignette and was followed by the question items where respondents entered their input immediately. A step wise progress indicator was added to the top of the page which would highlight the current page the user was on and how many pages were left. A visible 'Next Page' button was placed at the end of each page with a clear label. The button also acted as a submit button and uploading the information that the user had entered on to that specific page. This option allowed to capture the data even if the respondent did not complete the entire survey. The default value for each item was set to zero, this would indicate that the respondent had not answered a specific question.

A total of 250 messages were sent out through Linkedin's internal messaging system, over a span of 5 days. After the first round of messaging 13 requests were received to remove participants from the mailing list. These participants were removed from the mailing list for the second round of follow up messages. Follow up messages were sent out after a week. After the second round of messaging a further 9 individuals requested to be removed from the mailing list. A total of 165 individuals visited the address hosting the on-line questionnaire. This was indicated by a counter that was installed on the page. However, only 96 individuals went past the initial introduction page. Responses from individuals who had no work experience (total of 16 individuals) were removed from the final analysis. Also 8 participants failed to answer question to a minimum of 50% of the vignettes, and hence their responses are also not included in the final analysis. The total number of completed responses received was 72 for a total of 250 messages sent out. This translates into a response rate of 28.8%. Female participation was at 23.6% (17 out of 72), and the average work experience was at about 3.2 years for the sample.

As was mentioned with sample 1, workforce participation rates for females is low in Pakistan and hence the 23.6% response rate is actually quite good.

4.3.1 Satisfaction measures

Satisfaction was measured using a scale that was created by adopting three items from the Job Satisfaction Scale developed by Brayfield and Rothe (1951). This is a self-report scale based on global measures of job satisfaction. Previous studies have reported a high reliability coefficients ranging from .78 to .99 for this scale Moorman (1991). For the present study three items were selected from the over all scale. These items were 'I feel fairly well satisfied with my present job', 'Most days I am enthusiastic about my work', and 'I find real enjoyment in my work'. Because the original items were worded for self-reporting, they had to be reworded to reflect the third person observer stance of the respondents. The reworded items are listed in table 4.6.

The foci-specific sub-scales for satisfaction with organisation, supervisors and peers had returned significant reliability coefficients of .81, .83, and .84 respectively.

Table 4.6: *Peer-specific Satisfaction Scales*

Items measuring Ali's reported satisfaction with his peers (SP)

- Most days, Ali is enthusiastic about working with his peers.
- Working with his peers, Ali will be fairly satisfied with his present job.
- Working with his peers, Ali will find real enjoyment in his work.

Satisfaction with the peers ($\alpha = .84$)

4.4 Sample and Procedure (Study 3)

Studies 1 and 2 focused on multi-foci psychological contracts, and the effects of their breach on foci-specific work-related outcomes. Considering the hypothesis that were tested for these two studies, it was considered appropriate to conduct a third independent study to investigate the content of a focal-person's psychological contract with his/her co-workers. This was also considered relevant to the current thesis because of the lack of research on psychological contracts with co-workers (henceforth

peer-to-peer psychological contacts). In the following sample and procedure that was adopted to gather data using purposeful group of Pakistani employees.

Data was collected on-line using LinkedIn as a recruitment point for participants – similar to study 2. Using the researcher's own personal network of 500+ connections on LinkedIn invites were sent to contacts explaining the study and asking for help in either (a) participation in the survey; (b) recruitment of participants through forwarding the invite; and (c) both (a) and (b). Because my thesis is context specific to Pakistan only LinkedIn members who were working in Pakistan were invited and the survey introduction also explicitly requested only Pakistani employees working in Pakistan were needed. needed. This was to ensure the Pakistan context remains a constant.

While it is difficult to estimate the total numbers of potential participants - over 500 invitations were sent out and a total of 201 completed responses were received. It is important to note that female workplace participation rates are low in Pakistan, thus the low number of female respondents (20%) reflects the religious and cultural influence in the Pakistan economy. On average, the participants were male (80%), married (70%), with education highly skewed to professionals due to the nature of the LinkedIn cohort: 20% held a university qualification and the remainder a master's degree (73%) or PhD (7%). The industries were varied, ranging from Non-Government-Organisations (38%), IT (19%), Industrial (14%), Government Organisations (10%), Finance (7%), Multi-National (4%) and others (8%).

4.4.1 Study 3 Measures

Peer-to-peer psychological contract breach was measured following the approach of Kickul et al. (2002). In the present study, the focus is strictly on peer-to-peer breach, although this is theoretically built upon the same premise of organisational promises that are subsequently breeched. It was due to the potentially extensive nature of exploring promises at the organisation, supervisor and peer foci-levels that it was decided to focus solely upon the peer-to-peer psychological contracts. While clearly

employee to organisation psychological contracts is the dominant form, it was felt that peer-to-peer provided a unique contribution in approach and hence that was the foci group selected.

A modified versions of the 26 organisational promises from Kickul et al. (2002) were used and reworded these to be at the peer-to-peer level. For example, Kickul had as an organisational promise "Safe work environment" and this was modified to "My peers promise me a safe work environment". This modification was confirmed suitable by one of my supervisors. I then took these 26 peer promises to the focus groups for development. Three focus groups were conducted in Pakistan to generate a final set of common peer-based promises. The first focus group consisted of six employees from different industries. They were asked to explore the list of potential promises that peers make and then were encouraged to remove one's they thought were less applicable and modify those that didn't fit well. This generated a set of 15 promises that were generally well agreed and four potential promises. They suggested removing the seven outliers. The second focus group involved six Human Resource managers and they assessed the promises and provided feedback on these. This narrowed the options to 17 promises. A final focus group of five employees from different organisations and sectors (and distinct from the first focus group) provided a final overview and a final set of 15 promises were agreed on. These are listed below (Table 4.7):

In the survey, participants were presented with these 15-items regarding peer-to-peer promises. Within the on-line survey, participants were asked to select the top five and slide these choices across to the right to ultimately rank their own personal top five promises from their peers. Appendix 10.1 shows how this interface works.

Once the participant had selected their top five choices, they hit a submit button that then moved them onto the next page. Within this page, their 'top five' peer promises were used to populate a set of five questions around these promises being breeched (as per Kickul et al., 2002) , coded 1=not at all fulfilled, 5=totally fulfilled. Thus, a higher score indicates greater fulfilment with the psychological contracts between peers.

Table 4.7: *Peer-To-Peer Psychological Promises*

Item #	Question
P1	My peers promised to share their knowledge with me
P2	My peers promised me that they will help me even if I did not ask for their help
P3	My peers promised to fill in for me when I was absent
P4	My peers promised to support my career growth
P5	My peers promised to help me implement what I learned on trainings
P6	My peers promised me to help me balance my work and family responsibilities
P7	My peers promised me that they will guide me when I am doing something wrong
P8	My peers promised me that they will share their resources with me when I needed them
P9	My peers promised me that they will encourage me to do things in a new way
P10	My peers promised me that they will not undermine my interests
P11	My peers promised to give me credit for the work that I have done
P12	My peers promised me that they will give me a fair evaluation on my appraisals
P13	My peers promised me that they will not be absent at critical stages of our projects
P14	My peers promised me that they will share my load of work with me, if they have the time
P15	My peers promised me that they will do their part of the work that was assigned to us as a team

The five-item measure was tested by EFA to determine its factor structure. Factor analysis (principal components, Varimax rotation) was conducted and the top-five items (from each respondent) loaded onto a single factor with an eigenvalues greater than 1 (2.816) and accounting for 56.3% of variance and all items had a factor loading of over 0.6. The measure achieved strong reliability $(\alpha = .80)$.

Satisfaction was measured using three items from the scale developed by Brayfield and Rothe (1951). The three items used are "Most days I am enthusiastic about my work with my peers", "I feel satisfied with my present job working with my peers" and "I find real enjoyment in working

with my peers". Factor analysis (principal components, Varimax rotation) was conducted and the three items loaded onto a single factor with an eigenvalues greater than 1 (1.905) and accounting for 63.5% of variance and all items had a factor loading of over 0.6. The measure also achieved adequate reliability ($\alpha = .71$).

Control Variables: Williams, Vandenberg, and Edwards (2009) note that SEM is not conducive to a large number of control variables. As such, I control for three variables likely to influence the job satisfaction of respondents. Gender (1=female, 0=male), Non-Government-Organisations [NGO] (1=yes, 0=no), and salary [Pakistan dollars] (1= Under PKR20,000, 2= PKR20,000-PKR40,000, 3= PKR40,001-PKR60,000, 4= PKR60,001-PKR80,000, and 5= Over PKR80,000).

In conclusion, the present thesis conducted three separate studies. The primary purpose for all three studies was to test the effect of foci-specific psychological contract breach on foci-specific work-related outcomes. All three studies were based on samples drawn from Pakistan. The first two studies used a research design that was based on the use of the vignette technique. Studies two and three made used and OSN for the recruitment of participants.

Chapter 5

Descriptive Statistics and Assumptions testing

Empirical research, specifically that within the area of social sciences, attempts to prove facets of reality regrading a population by studying a sample from that population. The validity of the results generated by the research is dependent upon how accurately the sample represents the population that it is drawn from. Most of statistical test available to researchers, those that are classified as parametric tests, demand that the sample meets certain assumptions. These assumptions relate to the sampling distribution (Yu, 2002). Although, there is a consensus that in majority cases social sciences research generally violates these assumptions (Yu, 2002), nevertheless, reporting these statistics enhances the confidence in the research outcomes.

5.1 Parametric Assumptions

Parametric tests are generally more accurate when they are carried out on data that is based on a normal distribution that meets four basic assumptions (Field, Miles, & Field, 2013). These assumptions are: the assumption of normality, the homogeneity of variances, that the type of data used is continuous, and finally the assumption that the participants provided their observations independent of each other. The last two of these assumptions are not tested for statistically and relate to the research design. The assumptions for normality and homogeneity of variances can be tested using modern statistical packages. For the purpose

of the studies described here, the open source data analysis package *R* was used to carry out the parametric assumptions testing.

5.1.1 Study 1: Testing for the Assumption of Normality

Normality test ensures that the sample data is normally distributed. This can be tested both graphically and looking at quantitative values for kurtosis and skewness. Using the *ggplot 2* package in *R*, histograms were generated for each foci-specific citizenship behaviour variables. These were then overlaid with normal curves that were drawn using the density function of the *ggplot 2* package. This function draws a normality curve based on the probability for a given values based on the mean and standard deviation values of a selected variable (Field et al., 2013).

The histograms for the citizenship behaviour directed at the organisation are included in the appendix from figure 10.8 to figure 10.15. In order to get a more accurate results descriptive statistics were also generated for the data across all the vignettes. These results are presented in table 5.1. Both skewness and kurtosis are significant if the absolute values of *skew.2SE* and *kurt.2SE* are greater than 1 (at $p < .05$), or are greater than 1.29 indicate significance at $p < .01$, and above 1.65 indicate significance at $p < .001$ (Field et al., 2013). From table 5.1 we can confirm that the OCBO data is normally distributed as there were no issues with the skewness and kurtosis.

Figures from 10.16 to 10.23 present the histograms for the citizenship behaviour directed at the supervisor. The descriptive statistics for the OCBs directed at the supervisor data is presented in table 5.1. Looking at the descriptive statistics in table 5.1 we can confirm that the data did not have an significant skewness and kurtosis values ($p > 0.05$) and is thus normally distributed.

Figures from 10.24 to 10.31 display the histograms for the citizenship behaviours directed at the peers. A visual inspection of these histogram suggests that the data is normally distributed across all vignettes. This is also confirmed by the descriptive statistics provided in table 5.1.

The above results can be summarised to conclude that the data for the foci-specific citizenship behaviour is normally distributed across all the

Table 5.1: *Descriptive Statistics for Foci-Specific OCBs*

	skewness	skew.2SE	kurtosis	kurt.2SE
OCBs Directed at the Organisation				
Scenario 1	-0.01	-0.03	-0.43	-0.40
Scenario 2	-0.34	-0.63	-0.42	-0.40
Scenario 3	-0.43	-0.79	-0.43	-0.40
Scenario 4	0.07	0.14	-0.82	-0.77
Scenario 5	-0.30	-0.56	-0.31	-0.29
Scenario 6	-0.52	-0.97	-0.33	-0.31
Scenario 7	-0.26	-0.48	0.11	0.10
Scenario 8	-0.24	-0.44	-0.55	-0.51
OCBs Directed at the Supervisor				
Scenario 1	-0.53	0.99	0.46	0.43
Scenario 2	0.15	0.27	0.27	0.25
Scenario 3	-0.34	0.63	0.38	0.36
Scenario 4	0.31	0.57	0.56	0.53
Scenario 5	-0.20	0.38	0.13	0.12
Scenario 6	-0.12	0.21	0.69	0.65
Scenario 7	-0.36	0.66	0.15	0.14
Scenario 8	0.07	0.13	0.62	0.58
OCBs Directed at the Peers				
Scenario 1	-0.38	0.69	0.12	0.12
Scenario 2	-0.16	0.30	0.45	0.42
Scenario 3	0.23	0.42	0.25	0.23
Scenario 4	-0.13	0.25	0.49	0.46
Scenario 5	-0.19	0.34	0.47	0.44
Scenario 6	-0.12	0.22	0.04	0.04
Scenario 7	0.12	0.23	0.56	0.52
Scenario 8	0.36	0.66	0.28	0.26

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

vignettes. It is worthwhile to keep in mind that the sampling distribution for large samples (with observations greater than 30) generally tend to be normally distributed(Field et al., 2013).

5.1.2 Study 1: Testing for the assumption Homogeneity

The other important parametric test is that of homogeneity. What this implies is that for studies that collect group based data (in the case of this study each vignette represents a different group) the variance of the outcome variable or variables should be the same across all groups (Field et al., 2013). Table 5.2 reports the results for the Levene's test for homogeneity of variance for all the foci-specific citizenship behaviours. This test tests the hypothesis that the variance across the groups is the same. When this is returned as significant $p \leq 0.5$ then the assumption of homogeneity is not tenable for the given data set (Field et al., 2013). The results for Levene's test indicated unequal variance for the citizenship behaviours directed at the organisation (*F = 7.84, p = 0.00*), at the supervisor (*F = 5.8, p = 0.00*), and peers (*F = 2.76, p = 0.00*).

Field et al. (2013) advice caution while interpreting Levene's test values when the sample size is large. They argue that in large samples even small differences is groups variances can produce a significant Levene's test. As a double check for this Field et al. (2013) recommend using Hartley's F_{max}, which is a ratio variance between the group with the largest values of variance to the group with the lowest level of variance. For samples where each group contains more than 60 members the value of F_{max} should be less than 1. The F_{max} values reported in table 5.2 confirm that the data for the foci-specific OCBs does not meet the assumption of homogeneity.

Although the data presented in table 5.2 shows that for the foci-specific OCBs does not meet the assumption of Homogeneity, this will not be a concern while reporting the results for the current study. This assumption is only considered when the group sizes are not equal and the groups are made of different subjects Field et al. (2013). Whereas this thesis makes use of a repeated measure design where the data from the same participants has split groups wise.

Table 5.2: *Study 1: Homogeneity Testing*

Levene's Test for Homogeneity of Variance (center = median)			
	F value	Pr(>F)	F_{max}
OCBO	6.5462	0.00 ***	3.23
OCBS	5.0241	0.00 ***	2.46
OCBP	3.105	0.00 **	1.79

Group = 7 Df = 624
Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

5.1.3 Study 1: Testing for Outliers and influential cases

In order to check some of these other assumption about our data we developed multiple-regression models incorporating a foci-specific OCB as the outcome variable and using the three foci-specific psychological contracts breach measures as the determinate factors. Tests were run to check for outliers and influential cases. Outlier represents cases that are significantly different from the normal data trend, whereas influential cases represents case that exert undue influence on parameters of a model (Field et al., 2013). Outliers are identified by calculating the standardised residual for the each case. Standardised residuals are defined as the residual of a case divided by an estimate of its standard deviation. Field et al. (2013) provide the following general guidelines for using the standardised residuals to identify if a model fitted to a dataset has been distorted due to outliers and influential cases:

- for a given model if more than 5% of cases have standardised residuals with an absolute value greater or less than ± 2 then the said model is not a good fit for the data.
- the above statement also holds for models with 1% of cases with standardised residuals with an absolute value greater 2.5
- any individual case with standardised residuals with an absolute value greater than 3 is of concern and should be further analysed.
- cases with a cook's distance measure of greater than 1 are classified as having undue influence over the model.

Using the procedure outlined by Field et al. (2013) standardised residuals and other case-wise statistics were calculated using R. The standard-

ised residuals are used to assess the effect of a case on a model's power to predict that case. The output from table 5.3 confirms that 24 (3.8%) cases had a standardised residual value out of the prescribed range of ± 2. That is within the 5% guideline proposed by Field et al. (2013), and thus confirms that the number of outlier cases is negligible.

Table 5.3 also reports the Cook's distance for the individual cases. Cook's distance is a measure of the influence a case has on the overall model. The guideline for using the Cook's distance is that its value should be under 1. Cases with a Cook's distance of greater than one should be investigated further. For the cases reported in table 5.3 the Cook's distance is substantially below 1, confirming that non-of them is exerting undue influence on the model. Taken together these results indicate that model fitted to the data has not be influenced by a subset of cases.

Study 1: Testing for the assumption of independence

Under this assumption it is assumed that the residuals for the individual cases are independent (uncorrelated) with the errors of other cases (Field et al., 2013). This assumption is also described as the serial independence of error, where the size of an error is not influenced by the size of the error preceding it (Meier, Brudney, & Bohte, 2011). This assumption is only considered when dealing with time-series data. The Durbin Watson Test is used to check for this assumption. The guideline for using this test is that its value should not be less than one and should not be more than three, the closer to two the more independent the residuals for the cases are from each other (Field et al., 2013). The Durbin Watson Test for our model returned a value of 1.94 which is very close to two, hence proving that the data there is not autocorrelation within the data.

5.1.4 Study 1: Testing for the assumption of no multicollinearity

Under this assumption it is assumed that there should be no collinearity between the predictor variables. The predictor variables for the current

Table 5.3: *Case-Wise Statistics for OCBs Directed at the Organisation*

case	standardised residuals	cooks.distance	leverage	covariance.ratios
6	-3.01	0.01	0.01	0.96
114	-2.61	0.01	0.01	0.97
149	-2.23	0.01	0.01	0.98
185	-2.68	0.01	0.01	0.97
205	-2.68	0.01	0.01	0.97
207	-2.30	0.01	0.01	0.98
244	-2.28	0.01	0.01	0.98
249	-2.28	0.01	0.01	0.98
250	-2.28	0.01	0.01	0.98
265	-2.28	0.01	0.01	0.98
269	-2.28	0.01	0.01	0.98
284	-2.28	0.01	0.01	0.98
288	2.28	0.01	0.01	0.98
404	-2.59	0.01	0.01	0.97
409	-2.97	0.01	0.01	0.96
457	-5.25	0.04	0.01	0.85
473	-2.59	0.01	0.01	0.97
483	-2.66	0.01	0.01	0.97
488	-2.66	0.01	0.01	0.97
552	-2.29	0.01	0.01	0.98
566	-2.26	0.01	0.01	0.98
603	2.29	0.01	0.01	0.98
611	-2.26	0.01	0.01	0.98
631	2.29	0.01	0.01	0.98

n=632

study are the foci-specific measures of psychological contract breach. This assumption is tested by using the values of VIF (variance inflation factor) and the tolerance statistics (which is the value of $\frac{1}{VIF}$). Field et al. (2013) provide a general guideline for using these values to test for multicollinearity, these includes;

- For each factor the VIF should not be more than 10.
- The average VIF for all the factors should not be substantially greater than 1.
- A tolerance measure bellow 0.1 should be further inspected.

- A tolerance measure bellow 0.2 should be considered as unacceptable.

Due to the particular design of the current study, where all three factors are binary variable (with values of 0, and 1) the VIF values and the tolerance values were returned as 1, as per the guideline give above, it is a clear indication that the data fulfils the assumption of no multicollinearity.

5.1.5 Study 2: Testing for the Assumption of Normality

Normality for study 2 was also tested by generating histograms and descriptive statistics. Data is considered to be non-normal if it has significant skewness and kurtosis. Both skewness and kurtosis are significant if the absolute values of *skew.2SE* and *kurt.2SE* are greater than 1 (at $p < .05$), or are greater than 1.29 indicate significance at $p < .01$, and above 1.65 indicate significance at $p < .001$ (Field et al., 2013). In the following section the histograms and descriptive statistics for the foci-specific satisfaction are presented.

The histograms for Ali's reported satisfaction with his organisation are included in the appendix from figure 10.32 to figure 10.39. These figures indicate that the data for Ali's reported satisfaction with his organisation (SO) is normally distributed. Figures from 10.40 to 10.47 in the appendix present the histograms for Ali's reported satisfaction with his supervisor (SS). The descriptive statistics data for Ali's reported satisfaction with his supervisor is provided in table 5.4. The data for Ali's reported satisfaction with his supervisors did not exhibit any significant skewness or kurtosis across all eight vignettes. Figures from 10.48 to 10.55 in the appendix present the histograms for Ali's reported satisfaction with his peers (SP). The descriptive statistics data for Ali's reported satisfaction with his peers is provided in table 5.4. The results presented in table 5.4 confirm that the data for Ali's reported satisfaction with his peers was also normally distributed.

Table 5.4: *Descriptive Statistics for Foci-Specific Job Satisfaction Measures*

	skewness	skew.2SE	kurtosis	kurt.2SE
Ali's Reported Satisfaction with His Organisation				
Scenario 1	-0.30	-0.50	-1.17	-0.99
Scenario 2	0.28	0.48	-0.37	-0.31
Scenario 3	-0.15	-0.26	-0.42	-0.35
Scenario 4	0.51	0.86	0.28	0.24
Scenario 5	-0.19	-0.32	-0.11	-0.10
Scenario 6	-0.46	-0.77	0.03	0.02
Scenario 7	0.08	0.14	-0.55	-0.46
Scenario 8	0.41	0.69	-1.10	-0.93
Ali's Reported Satisfaction with His Supervisor				
Scenario 1	-0.44	-0.73	0.35	0.30
Scenario 2	0.17	0.29	-0.95	-0.81
Scenario 3	0.28	0.48	0.55	0.47
Scenario 4	0.38	0.63	0.48	0.41
Scenario 5	0.21	0.35	-0.38	-0.32
Scenario 6	0.12	0.20	-0.57	-0.48
Scenario 7	-0.21	-0.35	-0.74	-0.63
Scenario 8	0.27	0.46	-1.01	-0.86
Ali's Reported Satisfaction with His Peers				
Scenario 1	-0.13	-0.21	-0.93	-0.79
Scenario 2	0.09	0.15	-0.48	-0.41
Scenario 3	0.14	0.24	-0.77	-0.65
Scenario 4	0.09	0.16	-0.06	-0.05
Scenario 5	0.03	0.05	-0.28	-0.24
Scenario 6	-0.21	-0.36	-0.61	-0.51
Scenario 7	0.46	0.77	-0.08	-0.07
Scenario 8	0.32	0.53	-1.03	-0.87

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

5.1.6 Study 2: Testing for the Assumption of Homogeneity

Table 5.5 reports the results for the Levene's test for homogeneity of variance for all the foci-specific satisfaction measures. As was discussed in the previous section this test tests the hypothesis that the variance across the groups is the same. When this is returned as significant $p \leq 0.5$ then the assumption of homogeneity is not tenable for the given data set (Field et al., 2013). The results for Levene's test indicated unequal

variance for Ali's reported satisfaction with his organisation (*F = 2.54, p = 0.014*), to the supervisor (*F = 3.33, p = 0.002*), and peers (*F = 2.37, p = 0.022*).

Table 5.5: *Study 2: Homogeneity Testing for Foci-Specific Satisfaction Measures*

Levene's Test for Homogeneity of Variance (center = median)		
	F value	Pr(>F)
JSO	2.5386	0.014 *
JSS	3.3346	0.002 **
JSP	2.374	0.022 *

Group = 7 Df = 504
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

5.1.7 Study 2: Testing for Outliers and influential cases

In order to check for outlier and influential case in the data multiple-regression models were developed incorporating one of the three foci-specific job satisfaction as the outcome variable and using the three foci-specific psychological contracts breach measures as the determinate factors. Tests were run to check for outliers and influential cases. Outlier represents cases that are significantly different from the normal data trend, whereas influential cases represents case that exert undue influence on parameters of a model (Field et al., 2013). Outliers are identified by calculating the standardised residual for the each case. Standardised residuals are defined as the residual of a case divided by an estimate of its standard deviation. The data was inspected for the presence of outliers or influential cases by using the guidelines provided by Field et al. (2013).

The standardised residuals are used to assess the effect of a case on the model's power to predict that case. The output from table 5.6 confirms that 24 (3.8%) cases had a standardised residual value out of the prescribed range of ± 2. That is within the 5% guideline proposed by Field et al. (2013), and thus confirms that the number of outlier cases is negligible.

Table 5.6 also reports the Cook's distance for the individual cases. Cook's distance is a measure of the influence a case has on the overall model. The guideline for using the Cook's distance is that its value should be under 1. Cases with a Cook's distance of greater than one should be investigated further. For the cases reported in table 5.6 the Cook's distance is substantially below 1, confirming that non-of them is exerting undue influence on the model. Taken together these results indicate that model fitted to the data has not be influenced by a subset of cases.

Table 5.6: *Case-Wise Statistics for Ali's Reported Satisfaction with His Organisation*

	standardized residuals	cooks.distance	leverage	covariance.ratios
130	2.16	0.01	0.01	0.98
133	-2.12	0.01	0.01	0.98
136	2.16	0.01	0.01	0.98
167	-2.12	0.01	0.01	0.98
178	2.16	0.01	0.01	0.98
194	2.51	0.01	0.01	0.97
197	2.51	0.01	0.01	0.97
200	2.51	0.01	0.01	0.97
253	2.51	0.01	0.01	0.97
254	2.51	0.01	0.01	0.97
258	-2.13	0.01	0.01	0.98
261	-2.13	0.01	0.01	0.98
264	2.16	0.01	0.01	0.98
272	-2.13	0.01	0.01	0.98
289	-2.13	0.01	0.01	0.98
328	2.51	0.01	0.01	0.97
366	2.51	0.01	0.01	0.97
392	2.92	0.02	0.01	0.95
456	3.27	0.02	0.01	0.93
510	3.27	0.02	0.01	0.93

5.1.8 Study 2: Testing for the assumption of independence

Under this assumption it is assumed that the residuals for the individual cases are independent (uncorrelated) with the errors of other cases

(Field et al., 2013). This assumption is also described as the serial independence of error, where the size of an error is not influenced by the size of the error preceding it (Meier et al., 2011). This assumption is only considered when dealing with time-series data. The Durbin Watson Test is used to check for this assumption. The guideline for using this test is that its value should not be less than one and should not be more than three, the closer to two the more independent the residuals for the cases are from each other (Field et al., 2013). The Durbin Watson Test for our model returned a value of 2.03 which is very close to two, hence proving that the data there is no autocorrelation within the data.

Chapter 6

Results and Analysis

6.1 Study 1 Results and Analysis

The purpose of study 1 was to model the influences of multi-foci psychological contract breach on foci-specific OCBs, using the target-similarity model presented by Lavelle et al. (2007). This will be in line with the previous research that distinguishes between OCBs based on their targets (Lepine, Erez, & Johnson, 2002; Williams & Anderson, 1991). This study will also be contributing to the literature that operationalises psychological contract breach as a multi-foci construct (Bordia et al., 2010; Conway et al., 2014; Dawson et al., 2013; Sverdrup & Schei, 2013; Turnley et al., 2003).

Responses for the foci-specific OCBs measures where collected for each of the eight vignettes, using three items for each foci. For the first level of analysis stacked frequency plots (SFP) were generated to analyse the response patterns (figures 10.56 to figure 10.63) . These graphs charts allow for within and across scenarios analysis of the foci-specific satisfaction responses. The table in figure 6.1 also reproduces the same data but in a tabular format. Vignette 1 was used as the reference vignette and change in the responses have been indicated by arrows in figure 6.1. The two extreme scenario are represented by vignette 1 (figures 10.56) and vignette 8 (figure 10.63). In vignette 1, all the foci-specific psychological contracts are portrayed as fulfilled. Whereas in vignette 8, the scenario is worded to show that all the foci-specific psychological contracts were breached. A visual analysis of the SFP for these two

vignettes reveals that for the first vignette most of the response are on the right of the mid-point (indicating high levels of OCBs) whereas for vignette eight they are on the left (indicating low levels of OCBs). This is also confirmed by the results in figure 6.1. These results are in line with previous research on psychological contract breach, in that breach is negatively related and fulfilment is positively related to OCBs.

The second vignette portrayed a scenario where the supervisor had breached Ali's psychological contract. Whereas the organisation and the peers were seen as fulfilling their psychological contracts. The SFP for this vignette is presented at figure 10.57. Both this and the data in figure 6.1 confirm that majority of respondents saw the breach of the psychological contract by the supervisor influencing all three foci-specific OCBs. This influenced the OCBs directed at the supervisor more than it did OCBs directed at the organisation and OCBs directed at the peers. There was movement in the frequency of responses for all three foci-specific OCBs towards the left of the scale from the right side of the SFP plot. This movement was most prominent for the OCBs directed at the supervisor.

The scenario in vignette 3 portrays a situation where the organisation has breached Ali's psychological contract, but the his psychological contracts with his peers and supervisor are fulfilled. Using the results of the first vignette as the reference point, the results for vignette 3 show movement towards the left for the OCBs directed at the supervisor and the peers (figure 10.58). This indicates that the psychological contract breach (PCB) by the organisation influenced the OCBs directed at the supervisor and peers. Inline with the target-similarity model, the results confirm that psychological contract breach by the organisation influenced the OCBs directed at the organisation more than it did the OCBs directed at the supervisor and the OCBs directed at the peers.

The forth vignette was worded to portray a situation where the psychological contracts with the supervisor and the organisation are breached, the only one fulfilled is the one between Ali and his peers. The SFP for this vignette is presented at figure 10.59. The plot lines in this figure show a clear movement towards the left indicating that the respondents

Figure 6.1: *Response Frequency Table for Foci-Specific OCBs*

Vignettes	Psychological contract state 0 = Fulfilled 1 = Breached			OCBs directed at the: Organisation										Supervisor										Peers									
	PCO	PCS	PCP	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change
1	0	0	0	0		0		14		49		16		1		2		25		40		8		2		13		38		25		1	
2	0	0	1	0	⇔	7	↑	21	↑	39	↓	12	↓	3	↑	22	↑	35	↑	16	↓	3	↓	1	↓	10	↓	47	↑	20	↓	1	⇔
3	0	1	0	3	↑	13	↑	23	↑	33	↓	7	↓	0	↓	8	↑	24	↓	40	⇔	7	↓	0	↓	12	↓	42	↑	22	↓	3	↑
4	0	1	1	7	↑	22	↑	24	↑	19	↓	7	↓	8	↑	26	↑	26	↑	16	↓	6	↓	3	↑	19	↑	33	↓	22	↓	2	↑
5	1	0	0	0	⇔	1	↑	14	⇔	43	↓	21	↑	0	↓	3	↑	26	↑	43	↑	7	↓	2	⇔	18	↑	36	↓	22	↓	1	⇔
6	1	0	1	4	↑	10	↑	21	↑	32	↓	12	↓	4	↑	17	↑	26	↑	24	↓	8	⇔	8	↑	18	↑	41	↑	10	↓	2	↑
7	1	1	0	3	↑	9	↑	36	↑	25	↓	6	↓	3	↑	7	↑	33	↑	28	↓	8	⇔	4	↑	26	↑	30	↓	17	↓	2	↑
8	1	1	1	6	↑	14	↑	28	↑	24	↓	7	↓	2	↑	19	↑	30	↑	22	↓	6	↓	4	↑	29	↑	30	↓	13	↓	3	↑

↑ Values increased as compared to vignette 1 value
↓ Values decreased as compared to vignette 1 value
⇔ Values remaind the same as compared to vignette 1 value

PCO = Psychological Contract with organisation
PCS = Psychological Contract with superviosr
PCP = Psychological Contract with peers

saw Ali being less willing to direct OCBs toward all three foci. The data confirms that change in OCBs was most prominent for the two foci that breached their psychological contracts with Ali. The OCBs directed at the peers registered the lowest amount of change from the reference vignette.

In vignette five the psychological contract between Ali and his peers was portrayed as being breached, while the other two psychological contracts remained fulfilled. What is interesting about the SFP for this vignette (figure 10.60) is that it is almost similar to the SFP of vignette 1. The data for this vignette also exhibits the target-similarity effect. All three of the foci-specific OCBs have been altered as a result of psychological contract breach by the peers, the size of change was more for the OCBs directed at the peers than for OCBs directed at the organisation and OCBs directed at the supervisor.

This trend is also reflected in vignette 6, where the psychological contract breach is committed by the supervisor and the peers. The OCBs related to these foci are seen as diminishing as a result of the psychological contract breach. Participants saw Ali remaining satisfied with his organisation which has fulfilled his psychological contract. This trend is also reflected in vignette 7, where the organisation and the peers are the parties that are breaching Ali's psychological contract. Descriptive statistics for the study variables are shown in Table 6.1.

Table 6.1: *Study 1: Correlations and Descriptive Statistics*

Variables	M	SD	1	2	3
1. OCBO	3.50	.99	–		
2. OCBS	3.28	.96	.382**	–	
3. OCBP	2.98	.85	.332**	.399**	–

OCBO = OCBs directed at the organisation

OCBS = OCBs directed at the supervisor

OCBP = OCBs directed at the peers

N=632, *p< .05, **p< .01

The mean scores (Table 6.1) show that the OCBs directed at the organisation was the highest (M=3.5), followed by OCBs directed at the

supervisor (M=3.28) and then towards the peers (M=2.98). Additional analysis with paired-sample t-tests showed that there was no significant differences between these vignettes (all $p > 0.05$). Remember that each vignette represents a single instance of breach or fulfilment of the foci-specific psychological contracts. What the results therefore imply is that this sample of respondents reported that after experiencing these events Ali will be equally satisfied towards each foci. The Pearson's correlation results show that the three facets of satisfaction are all significantly correlated to each other ($.4 < r < .3$, all $p < .001$). This correlation is below the threshold of concept redundancy that occurs at $r > .75$ (Morrow, 1983).

As was noted earlier, a total of eight vignettes were constructed for the current study. Each vignette portrayed a different state (breached v/s fulfilled) for each of the three foci-specific (organisation, supervisor, and peers) psychological contracts with Ali. For each of the foci-specific psychological contracts there were two sets of vignettes. In set one there were four vignettes in which that specific psychological contract was portrayed as being fulfilled, and another set of four vignette in which it was portrayed as being breached. In each set the remaining two psychological contracts were portrayed in different combinations of breached and fulfilled states. So, for example, with regards to the psychological contract with the organisation there were four vignettes in which this contract was fulfilled and then there were four other vignettes in which this contract was breached (Table 6.2). The same pattern was repeated for the psychological contracts with the supervisor and peers. The t-test was used to compare the responses for the contrasting sets of vignettes for each foci-specific psychological contract.

Table 6.3 produces the results of a independent sample t-test. This test is used to confirm that the means of two groups are significantly different. This test was used to compare the two sets of contrasting vignettes for each foci-specific psychological contract.

With regards to the psychological contract breach/fulfilment by the organisation, there was a significant difference between the responses relating to the foci-specific OCB measures. The two sets of vignettes varied

Table 6.2: *Sets of Breached and Fulfilled Vignettes*

Psychological Contract Foci	Vignettes with Fulfilled scenarios (set1)	Vignettes with Breached scenarios (set2)
Organisation	1,2,3,4	5,6,7,8
Supervisors	1,2,5,6	3,4,7,8
Peers	1,3,5,7	2,4,6,8

Table 6.3: *Study 1: Independent Sample T-Test Analysis*

	Breached (n=316)		Fulfilled (n=316)		Difference
Variables	Mean	SD	Mean	SD	(T-test)
	Psychological Contract with Organisation				
1. OCBO	3.19	1.03	3.82	0.85	8.85***
2. OCBS	3.22	0.99	3.35	0.92	1.99*
3. OCBP	2.96	0.88	3.01	0.81	0.84*
	Psychological Contract with Supervisor				
1. OCBO	3.33	1.06	3.68	0.89	4.93***
2. OCBS	3.01	1.01	3.57	0.81	7.81***
3. OCBP	2.91	0.86	3.05	0.82	2.12*
	Psychological Contract with Peers				
1. OCBO	3.49	1.00	3.51	0.99	0.26
2. OCBS	3.35	0.94	3.23	0.97	-1.70
3. OCBP	2.84	0.89	3.12	0.78	4.01***

OCBO = Citizenship behaviour directed at the organisation

OCBS = Citizenship behaviour directed at the supervisor

OCBO = Citizenship behaviour directed at the peers

âĂăp< .1, *p< .05, **p<.01,***<.001

the most on the OCBs directed at the organisation (t = 8.85, p < .001). This was followed by the OCBs directed at the supervisor (t = 1.99, p < .05) and then by the OCBs directed at the peers (t = .84, p < .05). This portion of the results supports hypothesis H_{1a1} and H_{1a2}, in that they confirm that psychological contract breach by the organisation will lead to a

decrease in OCBs directed at the organisation. Furthermore, the breach will have an influence on the OCBs directed at the supervisor and the peers but the influence will not be as strong.

Comparing the scenarios where the psychological contract breach is committed by the supervisors against those where this contract is fulfilled, the results were similar to above. These results support hypothesis H_{1b1}. The breach of the psychological contract by the supervisor had the strongest influence on the OCBs directed at the supervisor (t = -7.81, p < .001). There was some spillover effect of this breach on to the OCBs directed at the organisation (t = 4.93, p < .001) and the peers (t = 2.12, p < .001). Hypothesis H_{1b2} was also supported because the target specific effect was stronger than the spillover effect.

The results also confirmed that psychological contract breach by the peers would have a target-specific effect on the OCBs directed at the peers. This provides support for hypothesis H_{2c1}. Hypothesis H_{2c2} was not supported because the data does not report any difference between the vignettes depicting a psychological contract breach by the peers and those where this contract was fulfilled, in-terms of the OCBs directed at the organisation and OCBs directed at the supervisor. Hence proving that there was no spillover effect.

6.1.1 Repeated Measure Design for study 1

For the current study the participants were presented with vignettes that portrayed situations of psychological contract breach or fulfilment. A single respondent had to answer the same questions for eight unique vignettes. Designs, like this one, which collect multiple responses from the same participants are known as repeated-measure designs (Vonesh & Chinchilli, 1996). Repeated measure design allow for testing within-participant variation caused by the experimental effect (Field et al., 2013). In the context of the current study, the objective was to determine whether the respondents noticed the variation in the context of the vignettes and how this variation in the context influenced their responses. Logic dictates that individuals who would attribute a similar meaning to vignettes would respond similarly to how Ali would react to the situations depicted

in the vignettes. Also that the respondents would report differently on different vignettes because they would have attributed different meanings to each individual vignette.

Field et al. (2013) noted that repeated-measure data should not be modelled using the normal linear modelling techniques. This is because these techniques assume that each response is independent of the others. Whereas, with repeated-measure data, there is an obvious correlation between responses that were recorded from a single participant. As a solution to this repeated-measure data is analysed using a multilevel modelling framework, where the responses are taken to be grouped by the respondents (Field et al., 2013). In response to these suggestions a multilevel analysis was carried out using the procedure outlined by Finch, Bolin, and Kelley (2014) and Field et al. (2013). The *nlme* package for the *R* statistical software was used to carryout the multilevel analysis.

The first step for conducting a multilevel analysis is to determine whether there is a significant variation across the contexts (Field et al., 2013). This is achieved by comparing two models. A base model which assumes fixed intercepts to model the data. This model is fitted based on the assumption that there is no variance in the context across the groups of data. The second model fitted to the data assumes that the intercepts are random and vary across the contexts. Both these fixed intercept model and random intercept models were tested using the three foci-specific satisfaction facets, as outcome variables, across the eight vignettes. The model fit estimates for these models are presented in Table 6.4.

As a general rule of thumb models with lower AIC (Akaike's information criterion) and BIC (Schwarz's Bayesian criterion) are considered to have better fit to data (Finch et al., 2014). For the OCBs directed at the organisation the fixed intercept model had an AIC of 1797 and BIC of 1805. The corresponding random intercept model had lower AIC (1730) and BIC (1744) values, and thus was a better fit to the data. This Table also provides the log likelihood ratio comparison between the models and this confirms that random intercept model offers a better fit for the data ($\chi^2(1) = 67.97, p < .001$). The results presented in Table 6.14

also confirm that the random intercept models for the OCBs directed at the supervisor ($\chi^2(1) = 45.73, p < .001$), and OCBs directed at the peers ($\chi^2(1) = 7.18, p < .05$) also provided a significantly better fit to the data. These results confirm the repeated-measure nature of the data and confirm that multilevel models provide a better fit for the data.

Table 6.4: *Study 1 : Model-Fit Statistics for Models with Fixed and Random Intercepts*

	OCBs directed at					
	Organisation		Supervisor		Peers	
	Model Intercepts		Model Intercepts		Model Intercepts	
	Fixed	Random	Fixed	Random	Fixed	Random
df	2	3	2	3	2	3
AIC	1796.54	1730.57	1796.54	1752.81	1796.54	1791.35
BIC	1805.44	1743.91	1805.44	1766.15	1805.43	1804.7
logLik	-896.27	-862.28	-896.27	-873.41	-896.27	-892.68
	67.97		45.73		7.18	
p-value		<.0001		<.0001		<.05

Having confirmed the viability of using the multilevel modelling framework in the previous stage, fixed effects were added to the multilevel models for each foci-specific satisfaction facets. Fixed effects remain constant for each participant across the different vignettes. For example, the gender of the person would remain same for all the eight vignettes. These also represent the non-systematic factors, that could have influenced an individual respondent's response to a particular vignette in addition to the change in the context of the vignettes.

Table 6.5 provides the summary of the regression parameters for all three foci-specific OCB outcomes. None of the fixed effects register any influence in any of the models. Confirming that the participants' responses were not influenced by the within participant difference. Thus, it can be concluded from the data that most of the variations in the responses were attributed to the systematic variation introduced into the vignettes, which was the variation in the states of foci-specific psycho-

Table 6.5: *Model Summary; Fixed Effects Model for Foci-Specific OCBs*

Outcome variable : OCBs directed at the organisation					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.01	0.38	551.00	0.02	0.99
married	0.11	0.17	74.00	0.67	0.51
gender	-0.06	0.12	74.00	-0.54	0.59
e_status	0.00	0.10	551.00	0.00	1.00
c_positions	0.02	0.05	551.00	0.42	0.67
salary	-0.05	0.06	74.00	-0.81	0.42
education	-0.06	0.10	74.00	-0.64	0.53
Outcome variable : OCBs directed at the supervisor					
(Intercept)	0.07	0.39	551.00	0.19	0.85
married	-0.02	0.17	74.00	-0.10	0.92
gender	0.06	0.12	74.00	0.51	0.61
e_status	-0.15	0.10	551.00	-1.51	0.13
c_positions	-0.01	0.05	551.00	-0.20	0.84
salary	0.03	0.06	74.00	0.61	0.55
education	0.02	0.10	74.00	0.19	0.85
Outcome variable : OCBs directed at the peers					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.29	0.40	551.00	0.73	0.47
married	-0.18	0.17	74.00	-1.02	0.31
gender	0.21	0.12	74.00	1.72	0.09
e_status	0.03	0.10	551.00	0.27	0.79
c_positions	0.01	0.05	551.00	0.27	0.79
salary	0.00	0.06	74.00	0.04	0.97
education	-0.15	0.10	74.00	-1.41	0.16

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

logical contracts (breached/fulfilled) .

The models were further developed by adding to them the random effects. Random effects are the effects that changed with the context. In case of the current study these were the breach/fulfilled states of foci-specific psychological contracts for each of the eight vignettes. These models were compared to the fixed effects model developed in the pre-

vious stage to determine whether they offered a better fit to the data. Table 6.6 provides the results for this analysis.

Table 6.6: *Model-Fit Statistics for Models with Fixed and Mixed Effects*

	OCBs directed at					
	Organisation		Supervisor		Peers	
	Modelled effects		Modelled effects		Modelled effects	
	Fixed	Mixed	Fixed	Mixed	Fixed	Mixed
df	10.00	31.00	10.00	31.00	10.00	31.00
AIC	1809.31	1706.35	1808.02	1756.38	1803.07	1790.54
BIC	1853.80	1844.27	1852.51	1894.29	1847.56	1928.45
logLik	-894.66	-822.18	-894.01	-847.19	-891.53	-864.27
L.Ratio	Âă	144.96	Âă	93.64	Âă	54.53
p-value	Âă	<.0001	Âă	<.0001	Âă	<.0001

The mixed effects model for the OCBs directed at the organisation had a lower AIC (1706) and BIC (1844) than the corresponding fixed effects model for the same outcome variable. The log likelihood ratio comparison between these two model also confirmed that the mixed effects model as a better fit for the data ($\chi^2(21) = 144.96, p < .001$). Similarly, the model for the OCBs directed at the supervisor also had a lower AIC (1756) as compared to the fixed effects model for the same outcome variable. The log likelihood ratio ($\chi^2(21) = 465.17, p < .001$) also confirmed that the mixed effects model was a better fit for the data. The AIC (1790) value for the model of OCBs directed at the peers was also significantly less than the corresponding fixed effects model and the log likelihood ratio was also significant in favour of the mixed effects model ($\chi^2(21) = 54.53, p < .001$). These results confirm that the mixed effects model offered a better fit for the data than the fixed effects model. Also confirming that there was a significant variation in the vignette contexts.

The regression parameters for all three foci-specific mixed effect models are presented in table 6.7. Almost all the fixed factors did not register any significant regression parameters in the three models. Gender registered a significant effect on OCBs directed at the peers (t(1.76) = 0.22, p < .1). Starting with the model for OCBs directed at the organisation,

the variations in the psychological contract with the organisation (PCO) and psychological contract with the supervisors (PCS) registered significant effects, whereas psychological contract with peers (PCP) was not significantly related to OCBs directed at the organisation. For the model calculating OCBs directed at the supervisor, PCO had a significant influence (t(-1.89) = -0.14, p < .1), PCS had the largest effect size (t(-7.97) = -0.61, p < .001). PCP did not register any influence on OCBs directed at the supervisor. Lastly, PCS (t(-2.17) = -0.15, p < .05) and PCP (t(-3.40) = -0.33, p < .001) had significant effect on OCBs directed at the peers. PCO, on the hand, was not related to OCBs directed at the peers.

To allow for an easier comparisons between the effects of foci-specific psychological contract breach on foci-specific OCBs table 6.10 reproduces their regression coefficients from their respective final models. The coefficients for OCBs directed at the organisation and OCBs directed at the peers were reproduced from table 6.7. The coefficients for OCBs directed at the supervisor are reproduced from table 6.9. PCO was significantly related to OCBs directed at the organisation (t(-9.54) = -0.67, p < .0001) but not to OCBs directed at the supervisor and OCBs directed at the peers, whereas PCP was only significantly related to OCBs directed at the peers (t(-3.4) = -0.33, p < .0001). On the other hand, PCS was significantly related OCBs directed at the organisation (t(-4.71) = -0.36, p < .0001), OCBs directed at the supervisor (t(-5.28) = -0.74, p < .0001), and OCBs directed at the peers (t(-2.17) = -0.15, p < .0001).

In order to determine if there were any interaction-effects in the data, a further set of models was developed incorporating the interaction-effects of the independent variables (the three foci-specific psychological contracts). These models were tested for model fit against the models without the interaction effects in order to determine whether adding the interaction effects would improve their fit. The results for this analysis are provided in table 6.8. The models for the OCBs directed at the organisation and OCBs directed at the peers did not provide a better fit for the data. The log likelihood ratio between the models for OCBs directed at the organisation with and without interaction was ($\chi^2(4) = 5.59, p > .05$). The log likelihood ratio between the models for OCBs directed at the su-

pervisor with and without interaction was ($\chi^2(4) = 3.75, p > .05$). Because adding the interaction effects did not to the models' predictive ability, the models without the interactions effect were retained for OCBs directed at the organisation and OCBs directed at the peers. Because of these results Hypothesis H_{10}, and H_{11} were rejected.

The only model to show any improvement in the fit statistics was the one for OCBs directed at the supervisor ($\chi^2(4) = 9.49, p < .05$). The summary for this model is presented in table 6.9. None of the two-way interactions between the various psychological contracts or their combined three-way interaction registered a significant effect on the model. But interestingly the effect of PCO on OCBs directed at the supervisor did not remain significant when the interaction effects were added. In the model for OCBs directed at the supervisor without the interaction effects the effect of PCO was t(-1.89) = -0.14, p < .1, which is a weak significance. Because there were no interaction effects in the model Hypothesis H_{12} was also rejected. The model of OCBs directed at the supervisor with the interaction effects was used as the final model for analysis, because it had a better fit with the data.

Table 6.7: *Model Summary; Mixed Effects Model for Foci-Specific OCBs*

	Value	Std.Error	DF	t-value	p-value
Outcome variable : OCBs directed at the organisation					
(Intercept)	0.52	0.34	548.00	1.54	0.12
married	0.12	0.14	74.00	0.85	0.40
gender	-0.02	0.10	74.00	-0.20	0.84
e_status	0.02	0.08	548.00	0.24	0.81
c_positions	0.01	0.04	548.00	0.32	0.75
salary	-0.02	0.05	74.00	-0.50	0.62
education	-0.12	0.09	74.00	-1.37	0.18
PCO	-0.67	0.07	548.00	-9.54	0.00
PCS	-0.36	0.08	548.00	-4.71	0.00
PCP	-0.02	0.07	548.00	-0.26	0.79
Outcome variable : OCBs directed at the supervisor					
(Intercept)	0.32	0.37	548.00	0.87	0.39
married	0.01	0.16	74.00	0.04	0.97
gender	0.09	0.11	74.00	0.82	0.42
e_status	-0.13	0.09	548.00	-1.40	0.16
c_positions	-0.02	0.04	548.00	-0.53	0.59
salary	0.07	0.05	74.00	1.24	0.22
education	-0.01	0.10	74.00	-0.11	0.91
PCO	-0.14	0.07	548.00	-1.89	0.06
PCS	-0.61	0.08	548.00	-7.97	0.00
PCP	0.10	0.08	548.00	1.25	0.21
Outcome variable : OCBs directed at the peers					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.65	0.40	548.00	1.62	0.11
married	-0.21	0.17	74.00	-1.21	0.23
gender	0.22	0.12	74.00	1.76	0.08
e_status	0.02	0.09	548.00	0.20	0.85
c_positions	-0.01	0.05	548.00	-0.29	0.77
salary	0.01	0.06	74.00	0.18	0.86
education	-0.13	0.10	74.00	-1.29	0.20
PCO	-0.05	0.07	548.00	-0.75	0.45
PCS	-0.15	0.07	548.00	-2.17	0.03
PCP	-0.33	0.10	548.00	-3.40	0.00

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

PCO = (Psychological contract with the organisation)

PCS = (Psychological contract with the supervisors)

PCP = (Psychological contract with peers)

Table 6.8: *Model-Fit Statistics for Models with and without Interaction Effects*

	OCBs Directed at					
	Organisation		Supervisor		Peers	
	Interaction effects included		Interaction effects included		Interaction effects included	
	No	Yes	No	Yes	No	Yes
df	31	35	31	35	31	35
AIC	1706.35	1708.76	1756.38	1754.88	1790.54	1794.83
BIC	1844.27	1864.47	1894.29	1910.59	1928.45	1950.54
logLik	-822.18	-819.38	-847.19	-842.44	-864.27	-862.41
L.Ratio		5.59		9.49		3.71
p-value		0.23		0.05		0.45

Table 6.9: *Model Summary; Mixed Effects Model for OCBs Directed at the Supervisor*

	Value	Std.Error	DF	t-value	p-value
married	0.01	0.16	74.00	0.04	0.97
gender	0.09	0.11	74.00	0.84	0.40
e_status	-0.12	0.09	544.00	-1.37	0.17
c_positions	-0.03	0.04	544.00	-0.67	0.51
salary	0.07	0.05	74.00	1.28	0.20
education	-0.01	0.10	74.00	-0.10	0.92
PCO	-0.05	0.13	544.00	-0.36	0.72
PCS	-0.74	0.14	544.00	-5.28	0.00
PCP	0.06	0.13	544.00	0.47	0.64
PCO:PCS	-0.09	0.19	544.00	-0.47	0.64
PCO:PCP	-0.26	0.18	544.00	-1.45	0.15
PCS:PCP	0.21	0.20	544.00	1.09	0.28
PCO:PCS:PCP	0.36	0.28	544.00	1.26	0.21

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

PCO = (Psychological contract with the organisation)

PCS = (Psychological contract with the supervisors)

PCP = (Psychological contract with peers)

Table 6.10: *Regression Coefficients for Foci-Specific Psychological Contracts*

	PCO			PCS			PCP		
	OCBO	OCBS	OCBP	OCBO	OCBS	OCBP	OCBO	OCBS	OCBP
Value	-0.67^{****}	-0.05	-0.05	-0.36^{***}	-0.74^{***}	-0.15^{**}	-0.02	0.06	-0.33^{****}
Std.Error	0.07	0.13	0.07	0.08	0.14	0.07	0.07	0.13	0.1
DF	548	544	548	548	544	548	548	544	548
t-value	-9.54	-0.36	-0.75	-4.71	-5.28	-2.17	-0.26	0.47	-3.4

PCO = Psychological contract with the organisation

PCS = Psychological contract with the supervisors

PCP = Psychological contract with peers

OCBO = Citizenship behaviour directed at the organisation

OCBS = Citizenship behaviour directed at the supervisor

OCBO = Citizenship behaviour directed at the peers

*p< .1, **p< .05, ***p<.01,****<.001

6.2 Study 2 Results and Analysis

The purpose of study 2 was to model the influences of multi-foci psychological contract breach on a focal-person's (Ali) satisfaction with different organisational foci, using the target-similarity model proposed by Lavelle et al. (2007). This is in line with the previous research that identifies different facets of satisfaction based on their targets (Boles et al., 2003; Edwards et al., 2008). This study also contributes to the literature on multi-foci psychological contract breach (Bordia et al., 2010; Conway et al., 2014; Dawson et al., 2013; Sverdrup & Schei, 2013; Turnley et al., 2003).

A total of 72 completed questionnaires were received for this study. Each questionnaire consisted of eight vignettes and each vignette was followed by the same nine items (three for each foci). The total dataset then consisted of (72x9) 648 records. Three sets of analysis were conducted on the data collected. As a first level of analysis graphs were generated plotting Ali's reported satisfaction with his organisation, supervisor, and peers for each vignette. In the second stage descriptive statistics (t-test and independent sample t-tests) were used to compare the results of individuals vignettes against each other. Finally a repeated measure analysis was conducted using multi-hierarchical modelling technique.

6.2.1 Graphical Analysis

Responses for the foci-specific satisfaction measures where collected for each of the eight vignettes, using three items for each foci. For the first level of analysis stacked frequency plots (SFP) were generated to analyse the response patterns (figures 10.64 to figure 10.71). These graphs charts allow for within and across vignette analysis of the foci-specific satisfaction responses. The table in figure 6.2 also reproduces the same data but in a tabular format. Vignette 1 was used as the reference vignette and change in the frequencies of the responses has been indicated by the arrows in figure 6.2. The two extreme scenario are represented by vignette 1 (figures 10.64) and vignette 8 (figure 10.71). In

vignette 1, all the foci-specific psychological contracts are portrayed as fulfilled. Whereas in vignette 8, the scenario is worded to show that all the foci-specific psychological contracts were breached. For all the other vignettes a single or a pair of foci had either breached or fulfilled their psychological contracts with Ali.

Hypothesis H_{13}, H_{16}, and H_{19} had predicted that psychological contract breach by a party will negatively influence the focal-person's satisfaction with that party. A visual analysis of the SFP for vignettes 1 and 8 reveals that for the first vignette most of the respondents saw Ali as being satisfied with all three foci. Whereas for vignette 8, which portrayed a situation where all three foci had breached their psychological contracts, the respondents indicated that Ali would become unsatisfied will all three foci. This is also confirmed by the results in figure 6.2. These results provide support for the above stated hypothesis, and are in line with previous research on psychological contract breach, in that breach is negatively related and fulfilment is positively related to satisfaction.

Hypothesis H_{14}, H_{17}, and H_{20} had predicted that the psychological contract breach by a party will negatively influence the satisfaction with the other foci with whom Ali has psychological contracts with. Vignettes 2, 3, and 5 portrayed situations where only the peers, the supervisor, and the organisation had respectively breached their psychological contracts, whilst the other two foci had fulfilled their psychological contracts with Ali. The SFP for the second vignette is presented at figure 10.65. Both this and the data in Figure 6.2 confirm that majority of respondents saw the breach of the psychological contract by the peers influencing Ali's satisfaction with his peers. More importantly, the respondents also saw the breach of the psychological contract by the peers influencing Ali's satisfaction with his organisation and supervisor. This result provides support for Hypothesis H_{20}.

The SFP for the third vignette is presented at figure 10.66. The scenario in vignette 3 portrays a situation where the supervisor has breached Ali's psychological contract, but his psychological contracts with his peers and organisation are fulfilled. Using the results of the first vignette as the reference point, the results for vignette 3 show that the respondents

Figure 6.2: *Response Frequency Table for Foci-Specific Job-Statisfaction*

Vignettes	Psychological contract state (0 = Fulfilled, 1 = Breached)			Focal-person's satisfaction with																													
				Organisation										Supervisor										Peers									
	PCO	PCS	PCP	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change	Strongly Disagree	Change	Disagree	Change	Not Sure	Change	Agree	Change	Strogle Agree	Change
1	0	0	0	0		6		20		19		19		0		3		20		27		14		0		8		16		24		16	
2	0	0	1	0	⇔	8	↑	32	↑	16	↓	8	↓	0	⇔	0	↓	29	↑	22	↓	13	↓	4	↑	20	↑	33	↑	5	↓	2	↓
3	0	1	0	2	↑	17	↑	36	↑	6	↓	3	↓	12	↑	28	↑	15	↓	7	↓	2	↓	2	↑	4	↓	30	↑	16	↓	12	↓
4	0	1	1	9	↑	20	↑	20	⇔	10	↓	5	↓	17	↑	19	↑	24	↑	1	↓	3	↓	14	↑	22	↑	19	↑	6	↓	3	↓
5	1	0	0	5	↑	14	↑	33	↑	10	↓	2	↓	1	↑	4	↑	32	↑	20	↓	7	↓	3	↑	9	↑	26	↑	21	↓	5	↓
6	1	0	1	5	↑	24	↑	25	↑	8	↓	2	↓	0	⇔	14	↑	26	↑	21	↓	3	↓	12	↑	17	↑	25	↑	8	↓	2	↓
7	1	1	0	11	↑	28	↑	15	↓	9	↓	1	↓	16	↑	28	↑	14	↓	5	↓	1	↓	1	↑	11	↑	32	↑	16	↓	4	↓
8	1	1	1	34	↑	5	↓	21	↑	2	↓	2	↓	32	↑	11	↑	14	↓	5	↓	2	↓	29	↑	11	↑	19	↑	3	↓	2	↓

↑ Values increased as compared to vignette 1 value
↓ Values decreased as compared to vignette 1 value
⇔ Values remaind the same as compared to vignette 1 value

PCO = Psychological Contract with organisation
PCS = Psychological Contract with superviosr
PCP = Psychological Contract with peers

saw Ali as being less satisfied with his organisation and supervisor in this scenario. This is indicative that the psychological contract breach (PCB) by the supervisor will influence Ali's satisfaction with these foci. The respondents also reported that Ali will be less satisfied with his peers, but the change in this regard was less than with regards to the other two foci. This results provide support for Hypothesis H_{17} in that they confirm that the PCB by the supervisor will negatively influence the focal-person's satisfaction with his organisation and peers.

In vignette five the psychological contract between Ali and his organisation was portrayed as being breached. What is interesting about the SFP for this vignette (figure 10.68) is that the most of the respondent reported that Ali will become dissatisfied with his organisation. On the other hand, most of the respondents saw Ali remaining satisfied with his peers and supervisor. This is interesting in that it indicates that a psychological contract breach by organisation will only influence Ali's satisfaction with his organisation and will not show a significant influence on satisfaction with his supervisor and peers. This results implies that Hypothesis H_{14} is not tenable.

Hypothesis H_{15}, H_{18}, and H_{21} had predicted that the focal-person's satisfaction with party will be dependent upon whether that particular party breaches or fulfils it's psychological contract and to a lesser extent on the state of the focal-person's psychological contract with the other foci. This is has been referred to as the target-similarity effect. In vignettes 4, 6, and 7 two foci had breached their psychological contracts with Ali while the remaining 1 had fulfilled its psychological contract. The forth vignette was worded to portray a situation where the psychological contract with the supervisor and the peers is breached, the only one fulfilled is the one between Ali and his organisation. The SFP for this vignette is presented at figure 10.67. The plot lines in this figure are almost reversed of what it were in the plot for the first vignette. All three plot lines are on the left side of the mid-point on the plot. Only the line for Ali's satisfaction with his organisation had some part of its tail on the right side of the mid-point. It can then be cautiously concluded from this graph that the foci-specific psychological contract breach would influence the

corresponding foci-specific satisfaction, more than it will influence the other facets. Which provides support for the target-similarity hypothesis

This trend is also reflected in vignette 6, where the psychological contract breach is committed by the organisation and the peers. The satisfaction related to these foci is seen as diminishing as a result of the psychological contract breach. Participants saw Ali remaining satisfied with his supervisor who has fulfilled his psychological contract. This trend is also repeated in vignette 7 where the organisation and the supervisor are the parties that are breaching Ali's psychological contract.

6.2.2 Testing the internal validity of the vignettes

A key design consideration for using vignettes is to ensure their validity. Vignettes are qualified as valid when they accurately depict the reality that they were designed to portray (Hughes, 2008). The vignettes in the current study were used to test the effect of foci-specific psychological contract breach. Basic descriptive statistics were used to test for the validity of the vignettes that were designed for this study. The results for these tests are shown in Table 6.11.

Table 6.11: *Study 2: Correlations and Descriptive Statistics*

Variables	M	SD	1	2	3
1. SO	2.82	1.07	–		
2. SS	2.87	1.14	.69**	–	
3. SP	2.89	1.09	.59**	.46**	–

SO = Ali's reported satisfaction with his organisation

SS = Ali's reported satisfaction with his supervisor

SP = Ali's reported satisfaction with his peers

N=696, *p< .05, **p< .01

The mean scores (Table 6.11) show that Ali's reported satisfaction with his peers was the highest (M=2.89), followed by that whit his supervisor (M=2.87) and then with his organisation (M=2.82). These mean scores were arrived at by combining the scores for all the eight vignettes. Additional analysis with paired-sample t-tests showed that there was no

significant differences between these satisfaction facets (all $p > 0.05$). Remember that each vignette represents a single instance of breach or fulfilment of the foci-specific psychological contracts. For each individual foci there were equal number of vignettes where that foci had breached and fulfilled it's psychological contract with Ali. What the results therefore imply is that this sample of respondents reported that after experiencing these events Ali will be equally satisfied towards all foci. The Pearson's correlation results show that the three facets of satisfaction are all significantly correlated to each other ($.70 < r < .45$, all $p < .001$). This correlation is below the threshold of concept redundancy that occurs at $r > .75$ (Morrow, 1983).

As was noted earlier, a total of eight vignettes were constructed for the current study. Each vignette portrayed a different state (breached v/s fulfilled) for each of the three foci-specific (organisation, supervisor, and peers) psychological contracts with Ali. For each of the foci-specific psychological contracts there were two sets of vignettes. In set one there were four vignettes in which that specific psychological contract was portrayed as being fulfilled, and another set of four vignettes in which it was portrayed as being breached. In each set the remaining two psychological contracts were portrayed in different combinations of breached and fulfilled states. So, for example, with regards to the psychological contract with the organisation there were four vignettes in which this contract was fulfilled and then there were four other vignettes in which this contract was breached (Table 6.12). The same pattern was repeated for the psychological contracts with the supervisor and peers. Independent sample t-test was used to compare the responses for the contrasting sets of vignettes for each foci-specific psychological contract.

Table 6.13 produces the results of a independent sample t-test. This test is used to confirm that the means of two groups are significantly different. This test was used to compare the two sets of contrasting vignettes for each foci-specific psychological contract.

With regards to the psychological contract breach/fulfilment by the organisation, there was a significant difference between the responses relating to the foci-specific satisfactions measures. The two sets of vi-

Table 6.12: *Sets of Breached and Fulfilled Vignettes*

Psychological Contract Foci	Vignettes with Fulfilled scenarios (set1)	Vignettes with Breached scenarios (set2)
Organisation	1,2,3,4	5,6,7,8
Supervisors	1,2,5,6	3,4,7,8
Peers	1,3,5,7	2,4,6,8

Table 6.13: *Study 2: Independent Sample T-Test Analysis*

	Breached (n=255)		Fulfilled (n=257)		Difference
Variables	Mean	SD	Mean	SD	(T-test)
	Psychological Contract with Organisation				
1. SO	2.47	1.01	3.17	1.02	-7.874^{***}
2. SS	2.69	1.10	3.06	1.14	-3.677^{***}
3. SP	2.73	1.09	3.06	1.09	-3.476^{***}
	Psychological Contract with Supervisor				
1. SO	2.47	1.04	3.18	.98	-7.932^{***}
2. SS	2.21	1.01	3.54	.81	-16.42^{***}
3. SP	2.75	1.14	3.04	1.04	-3.070^{***}
	Psychological Contract with Peers				
1. SO	2.66	1.09	2.98	1.03	-3.43^{***}
2. SS	2.78	1.16	2.96	1.11	-1.786
3. SP	2.40	1.02	3.39	.95	-11.31^{***}

SO = Satisfaction with the organisation

SS = Satisfaction with the supervisor

SP = Satisfaction with the peers

âĂăp< .1, *p< .05, **p<.01,***<.001

gnettes varied the most on Ali's reported satisfaction with his organisation (t = -7.87, p < .001). This was followed by his satisfaction with his supervisor (t = -3.68, p < .001) and then by his satisfaction with his peers (t = -3.48, p < .001). The breach of the psychological contract by the supervisor had the strongest influence on Ali's reported satisfaction

with his supervisor ($t = -16.42$, $p < .001$). The breach of this contract had a lesser influence on Ali's reported satisfaction with his organisation ($t = -7.932$, $p < .001$). The results also confirm that the perceived breach of psychological contract by the peers will have the greatest influence on Ali's reported satisfaction with his peers ($t = -11.31$, $p < .001$) and would have a lesser influence on Ali's reported satisfaction with his organisation. The influence of the psychological contract breach by the peers showed no significant influence on Ali's reported satisfaction with his supervisor.

These results provide support for the validity of the vignettes in that they show that the respondents reported that the focal-person's satisfaction varied in correspondence to the breach or fulfilment of the foci-specific psychological contracts. These results lend support to the target-similarity hypothesis which had predicted that Ali's satisfaction with a particular foci will be influenced the most by state of his psychological contract with that foci. Most of the spillover effects were also proven, all but the effect of psychological contract breach by the peers on Ali's reported satisfaction with his supervisors.

6.2.3 Repeated Measure Analysis foci-specific satisfaction

For the current study the participants were presented with vignettes that portrayed situations of psychological contract breach or fulfilment. A single respondent had to answer the same questions for eight unique vignettes. Designs, like this one, which collect multiple responses from the same participants are known as repeated-measure designs (Vonesh & Chinchilli, 1996). Repeated measure design allow for testing within-participant variation caused by the experimental effect (Field et al., 2013). In the context of the current study, the objective was to determine whether the respondents noticed the variation in the context of the vignettes and how this variation in the context influenced their responses. Logic dictates that individuals who would attribute a similar meaning to vignettes would respond similarly to how Ali would react to the situations depicted in the vignettes. Also that the respondents would report differently on different vignettes because they would have attributed different mean-

ings to each individual vignette.

Field et al. (2013) noted that repeated-measure data should not be modelled using the normal linear modelling techniques. This is because these techniques assume that each response is independent of the others. Whereas, with repeated-measure data, there is an obvious correlation between responses that were recorded from a single participant. As a solution to this repeated-measure data is analysed using a multilevel modelling framework, where the responses are taken to be grouped by the respondents (Field et al., 2013). In line with these suggestions a multilevel analysis was carried out using the procedure outlined by Finch et al. (2014) and Field et al. (2013). The *nlme* package for the *R* statistical software was used to carryout the multilevel analysis.

The first step for conducting a multilevel analysis is to determine whether there is a significant variation across the contexts (Field et al., 2013). This is achieved by comparing two models. A base model which assumes fixed intercepts to model the data. This model is fitted based on the assumption that there is no variance in the context across the groups of data. The second model fitted to the data assumes that the intercepts are random and vary across the contexts. Both these fixed intercept model and random intercept models were tested using the three foci-specific satisfaction facets, as outcome variables, across the eight vignettes. The model fit estimates for these models are presented in Table 6.14.

As a general rule of thumb models with lower AIC (Akaike's information criterion) and BIC (Schwarz's Bayesian criterion) are considered to have better fit to data (Finch et al., 2014). For Ali's reported satisfaction with his organisation the fixed intercept model had an AIC of 1456 and BIC of 1465. The corresponding random intercept model had lower AIC (1345) and BIC (1357) values, and thus was a better fit to the data. This Table also provides the log likelihood ratio comparison between the models and this confirms that random intercept model offers a better fit for the data $\chi^2(1) = 113.49, p < .001$. The results presented in Table 6.14 also confirm that the random intercept models for Ali's reported satisfaction with his supervisor ($\chi^2(1) = 210.18, p < .001$), and peers ($\chi^2(1) = 113.67, p < .001$) also provided a significantly better fit to the data. These results con-

firm the repeated-measure nature of the data and confirm that multilevel models provide a better fit for the data.

Table 6.14: *Model-Fit Statistics for Models with Fixed and Random Intercepts*

	Reported satisfaction with					
	Organisation		Supervisor		Peers	
	Model Intercepts		Model Intercepts		Model Intercepts	
	Fixed	Random	Fixed	Random	Fixed	Random
df	2	3	2	3	2	3
AIC	1455.99	1344.50	1455.99	1247.82	1455.99	1344.32
BIC	1464.47	1357.21	1464.47	1260.53	1464.47	1357.03
logLik	-726.00	-669.25	-726.00	-620.91	-726.00	-669.16
L.Ratio		113.493		210.18		113.67
p-value		<.0001		<.0001		<.0001

Having confirmed the viability of using the multilevel modelling framework in the previous stage, fixed effects were added to the multilevel models for each foci-specific satisfaction facets. Fixed effects are effects that remain constant for each respondents across the different vignettes. For example, the gender of the respondent would remain same for all the eight vignettes. These also represent the non-systematic factors, that could have influenced an individual respondent's response to a particular vignette in addition to the change in the context of the vignettes.

Table 6.15: *Model Summary; Fixed Effects Model for Foci-Specific Satisfaction Measures*

Outcome variable : Ali's reported satisfaction with his organisation					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.55	0.53	448.00	1.04	0.30
married	-0.03	0.18	56.00	-0.15	0.88
gender	-0.01	0.15	56.00	-0.07	0.94
e_status	0.30	0.30	56.00	0.98	0.33
c_positions	-0.11	0.09	56.00	-1.31	0.19
salary	0.02	0.08	56.00	0.27	0.79
education	-0.31	0.13	56.00	-2.29	0.03
org_type	-0.04	0.03	56.00	-1.16	0.25
Outcome variable : Ali's reported satisfaction with his supervisor					
(Intercept)	0.35	0.46	448.00	0.77	0.44
married	-0.03	0.16	56.00	-0.20	0.84
gender	-0.03	0.13	56.00	-0.20	0.85
e_status	0.37	0.26	56.00	1.39	0.17
c_positions	-0.08	0.07	56.00	-1.10	0.27
salary	0.05	0.07	56.00	0.70	0.49
education	-0.28	0.12	56.00	-2.45	0.02
org_type	-0.03	0.03	56.00	-1.05	0.30
Outcome variable : Ali's reported satisfaction with his peers					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.22	0.53	448.00	0.41	0.68
married	-0.06	0.18	56.00	-0.33	0.75
gender	-0.16	0.15	56.00	-1.03	0.31
e_status	0.50	0.30	56.00	1.63	0.11
c_positions	-0.09	0.09	56.00	-1.07	0.29
salary	0.00	0.08	56.00	0.04	0.96
education	-0.14	0.13	56.00	-1.05	0.30
org_type	-0.01	0.03	56.00	-0.45	0.65

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

org_type = organisation type(public, industrial, bank, education, teleco, NGO, MNC)

Table 6.15 provides the summary of the regression parameters for all three foci-specific satisfaction outcomes. With regards to Ali's reported satisfaction with his organisation, only education had a regression parameter of -0.31, which was significant (t(47) = -2.15, p < .001). Other then this no other significant fixed effects were registered for the remaining factors. Education also had significant regression parameter (t(56) = -2.45, p < .001) in the model for Ali's reported satisfaction with his supervisor. None of the fixed effects registered any influences on the model for Ali's reported satisfaction with his peers. It seems from the data that the participants education level might have had an effect on their responses, but the significance of this effect was reduced in the latter models when the random effects were introduced to the model. Overall it can be concluded that most of the variations in the responses were attributed to the systematic variation introduced into the vignettes, and were not due to the between-participant differences.

The models were further developed by adding to them the random effects. Random effects are the effects that changed with the context. In case of the current study these were the breach/fulfilled states of foci-specific psychological contracts for each of the eight vignettes. These models were compared to the fixed effects model developed in the previous stage to determine whether they offered a better fit to the data. Table 6.16 provides the results for this analysis.

The mixed effects model for Ali's reported satisfaction with his organisation had a lower AIC (1179) and BIC (1315) then the corresponding fixed effects model for the same outcome variable. The log likelihood ratio comparison between these two model also confirmed that the mixed effects model as a better fit for the data ($\chi^2(21) = 314.28, p < .001$). Similarly, the model for Ali's reported satisfaction with his supervisor also had lower AIC (1038) and BIC (1174) values as compared to the fixed effects model for the same outcome variable. The log likelihood ratio ($\chi^2(21) = 465.17, p < .001$) also confirmed that the mixed effects model was a better fit for the data. The AIC (1456) and BIC (1503) values for the model representing Ali's reported satisfaction with his peers were also significantly less than the corresponding fixed effects model and the

log likelihood ratio was also significant in favour of the mixed effects model ($\chi^2(21) = 336.75, p < .001$). These results confirm that the mixed effects model offered a better fit for the data than the fixed effects model. Also confirming that there was a significant variation in the vignette contexts.

Table 6.16: *Model-Fit Statistics for Models with Fixed and Mixed Effects*

	Ali's reported Satisfaction with					
	Organisation		Supervisor		Peers	
	Modelled effects		Modelled effects		Modelled effects	
	Fixed	Mixed	Fixed	Mixed	Fixed	Mixed
df	11	32	11	32	11	32
AIC	1451.22	1178.94	1461.31	1038.13	1456.55	1161.79
BIC	1497.84	1314.57	1507.93	1173.76	1503.17	1297.42
logLik	-714.61	-557.47	-719.65	-487.07	-717.27	-548.90
L.Ratio		314.28		465.17		336.75
p-value		<.0001		<.0001		<.0001

The regression parameters for all three foci-specific mixed effect models are presented in Table 6.17. As with the fixed effects models, most of the fixed factors did not register any significant regression parameters. The effect of the participants' education level showed a reduced influence (t(56) = -1.90, p > .001) in the mixed effects model for Ali's reported satisfaction with his organisation. Whereas, for the mixed effect model related to Ali's reported satisfaction with his supervisor, education retained a significant regression effect (t(56) = -2.30, p < .001).

The variations in the three foci-specific psychological contracts had significant regression parameters in all the mixed effects models. The change in the psychological contracts with organisation had a similar regression parameter in both the model for Ali's reported satisfaction with his organisation (t(56) = -6.46, p < .001) and Ali's reported satisfaction with his supervisor (t(56) = -6.46, p < .001). The variation in psychological contract with the organisation was also significant predictor of Ali's reported satisfaction with his peers (t(56) = -5.55, p < .001). In terms of effect size, the breach of psychological contract by the or-

ganisation had the greatest effect on Ali's reported satisfaction with his organisation (-0.66) than on Ali's reported satisfaction with his supervisor (-0.32) and Ali's reported satisfaction with his peers (-0.32). These results provide support for hypothesis H_{13}, H_{14}, and H_{15}. This confirms the target-similarity effect of psychological contract breach by the organisation on the satisfaction with the organisation and its spill-over effect on the focal-person's satisfaction with his/her supervisor and peers.

The breach of psychological contract by the supervisor was also significant predictor of satisfaction with the organisation (t(56) = -6.41, p < .001), with the supervisor (t(56) = -9.25, p < .001), and with the peers (t(56) = -3.78, p < .001). In terms effect size this was greatest on Ali's reported satisfaction with his supervisor (-1.17), followed by Ali's reported satisfaction with his organisation (-0.66) and, the least on Ali's reported satisfaction with his peers (-0.26). These results provide support for hypothesis H_{16}, H_{17}, and H_{18}. This confirms both the target-similarity effect of psychological contract breach by the supervisor on the satisfaction with the supervisor and its spill-over effect on the focal-person's satisfaction with his/her organisation and peers.

The breach of psychological contracts by peers was also significantly correlated with all three foci-specific satisfaction facets. The regression parameter for this contract with Ali's reported satisfaction with his peers was t(56) = -6.98 (p < .001), and Ali's reported satisfaction with his organisation was t(56) = -5.10 (p < .001), and with Ali's reported satisfaction with his supervisor was t(56) = -3.46 (p < .001). In terms of effect size, psychological contract breach by the peers had the strongest effect on Ali's reported satisfaction with his peers (-0.92), followed by the correlation with Ali's reported satisfaction with his organisation (-0.32). The breach of psychological contract by the peers was least correlated with Ali's reported satisfaction with his supervisor (-0.16). These results provide support for hypothesis H_{19}, H_{20}, and H_{21}. This confirms both the target-similarity effect of psychological contract breach by the supervisor on the satisfaction with the supervisor and its spill-over effect on the focal-person's satisfaction with his/her organisation and peers.

Table 6.17: *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Organisation*

	Value	Std.Error	DF	t-value	p-value
Outcome variable : Ali's reported satisfaction with his organisation					
(Intercept)	1.30	0.50	445.00	2.59	0.01
married	-0.02	0.17	56.00	-0.12	0.90
gender	0.01	0.14	56.00	0.04	0.97
e_status	0.12	0.28	56.00	0.42	0.68
c_positions	-0.07	0.08	56.00	-0.94	0.35
education	-0.24	0.12	56.00	-1.90	0.06
org_type	-0.03	0.03	56.00	-1.01	0.32
PCO	-0.66	0.10	445.00	-6.46	0.00
PCS	-0.66	0.10	445.00	-6.41	0.00
PCP	-0.32	0.06	445.00	-5.10	0.00
Outcome variable : Ali's reported satisfaction with his supervisor					
(Intercept)	1.16	0.44	445.00	2.63	0.01
married	-0.00	0.15	56.00	-0.01	0.99
gender	0.03	0.13	56.00	0.26	0.79
e_status	0.18	0.25	56.00	0.74	0.46
c_positions	-0.06	0.07	56.00	-0.84	0.40
salary	0.05	0.07	56.00	0.80	0.43
education	-0.25	0.11	56.00	-2.30	0.03
org_type	-0.03	0.03	56.00	-1.14	0.26
PCO	-0.32	0.05	445.00	-6.46	0.00
PCS	-1.17	0.13	445.00	-9.25	0.00
PCP	-0.16	0.05	445.00	-3.46	0.00
Outcome variable : Ali's reported satisfaction with his peers					
	Value	Std.Error	DF	t-value	p-value
(Intercept)	0.88	0.53	445.00	1.68	0.09
married	-0.04	0.18	56.00	-0.24	0.81
gender	-0.14	0.15	56.00	-0.93	0.35
e_status	0.46	0.30	56.00	1.56	0.12
c_positions	-0.07	0.08	56.00	-0.82	0.42
salary	0.00	0.08	56.00	0.03	0.98
education	-0.13	0.13	56.00	-0.99	0.33
org_type	-0.01	0.03	56.00	-0.45	0.66
PCO	-0.32	0.06	445.00	-5.55	0.00
PCS	-0.26	0.07	445.00	-3.78	0.00
PCP	-0.92	0.13	445.00	-6.98	0.00

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

org_type = organisation type(public, industrial, bank, education, teleco, NGO, MNC)

PCO = (Psychological contract with the organisation)

PCS = (Psychological contract with the supervisors)

PCP = (Psychological contract with peers)

Table 6.18: *Model-Fit Statistics for Models with and without Interaction Effects*

	Ali's reported satisfaction with					
	Organisation		Supervisor		Peers	
	Interaction effects		Interaction effects		Interaction effects	
	Missing	Present	Missing	Present	Missing	Present
df	32	36	32	36	32	36
AIC	1178.94	1175.46	1038.13	1039.97	1161.79	1159.33
BIC	1314.57	1328.04	1173.76	1192.55	1297.42	1311.91
logLik	-557.47	-551.73	-487.07	-483.98	-548.90	-543.66
L.Ratio		11.48		6.16		10.46
p-value		<.05		0.19		<.05

Table 6.19: *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Organisation and Supervisor*

	Value	Std.Error	DF	t-value	p-value
Outcome variable : Ali's reported satisfaction with his organisation					
(Intercept)	1.40	0.50	441.00	2.77	0.01
married	-0.02	0.17	56.00	-0.11	0.91
gender	0.01	0.14	56.00	0.04	0.97
e_status	0.11	0.28	56.00	0.39	0.70
c_positions	-0.07	0.08	56.00	-0.93	0.36
salary	0.05	0.08	56.00	0.62	0.54
education	-0.24	0.13	56.00	-1.89	0.06
org_type	-0.03	0.03	56.00	-0.97	0.33
PCO	-0.90	0.13	441.00	-6.83	0.00
PCS	-0.90	0.14	441.00	-6.64	0.00
PCP	-0.46	0.09	441.00	-4.93	0.00
PCO:PCS	0.46	0.14	441.00	3.30	0.00
PCO:PCP	0.29	0.13	441.00	2.30	0.02
PCS:PCP	0.30	0.14	441.00	2.17	0.03
PCO:PCS:PCP	-0.55	0.19	441.00	-2.89	0.00
Outcome variable : Ali's reported satisfaction with his supervisor					
(Intercept)	1.19	0.44	441.00	2.69	0.01
married	-0.01	0.15	56.00	-0.03	0.97
gender	0.03	0.13	56.00	0.23	0.82
e_status	0.19	0.25	56.00	0.76	0.45
c_positions	-0.06	0.07	56.00	-0.84	0.40
salary	0.06	0.07	56.00	0.80	0.43
education	-0.25	0.11	56.00	-2.28	0.03
org_type	-0.03	0.03	56.00	-1.13	0.26
PCO	-0.35	0.09	441.00	-3.95	0.00
PCS	-1.32	0.15	441.00	-8.73	0.00
PCP	-0.16	0.08	441.00	-1.88	0.06
PCO:PCS	0.19	0.12	441.00	1.53	0.13
PCO:PCP	-0.10	0.12	441.00	-0.83	0.41
PCS:PCP	0.12	0.13	441.00	0.98	0.33
PCO:PCS:PCP	-0.05	0.18	441.00	-0.29	0.77

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

org_type = organisation type(public, industrial, bank, education, teleco, NGO, MNC)

PCO = (Psychological contract with the organisation)

PCS = (Psychological contract with the supervisors)

PCP = (Psychological contract with peers)

Table 6.20: *Model Summary; Mixed Effects Model for Ali's Reported Satisfaction with His Peers*

	Value	Std.Error	DF	t-value	p-value
Outcome variable : Ali's reported satisfaction with his peers					
(Intercept)	0.89	0.53	441.00	1.67	0.10
married	-0.04	0.18	56.00	-0.24	0.81
gender	-0.14	0.15	56.00	-0.93	0.35
e_status	0.46	0.30	56.00	1.55	0.13
c_positions	-0.07	0.08	56.00	-0.83	0.41
salary	0.00	0.08	56.00	0.03	0.97
education	-0.13	0.13	56.00	-1.00	0.32
org_type	-0.01	0.03	56.00	-0.44	0.66
PCO	-0.43	0.10	441.00	-4.18	0.00
PCS	-0.21	0.12	441.00	-1.77	0.08
PCP	-0.92	0.15	441.00	-5.98	0.00
PCO:PCS	0.13	0.14	441.00	0.91	0.36
PCO:PCP	0.30	0.14	441.00	2.12	0.03
PCS:PCP	-0.06	0.14	441.00	-0.42	0.67
PCO:PCS:PCP	-0.36	0.19	441.00	-1.90	0.06

e_status=employment status (employed,self-employed,unemployed)

c_position= current position(entry level, junior executive, senior executive, middle-management, top-management)

salary(under 20000, 20000 to 40000, 40000 to 60000, 60000 to 80000, above 80000)

education(under graduate, masters, Ph.D.)

org_type = organisation type(public, industrial, bank, education, teleco, NGO, MNC)

PCO = (Psychological contract with the organisation)

PCS = (Psychological contract with the supervisors)

PCP = (Psychological contract with peers)

6.2.4 Testing for the interaction effects of foci-specific psychological contract breach on focal-person's foci-specific satisfaction

In order to determine if there were any interaction-effects in the data, a further set of models was developed incorporating the interaction-effects of the independent variables (the three foci-specific psychological contracts). These models were tested for model fit against the models without the interaction effects in order to determine whether adding the interaction effects would improve their fit. The results for this analysis are provided in Table 6.18. The models for Ali's reported satisfaction with his organisation and Ali's reported satisfaction with his peers both displayed better fit statistics when interaction effects were added to them. The log likelihood ratio between the models for Ali's reported satisfaction with his organisation with and without interaction was ($\chi^2(4) = 11.48, p < .05$). The log likelihood ratio between the models for Ali's reported satisfaction with his peers with and without interaction was ($\chi^2(4) = 10.46, p < .05$). The only model that did not show any improvement in the fit statistics was the one for Ali's reported satisfaction with his supervisor ($\chi^2(4) = 6.16, p > .05$).

Adding the interaction effects changed the regression parameters for the foci-specific psychological contract breach effects. The results for the models relating to Ali's reported satisfaction with his organisation and Ali's reported satisfaction with his supervisor are provided in table 6.19. The results for the model relating to Ali's reported satisfaction with his peers are presented in table 6.20. The effect size of each foci-specific psychological contract breach increased on Ali's reported satisfaction with his organisation. Both psychological contract breach by the organisation and psychological contract breach by the supervisor had a effect weight of 0.66 on Ali's reported satisfaction with his organisation, which increased to 0.90 for each one of them. The effect size for Ali's reported satisfaction with his peers on psychological contract breach by the organisation also marginally increased from 0.32 to 0.46.

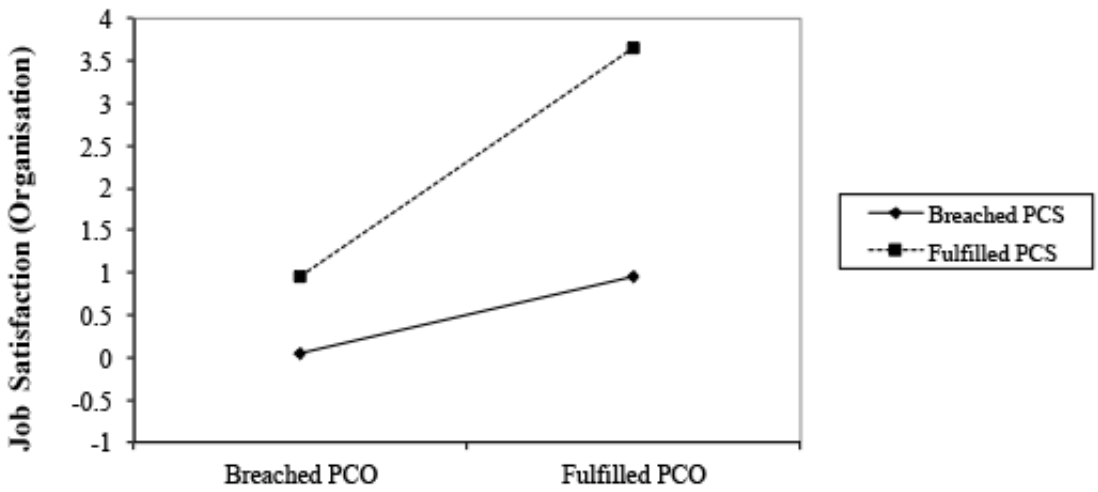
The interaction-effects between the independent variables (the three foci-specific psychological contract breachs) registered significant effects

against Ali's reported satisfaction with his organisation. The interaction effect between psychological contract breach by the organisation (PCO) and psychological contract breach by the supervisor (PCS) had a significant correlation of 0.46 (t(441) = 3.30, p < .001).

These results provide full support for hypothesis H_{22}. Hypothesis H_{23} was not support because both the two-way and three interactions between the foci-specific psychological contract breachs did not register any significant influence on Ali's reported satisfaction with his supervisor. Hypothesis H_{24} was partly supported by these results because the two-way interactions between psychological contract breach by the organisation and psychological contract breach by the supervisor, and between psychological contract breach by the supervisor and psychological contract breach by the peers did not register any significant influence on Ali's reported satisfaction with his peers.

Figure 6.3 shows the significant two-way interaction effects between psychological contract breach by the organisation (PCO) and psychological contract breach by the supervisor (PCS) towards Ali's reported satisfaction with his organisation.

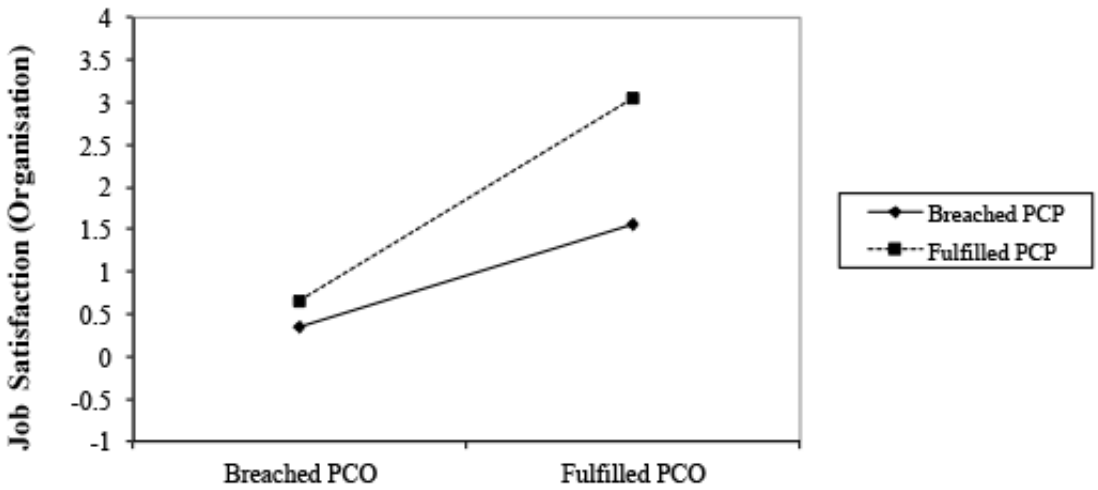
Figure 6.3: *Interaction Effects of PCO and PCS to Satisfaction with the Organisation*



The interaction effect shows that for vignettes that depict a psychological contract breach by the organisation there is a significant difference in satisfaction with the organisation between respondents responding to vignettes that depicted situations where the supervisor had also breached the psychological contract and vignettes where the supervisor had fulfilled the psychological contract. Respondents saw Ali being least satisfied with his organisation when both the organisation and the supervisor breach their psychological contracts. Whereas, respondents saw Ali being most satisfied with the organisation if both these foci-specific psychological contracts (with his organisation and supervisor) are fulfilled. The two lines depicted in figure 6.3 are not parallel which supports the intensification effects of psychological breach from multi-foci as hypothesised.

Figure 6.4 shows the significant two-way interaction effects between psychological contract breach by the organisation and psychological contract breach by the peers (PCP) towards Ali's reported satisfaction with his organisation. The interaction effect of psychological contract breach by the organisation and psychological contract breach by the peers was 0.29 ($t(441) = 2.30$, $p < .05$).

Figure 6.4: *Interaction Effects of PCO and PCP to Satisfaction with the Organisation*

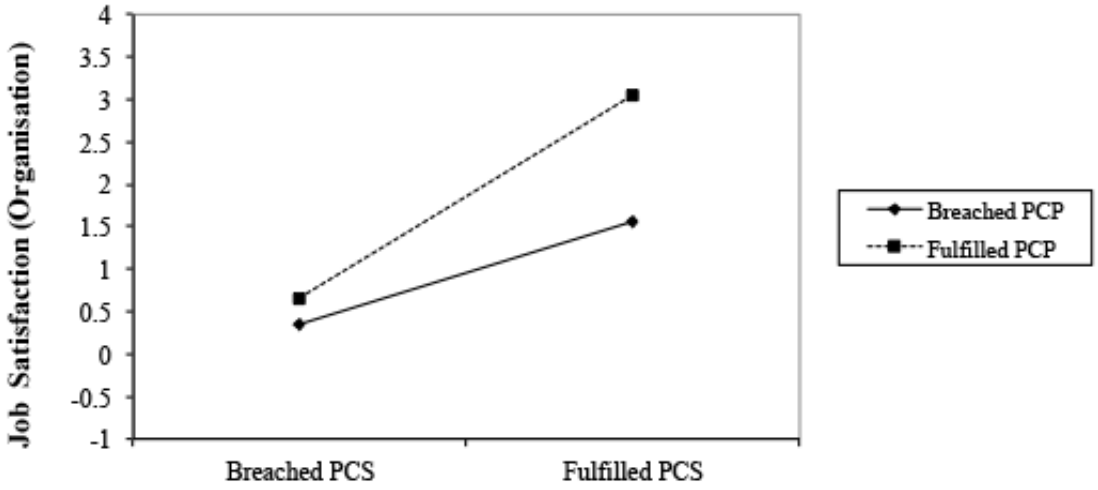


The interaction effect in figure 6.4 shows that for vignettes that depict a psychological contract breach by the organisation there is a significant difference in Ali's reported satisfaction with his organisation between respondents responding to vignettes that depicted situations where the peers have also breached the psychological contract and vignettes where the peers have fulfilled the psychological contract. Respondents saw Ali being least satisfied with his organisation when both the organisation and the peers breach their psychological contracts. Whereas, respondents saw Ali being most satisfied with his organisation if both these foci-specific psychological contracts (with his organisation and peers) are fulfilled. The two lines depicted in figure 6.4 are not parallel to each other which supports the intensification effects of psychological breach from multi-foci as hypothesised.

A comparison of figures 6.3 and 6.4 shows that there is a greater gap between the two lines depicting interactions effects between the scenarios depicting a change in psychological contract with the supervisors (figures 6.3) than for the vignettes depicting a change in psychological contract with peers (figures 6.4). This can be interpreted as indicating that the intensification effect between psychological contract with the organisation and psychological contract with the supervisors is greater than that between psychological contract with the organisation and psychological contract with peers.

Figure 6.5 shows the significant two-way interaction effects between psychological contract breach by the supervisor and psychological contract breach by the peers towards Ali's reported satisfaction with his organisation. The interaction effect of psychological contract breach by the supervisor and psychological contract breach by the peers on Ali's reported satisfaction with his organisation was 0.30 ($t(441) = 2.17$, $p < .05$).

Figure 6.5: *Interaction Effects of PCS and PCP to Satisfaction with the Organisation*

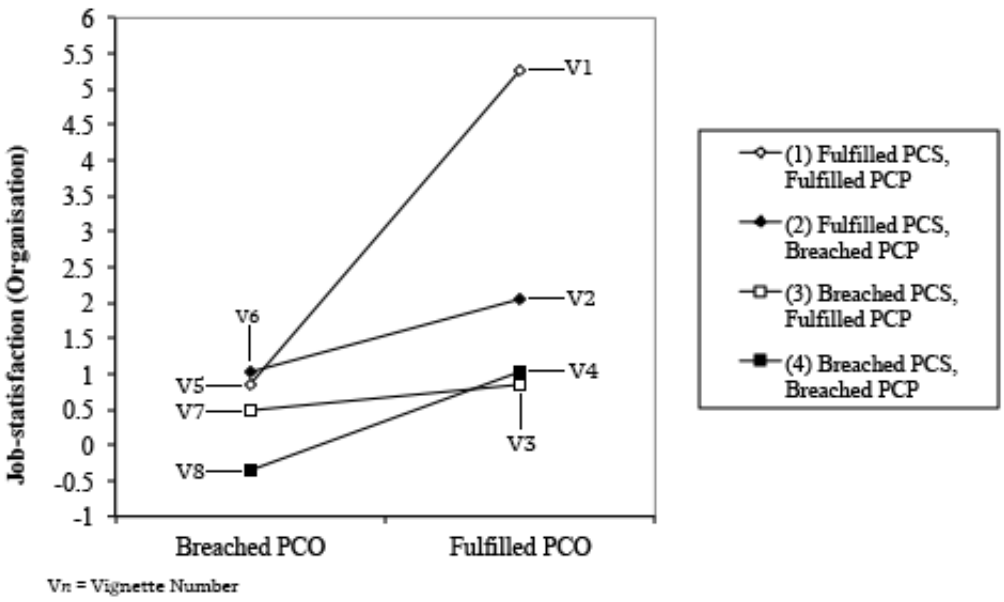


The interaction effect in figure 6.5 shows that for vignettes that depict a psychological contract breach by the supervisor there is a significant difference in Ali's reported satisfaction with the organisation between respondents responding to vignettes that depicted situations where the peers have also breached the psychological contract and vignettes where the peers have fulfilled the psychological contract. Respondents saw Ali being least satisfied with his organisation when both the supervisor and the peers breach their psychological contracts. Whereas, respondents saw Ali being most satisfied with the organisation if both these foci-specific psychological contracts (with his supervisor and peers) are fulfilled. The two lines depicted in figure 6.5 are not parallel to each other which supports the intensification effects of psychological breach from multi-foci as hypothesised.

Figure 6.6 shows the significant three-way interaction effects between psychological contract breach by the organisation, psychological contract breach by the supervisor, and psychological contract breach by the peers towards Ali's reported satisfaction with his organisation. The combined interaction effect of the three foci-specific psychological contract

breachs had an effect weight of -0.55 (t(441) = -2.89, p < .001).

Figure 6.6: *Interaction Effects of PCO, PCS, and PCP to Ali's Reported Satisfaction with His Organisation*



Each vignetted used in this study was designed to show the interaction of the three foci-specific psychological contracts (with the organisation, supervisor, and the peers). As such, each point indicated on figure 6.6 is representative of the related vignette. As was hypothesised, the respondents saw Ali being most satisfied with his organisation when all three of the foci-specific psychological contracts are fulfilled (Vignette 1). Vignette 8 represented a situation where all three psychological contracts were breached; the respondents saw Ali being list satisfied in this situation. The irregular gaps between the points charted in figure 6.6 confirm the presence of intensification effect between the three foci-specific psychological contracts.

Additional interesting observations emerge from figure 6.6. For example, the respondents saw Ali being more satisfied in the situation depicted in vignette 4 (point V4 figure 6.6) than he would be in the situation depicted by vignette 3 (point V4 figure 6.6). This is interesting because vignette 3 depicted a situation where only one of the three psychological contracts (with the supervisor) was breached. Whereas, in vi-

gnetted 4 two of the psychological contracts (that with the supervisor and peers) were breached. It seems that for the vignettes that were depicting scenarios of psychological contract fulfilment by the organisation, respondents saw Ali becoming more satisfied with organisation when both the supervisor and peers have breached their psychological contracts as compared to situations where only the supervisor has breached his psychological contract. This implies that under scenarios where both the organisation and supervisor have fulfilled their psychological contracts, a breach of the psychological contract by the peers could improve the focal-person's satisfaction with the organisation. But this level of satisfaction is low as compared to Ali's satisfaction with his organisation if all three foci-specific psychological contracts are fulfilled (comparing points V1 t V4).

Similarly the respondents saw Ali being more satisfied in the situation depicted in vignette 6 (point V6 figure 6.6) than he would be in the situation depicted by vignette 5 (point V5 figure 6.6). This is interesting because vignette 6 depicted a situation where only one of the three psychological contracts (with the supervisor) was fulfilled. Whereas, in vignetted 5 two of the psychological contracts (that with the supervisor and peers) were fulfilled. It seems that for the vignettes that were depicting scenarios of psychological contract breach by the organisation, respondents saw Ali becoming more satisfied with organisation when both the supervisor and peers have fulfilled their psychological contracts as compared to situations where only the supervisor has fulfilled his psychological contract. This implies that under scenarios where both the organisation and supervisor have breached their psychological contracts, a fulfilment of the psychological contract by the peers could reduce the focal-person's satisfaction with the organisation. But this level of satisfaction is higher as compared to Ali's satisfaction with his organisation if all three foci-specific psychological contracts are breached (comparing points V5 t V8). The implications of these results will be further discussed later.

The model not to show an improvement in its fit when the interaction effects were added was the model with Ali's reported satisfaction with his

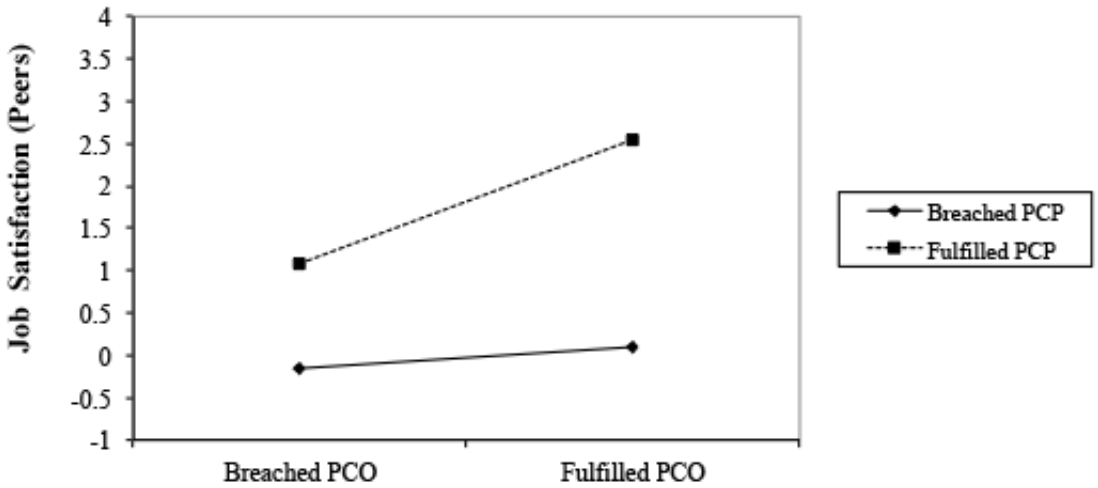
supervisor as an outcome variable. The effect size of the individual foci-specific psychological contract breach did not show a significant change. None of the interaction effects were significantly correlated with Ali's reported satisfaction with his supervisor.

The addition of the interaction effects to the model for Ali's reported satisfaction with his peers improved its fit to the data. The effect size of psychological contract breach by the organisation (-0.43) saw a marginal increase, whereas the effect size of psychological contract breach by the supervisor (-0.21) was marginally reduced as compared to the model without the interaction effects. The effect size of the psychological contract breach by the peers on Ali's reported satisfaction with his peers remained the same (-0.92).

The interaction effect between psychological contract breach by the organisation and psychological contract breach by the peers, and between psychological contract breach by the supervisor and psychological contract breach by the peers did not have a significant effects on Ali's reported satisfaction with his peers. The three-way interaction effect between the foci-specific psychological contracts was also not significant. Whereas interaction effect of psychological contract breach by the organisation and psychological contract breach by the peers did show a significant effect on Ali's reported satisfaction with his peers of 0.30 ($t(441) = 2.12$, $p < .05$).

Figure 6.7 shows the significant interaction effects between psychological contract breach by the organisation and psychological contract breach by the peers towards Ali's reported satisfaction with his peers.

Figure 6.7: *Interaction Effects of PCO and PCP to Satisfaction with the Peers*



The interaction effect in figure 6.7 shows that for vignettes that depict a psychological contract breach by the organisation there is a significant difference in Ali's reported satisfaction with his organisation between respondents responding to vignettes that depicted situations where the peers have also breached their psychological contract with Ali and vignettes where the peers have fulfilled the psychological contract. Respondents saw Ali being least satisfied with his organisation when both the organisation and the peers breach their psychological contracts. Whereas, respondents saw Ali being most satisfied with the organisation if both these foci-specific psychological contracts (with his organisation and peers) are fulfilled. The two lines depicted in figure 6.7 are not parallel to each other which supports the intensification effects of psychological breach from multi-foci as hypothesised.

6.3 Study 3 Results and Analysis

The objectives for study three were: a) to identify the contents of a peer-to-peer psychological contract, b) to determine the effect of the breach of the peer-to-peer psychological contract on the focal-person's satisfaction with his/her peers. An on-line survey instrument was developed to

capture data from the study's participants (Appendix 10.1). The survey instrument was divided into four stages, the first stage captured the demographics information (Appendix 10.2). In second stage the participants were offered a set of 15 peer-to-peer promises (Appendix 10.3) and to chose from this set the five promises which they perceived that their peers had made them. In the third stage the choice of top five promises selected in stage two were used to populate a set of five questions (Appendix 10.4) around these promises being breeched (as per Kickul et al., 2002) , coded 1=not at all fulfilled, 5=totally fulfilled. Thus, a higher score indicates greater fulfilment with the psychological contracts between peers. In the last stage the participant were presented with the satisfaction with peers scale that was created by adopting three items from the scale developed by Brayfield and Rothe (1951).

Table 6.21 shows the top six promises selected by most participants and which represent the contents of their peer-to-peer psychological contracts. The chart in Figure 6.8 shows the response frequencies for all the 15 proposed peer-to-peer promises. The distribution of the response frequencies indicate that the ordering of the questions did not have an effect on the respondents choice. If strict criteria needs to applied item P1 can be discounted from this list as it was sequentially the first item on the list and is also the one that was selected by most participants as being part of the peer-to-peer psychological contracts.

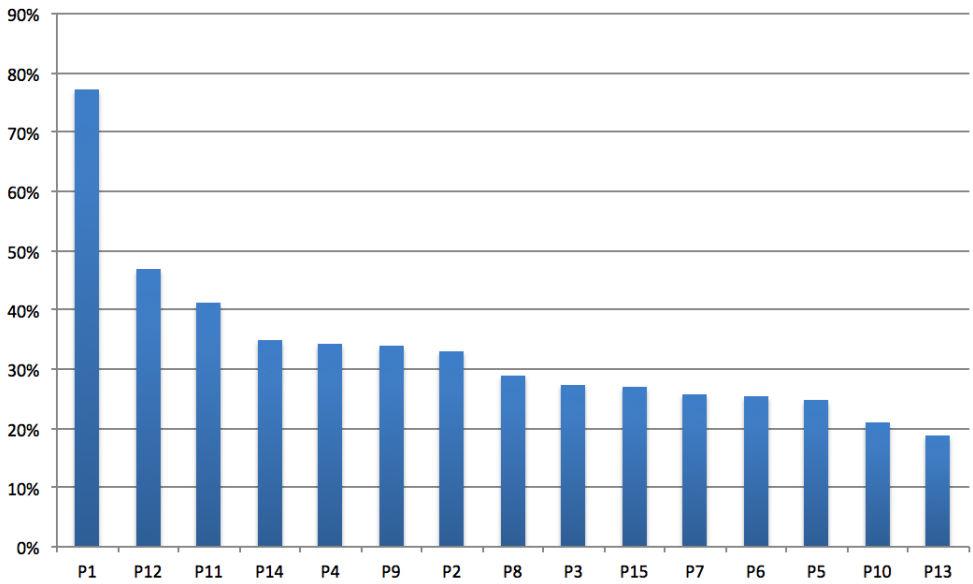
The second objective for study 3 was to determine the effects of peer-to-peer psychological contract breach on the focal-person's satisfaction with his/her peers. To confirm the separate dimensions of these two peer constructs, measures were tested with confirmatory factor analysis in SEM using AMOS 22.0. While studies using SEM typically offer a number of goodness-of-fit measures, Williams et al. (2009) assert the following are the best goodness-of-fit measures to assess model fit: (1) the comparative fit index (CFI >.95), (2) the root-mean-square error of approximation (RMSEA < .08), and (3) the standardised root mean residual (SRMR <.10). The hypothesised measurement model and an alternative model is shown in Table 6.22.

Overall, the hypothesised measurement model did fit the data best.

Table 6.21: *Peer-To-Peer Psychological Promises*

Item #	Question	
P1	My peers promised to share their knowledge with me	77%
P12	My peers promised me that they will give me a fair evaluation on my appraisals	47%
P11	My peers promised to give me credit for the work that I have done	41%
P14	My peers promised me that they will share my load of work with me, if they have the time	35%
P4	My peers promised to support my career growth	34%
P9	My peers promised me that they will encourage me to do things in a new way	34%

Figure 6.8: *Response Frequencies for Top Peer-To-Peer Promises*



To confirm whether this was the best model for the study, the CFA was reanalysed testing a combined measurement model and this alternative model resulted in a poorer fit. Following Hair, Black, Babin, Anderson, and Tatham (2006) instructions, the comparison model test showed the alternative model was significantly different (all $p < .001$) and a poorer fit than the hypothesised model.

The hypothesis was tested using a simple SEM model with peer-to-

peer psychological contract breach predicting satisfaction with peers, while controlling for the effects of gender, sector and salary. Descriptive statistics for all variables are shown in Table 6.23. The mean scores show Peer-To-Peer Psychological Contract Breach was above the midpoint (3.0) at M=3.4, while Satisfaction with Peers was also above the midpoint (3.0) at 3.7. Both these variables were significantly correlated with each other ($r= .45$, $p< .01$).To examine the direct Hypothesis, a SEM model was analysed. Following recommendations of Grace and Bollen (2005), unstandardised regression coefficients are presented. Figure 6.9 shows that Peer-To-Peer Psychological Contract Breach is significantly linked with Satisfaction with Peers (path coefficient = .33, $p< .001$), as was gender (path coefficient = -.14, $p< .05$). The model accounts for a large amounts of variance towards Ali's satisfaction with his peers ($r2 = .43$).

Table 6.22: *Results of Confirmatory Factor Analysis for Study Variables*

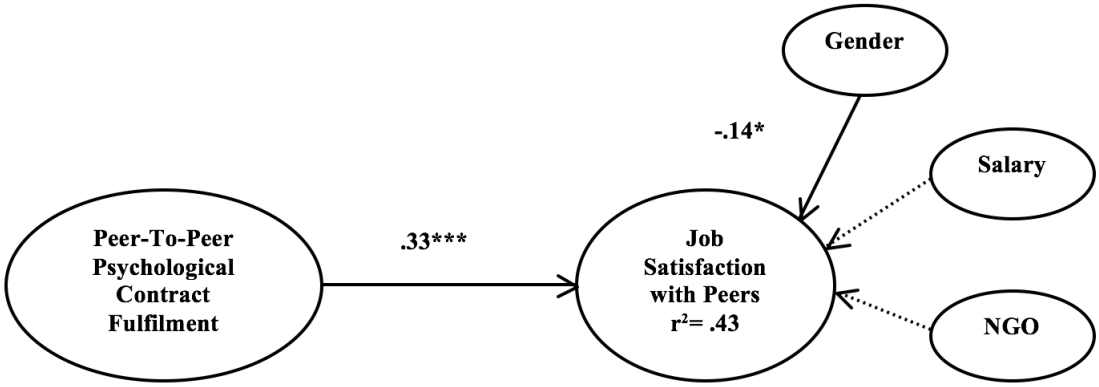
	Model Fit Indices					Model Differences			
Model	χ^2	df	CFI	RMSEA	SRMR	χ^2	df	p	Details
1. Hypothesized 2-factor model: Peer-to-Peer Psychological Contract Fulfilment, and Satisfaction with Peers.	32.3	19	.97	.06	.05				
2. Alternative 1-factor model: Peer-to-Peer Psychological Contract Fulfilment and Satisfaction with Peers combined.	97.2	20	.84	.14	.08	64.9	1	.001	Model 1 to 2

Table 6.23: *Correlations and Descriptive Statistics of Study Variables*

Variables	M	SD	1	2	3
1. Salary	3.7	1.4	–		
2. Peer-To-Peer Psychological Contract Breach	3.4	.77	-.05	–	
3. Satisfaction with Peers	3.7	.71	.03	.45**	–

N=201, *p< .05, **p< .01

Figure 6.9: Structural Model



Chapter 7

Discussion

From the results that were drawn in the previous chapter, the purpose for this chapter is to elaborate how the findings from this thesis contribute to the literature on psychological contract theory. The focus on multi-foci psychological contracts and the testing of target-similarity effect with regards to psychological contract breach or fulfilment is in the initial stages of exploration in the literature, and as such, while these findings contribute to this emerging literature stream, the following theoretical implications should be interpreted with caution.

Overall this thesis is made up of three studies. Studies 1 and 2 were used to test the target-similarity model with regard to the effects of foci-specific psychological contract breach on foci-specific work-related outcomes. Study 1 focused on OCBs as an outcome and Study 2 was used to test the effects of psychological contract breach on job satisfaction. The purpose for Study 3 was to identify the contents of peer to peer psychological contract, and to measure the effects of peer-to-peer psychological contract breach on the focal-person's satisfaction with his/her peers.

Study 1 and 2 made use of an instrument which presented the participants with eight different vignettes. Each vignette portrayed a different state (breach/fulfilled) of the three foci-specific psychological contracts. The participants were then asked to report whether the changes in the state of the psychological contracts would be influencing Ali's work-related outcomes. Study 3 made use of focus groups, expert panels, and an internet based interactive survey to determine the content of a peer-to-peer psychological contract. These content were then used to

make measure the effects of peer-to-peer psychological contract breach on the focal-person's satisfaction with his/her peers.

7.1 Discussion Study 1

Study 1 was used to model the influences of multi-foci psychological contract breach on foci-specific OCBs, using the target-similarity model presented by Lavelle et al. (2007). The primary objective being to provide evidence that individuals enter into multiple psychological contracts within the organisation, and that they react to the breach of these psychological contracts by targeting the party that has breached the contract. In addition to this hypothesised outcome, possible outcomes might have included:

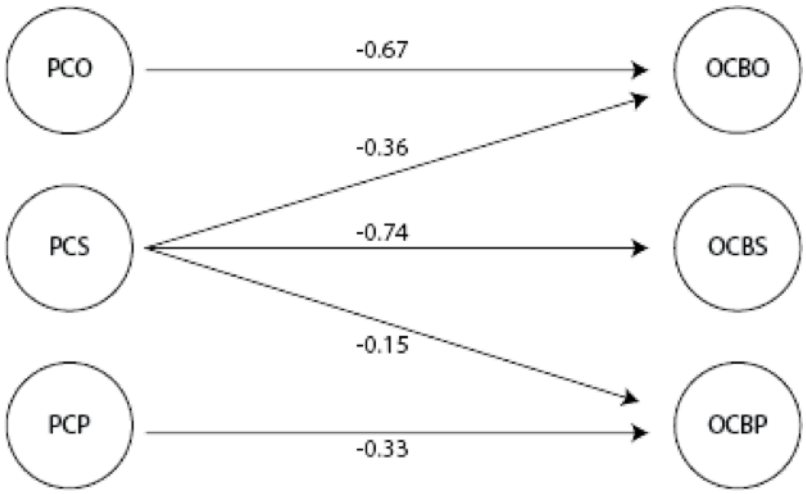
- that the psychological contract breach by any of the foci does not influence the OCBs directed at any of the foci, or in other words there is no target-similarity or spillover effects. For example, psychological contract breach by the organisation is not related to the OCBs directed at any of the foci.
- that there are no target-similarity effects of the psychological contract breach by a foci on the OCBs directed at that foci, but there is spillover effect. For example, psychological contract breach by the organisation is not related to OCBs directed at the organisation, but does significantly influence OCBs directed at the supervisor and OCBs directed at the peers.
- that the psychological contract breach by a foci has a stronger influence on the OCBs directed at the other foci than towards itself. This would mean that the spillover effect is greater than the target-similarity effect. For example, psychological contract breach by the organisation exhibits a stronger influence on either or both OCBs directed at the supervisor and peers, than compared to the influence it has on the OCBs directed at the organisation.

This study contributes to the literature on psychological contract theory by focusing on foci-specific psychological contracts, by simultaneously looking at psychological contracts with the organisation, super-

visor, and peers. In this regard the current thesis builds upon the literature that operationalises psychological contract breach as a multi-foci construct (Bordia et al., 2010; Conway et al., 2014; Dawson et al., 2013; Sverdrup & Schei, 2013; Turnley et al., 2003). Research interest in multi-foci psychological contracts is still relatively new (Marks, 2001). Secondly, this thesis introduces a somewhat different method to investigating psychological contract breach. Finally, this thesis also adds to the line of studies that have employed the target-similarity model (Lavelle et al., 2007).

The basic premise of the target-similarity model, as envisaged by Lavelle et al. (2007), is that work-related attitudes and behaviours can be best predicted by antecedents that are related to the targets of these attitudes and behaviours. Using the current study as an example, this wold mean that the effect of psychological contract breach (an antecedent factor) on OCBs (a work-related behaviour) can be best explained if the party that is breaching the psychological contract is also the target of the OCBs. In line with this argument, OCBs directed at the peers can be best predicted by a psychological contract breach if the breach is committed by the peers.

Figure 7.1: *Effect of Foci-Specific Psychological Contract Breach on Foci-Specific OCBs*



For study 1 which looked at the effects of foci-specific psychological contract breach on foci-specific OCBs, the results support all the target-similarity effects, but the same was not true for most of the spillover effects. Psychological contract breach by the organisation only accounted for the change in OCBs directed at the organisation and psychological contract breach by the peers only influenced the OCBs directed at the peers. On the other hand, Psychological contract breach by the supervisorinfluenced the OCBs directed at all three foci (Figure 7.1). This lends support to the target-similarity hypothesis with regards to the effect of foci-specific psychological contract breach on foci-specific OCBs.

With regards to the psychological contract breach by the organisation, hypothesis H_1 predicted that it would be negatively linked to OCBs directed at the organisation. The results prove this hypothesis as psychological contract breach by the organisation was negatively related to OCBs directed at the organisation (t(-9.54) = -0.67, p < .001). Hypothesis H_2 predicted that psychological contract breach by the organisation will be negatively related to OCBs directed at the supervisor and OCBs directed at the peers. The results did not support this hypothesis, which indicates that there was no spillover effect of psychological contract breach by the organisation on OCBs directed at the supervisor and OCBs directed at the peers. The target-similarity hypothesis, H_3, was also proved because psychological contract breach by the organisation did not register any influence on OCBs directed at the supervisor and OCBs directed at the peers.

All three hypothesis relating to psychological contract breach by the supervisor found support from the data. Hypothesis H_4 had predicted that psychological contract breach by the supervisor would be negatively linked to OCBs directed at the supervisor, the results confirm this (t(-5.28) = -0.74, p < .001). Hypothesis H_5 predicted the spillover effect of psychological contract breach by the supervisor on OCBs directed at the organisation and OCBs directed at the peers. The results (Figure 7.1) from this study also confirmed this hypothesis by showing that psychological contract breach by the supervisor was negatively related to OCBs directed at the organisation (t(-4.71) = -0.36, p < .001), and OCBs di-

rected at the peers (t(-2.17) = -0.15, p < .05). Hypothesis H_6 was also proven because the target-similarity effect was greater than the spillover effect.

Finally, hypothesis H_7 predicted that psychological contract breach by the peers would be negatively linked to OCBs directed at the peers. The results prove this hypothesis as psychological contract breach by the peers was negatively related to OCBs directed at the peers (t(-3.4) = -0.33, p < .001). Hypothesis H_8 had predicted that psychological contract breach by the peers will be negatively related to OCBs directed at the organisation and OCBs directed at the supervisor. The results did not support this hypothesis, which indicates that there was no spillover effect of psychological contract breach by the peers on OCBs directed at the organisation and OCBs directed at the supervisor. The target-similarity hypothesis, H_9, was proved because psychological contract breach by the peers did not show any significant influence on OCBs directed at the organisation and OCBs directed at the supervisor.

In very broad sense what these results prove is that when it comes to OCBs individuals view the organisation and peers as distal entities, and that the supervisors are the most influential in this regard. Therefore, psychological contract breach by the organisation and psychological contract breach by the peers have no spillover effect and they only influence the OCBs directed at the respective foci. On the other hand,Psychological contract breach by the supervisordid exhibit a strong target-similarity effect and the data also confirms its influence on OCBs directed at the organisation and peers. The results from this study can then be divided into two categories. First, all the target-similarity hypothesis were proved. Secondly, the spillover hypothesis was proved only for the supervisors. Each of these will be discussed individually in the following paragraphs.

The confirmation of the target-similarity hypothesis reinforces the findings from other studies that have incorporated the target-similarity model (Lavelle et al., 2007) in their studies. The results for this study are similar to the results obtained by Conway et al. (2014) who also reported that psychological contract breach by the organisation would only influence the OCBs directed at the organisation and would not influence the OCBs

directed at the peers. A possible explanation for this can be that the employees are aware that their peers are also facing this psychological contract breach by the organisation so they will identify with them and in some ways may even be more willing help out their peers in face of this adverse development. Secondly, the principle of reciprocity would also prohibit the employees from reducing the OCBs that the direct towards their peers and supervisors, because they might lose out on the favours their peers were directing towards them.

Traditionally most psychological contract research has looked at the supervisors as proxies for the organisation. The current thesis contributes to the literature on psychological contracts by focusing on the supervisors as a distinct party to the psychological contract. The only other study that has explicitly focused on psychological contract breach by the supervisor is the study by Bordia et al. (2010). They looked at cascading psychological contracts between a manager and subordinate and between the subordinate and clients. They were able to prove their hypothesis that the breach of supervisor's psychological contract by the organisation will lead to the supervisors breaching their psychological contracts with their subordinates, which in return results in a deterioration of customer service provided by the subordinates. Bordia et al. (2010) categorically mention that the subordinates will reduce the customer-focused citizenship behaviours to target their supervisors.

The studies by Bordia et al. (2010) and Conway et al. (2014) offer interesting contrasting results. Bordia et al. (2010) concluded that the psychological contract breach by the organisation would have a spillover effect on the OCBs directed at the customers. On the other hand, Conway et al. (2014) report that the psychological contract breach by the organisation will not have any spillover effect on the OCBs directed at customers. The difference between these two studies being that Conway et al. (2014) looked at the psychological contract between the employees and the organisation, whereas Bordia et al. (2010) looked at two different sets of psychological contracts, one between the organisation and supervisors, and the other between the supervisors and subordinates. This implies that psychological contract breach by the organisation has

a trickle-down effect on the psychological contract that supervisors have with their subordinates and that in return determines the quality of customer service provided by the organisation.

The studies by Bordia et al. (2010) and Conway et al. (2014) also differed from each other based on the samples that they used. Conway et al. (2014) were interested to know if public sector employees would reduce the customer-focused citizenship behaviours in response to the psychological contract breach by their organisations. Public service employees have a strong sense of duty to help their customers, who are the members of the public, and are reliant on the government support. This sense of duty is what prevents the public service employees from altering their helping behaviour towards their customers. The sample for the study by Bordia et al. (2010) was drawn from profit driven organisations. The relationship of the sales people at the hotels servings the hotels' guest do not have the same sense of duty towards their clients as that of the public sector employees. This is why they retaliate in response to the breach of their psychological contract by their supervisors by withdrawing the discretionary behaviours they were directing towards their clients.

Finally, the target-similarity effect of psychological contract breach by the peers, as confirmed by this study, to the best of my knowledge, has not been previously investigated. The only exception to this is the study conducted by Sverdrup and Schei (2013). Support for the target-similarity effect of psychological contract breach by the peers can be drawn from the literature on TMX, which is a measure of the perceived quality of support a person receives from his/her peers or team-members. For example, Kamdar and Van Dyne (2007) hypothesised that TMX would be a better predictor of OCBs directed at the peers than LMX. Their results confirmed that TMX was a better predictor of helping behaviours directed towards co-workers than LMX. Love and Forret (2008) also report that employees experiencing high amounts of TMX were more likely to engage in voluntary efforts to help out their co-workers.

In summary, the results from this study support the target-similarity effect hypothesis. What this implies is that individuals view these foci as distinct source of support and parties to the psychological contracts. This

would mean that individuals have separate sets of expectations from each of the foci and the agent that fails to meet the expectations associated with it faces the consequences for breaching the psychological contract with the focal-person. The specific consequence that was looked at in this study was the desire of the focal-person to direct OCBs towards the different foci. The results suggest that individuals penalise the foci that breach their psychological contracts by withholding the OCBs they were directing towards them.

The second set of results for current study pertained to the existence of spillover effect of psychological contract breach by the supervisor on OCBs directed at the organisation and OCBs directed at the peers. These findings are in line with the findings from other studies that have highlighted the importance of supervisors' role in promoting work-related behaviours. For example, Chen et al. (2002) noted that commitment to the supervisors is a better predictor of both in-role and extra-role performance. The results from their study indicate that performance was strongly related to the employees' desire to go the extra mile for their supervisors.

Similarly Askew et al. (2013) indicate that there is a strong spillover effect of commitment to supervisor on work outcomes that are related to the organisation and co-workers. This, they explained, is due to the role supervisors occupy within the organisations. Employees view supervisors as a distinct source of support and targets of commitment Stinglhamber and Vandenberghe (2003). Supervisors have a formal authority over their subordinates (Eisenberger et al., 2002), and organisations function and implement most of their strategies and polices through the supervisor (Chen et al., 2002). It is because of their authority that supervisors can penalise individuals who are not exhibiting positive behaviours. Whereas an employee's peers do not have any authority over him/her, and organisations rely on the reporting of the supervisors to determine the quality of an individual employee's behaviour.

Because employees view the supervisor as representing the organisation, they would respond to psychological contract breach by the supervisor by not only withdrawing the OCBs directed at the supervisor but also

OCBs directed at the organisation. This is in line with the results arrived at by Askew et al. (2013) who concluded that effective commitment to the supervisors does predict OCBs directed at the peers, and the organisations. An explanation of this can be drawn from the arguments that Eschleman, Bowling, Michel, and Burns (2014) offer to support their findings. They posit that when faced with abusive supervision (a breach of the psychological contract with the supervisor), employees will respond by exhibiting counter-productive work behaviours and withdrawing from all forms of helping behaviours. Counter-productive work behaviours generally target the organisation, in some cases they can also lead to the harassment other individuals within the organisation (including the supervisors and peers). This obviously translated into a reduction of the employees" participation in OCBs.

The results for this study also indicate that psychological contract breach by the supervisor will have a spillover effect on the OCBs directed at the peers. A plausible explanation for this is that the individual employees might feel that their supervisor is treating them differently as compared to their peers. This would result in these individuals withdrawing their OCBs from their peers. A concept embedded within the conceptualisation of LMX is that supervisor have different quality of relationship with different subordinates, this leads to LMX differentiation (Ford & Seers, 2006). LMX differentiation can lead to those who are experiencing low LMX (the out group) feeling envious of those who are enjoying high LMX (the in group). Furthermore, (Cohen-Charash & Mueller, 2007) note that envy leads to counter-productive work behaviours being directed at those being envied.

In summary, the findings from this study are that individuals target the organisational agents that breach their psychological contract by withholding OCBs directed towards that agent. In situations where the focal-persons perceives that only the organisation has committed a breach of his/her psychological contract, only the OCBs directed at the organisation will be withheld. Such OCBs may include working towards improving the organisational image, keeping up with the developments within the organisation, and pro-actively providing ideas for improving the func-

tioning of the organisation. More importantly the results of this study implies that the breach of psychological contract by the organisation will not influence the focal-person's desire to direct OCBs towards his supervisor and peers.

Similarly, individuals view their peers as distinct sources of support and parties to the psychological contract. A psychological contract breach by the peers damages the social exchange relationship, which is based of the principal of reciprocity, that exists between the peers. Individuals who perceive that their peers are not properly reciprocating their discretionary efforts, tend to withhold such efforts in the future. For example, individuals who are actively involved in sharing knowledge, would expect that their peers also share their knowledge in return. In case their peers withhold their knowledge, they will respond by hoarding their knowledge.

Finally, the results from this study confirm the importance of supervisors' role in motivating OCBs. Of the three foci-specific psychological contract breaches that were investigated for this thesis, the psychological contract breach by the supervisor was the only to have a both the direct effect on the OCBs directed at the supervisors, and spillover effect on the OCBs directed at the other foci. The results confirm the central role that supervisors occupy within the organisational context. They are perceived by their reports as representing the organisation, and their behaviour towards their subordinates has an influence of how their subordinates will behave towards each other. Supervisors behaviour towards their subordinates is key antecedent for the subordinates desire to engage in discretionary efforts such as OCB. The current study contributes to the literature by using psychological contract theory as a framework for understanding how supervisors behaviours shapes their reports attitudes and behaviours.

7.2 Discussion Study 2

Study 2 was used to model the influences of multi-foci psychological contract breach on the focal-person's (Ali's) foci-specific satisfaction, using

the target-similarity model presented by Lavelle et al. (2007). The primary objective being to provide evidence that individuals enter into multiple psychological contracts within the organisation, and that the focal-person's satisfaction with a party depends to a major extent on whether that party fulfils or breaches it's psychological contract with the focal-person. Additionally, the aim of this study was to determine if a foci-specific psychological contract breach will influence a focal-person's satisfactions towards other organisational foci. In addition to this hypothesised outcome, possible outcomes might have included:

- That the psychological contract breach by any of the foci does not influence the focal-person's satisfaction with any of the foci, or in other words there is no target-similarity or spillover effects. For example, psychological contract breach by the organisation is not related to the the focal-person's satisfaction with any of the foci.
- That there are no target-similarity effects of the psychological contract breach by any of the parties on the the focal-person's satisfaction with that party, but there is spillover effect. For example, psychological contract breach by the organisation is not related to the focal-person's satisfaction with his/her organisation , but does significantly influence the focal-person's satisfaction with his/her supervisor , and peers.
- That the psychological contract breach by a party has a stronger influence on the the focal-person's satisfaction with the other foci than towards itself. This would mean that the spillover effect is greater than the target-similarity effect. For example, psychological contract breach by the organisation exhibits a stronger influence on either or both the focal-person's satisfaction with the supervisor and peers, than compared to the influence it has on the the focal-person's satisfaction with his/her organisation .

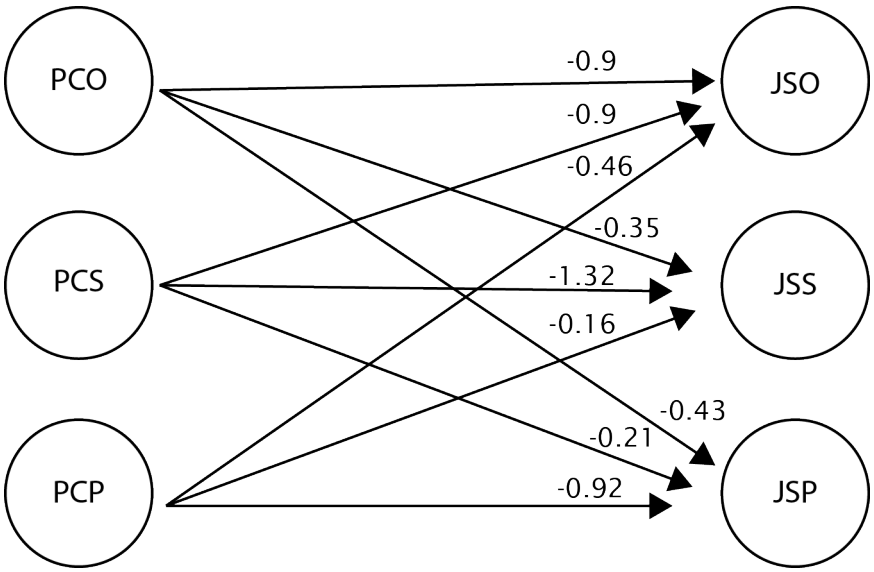
This study contributes to the literature on psychological contract theory by focusing on foci-specific psychological contracts, by simultaneously looking at psychological contracts with the organisation, supervisor, and peers. In this regard this thesis builds upon the literature that

operationalises psychological contract breach as a multi-foci construct (Bordia et al., 2010; Conway et al., 2014; Dawson et al., 2013; Sverdrup & Schei, 2013; Turnley et al., 2003). Research interest in multi-foci psychological contracts is still relatively new (Marks, 2001). Secondly, this thesis also adds to the line of studies that have employed the target-similarity model (Lavelle et al., 2007).

The basic premise of the target-similarity model, as envisaged by Lavelle et al. (2007), is that work-related attitudes and behaviours can be best predicted by antecedents that are related to the targets of these attitudes and behaviours. Using the current study as an example, this would mean that the effect of psychological contract breach (an antecedent factor) on the focal-person's satisfaction with different organisational foci (a work-related attitude) can be best explained if the party that is breaching the psychological contract is also the target of the satisfaction. In line with this argument, a focal-person's satisfaction with his/her peers can be best predicted by a psychological contract breach if the breach is committed by the peers.

For study 2 which looked at the effects of foci-specific psychological

Figure 7.2: *Effect of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction*



contract breach on foci-specific satisfaction, the results support all the target-similarity effects, and the spillover-effects (figure 7.2). The data in Figure 7.5 reports that the two and three-way interaction effects of foci-specific psychological contract breach on the focal-person's satisfaction with different foci. It shows that the the focal-person's satisfaction with his/her organisation is influenced by the two and three-way interaction effects between the foci-specific psychological contract breachs. The results also show that these interaction effects have no significant influence on the focal-person's satisfaction with his/her supervisor. With regards to the the focal-person's satisfaction with his/her peers, only the two-way interaction effect between psychological contract with the organisation and psychological contract with peers, and the three-way interaction-effect between all the foci-specific psychological contract breachs registered significant effect size.

With regards to the psychological contract breach by the organisation, hypothesis H_{13} predicted that it would be negatively linked to the focal-person's satisfaction with his/her organisation. The results prove this hypothesis as psychological contract breach by the organisation was negatively related to the focal-person's satisfaction with his/her organisation (t(-6.83) = -0.9, p < .001). Hypothesis H_{14} predicted that psychological contract breach by the organisation will be negatively related to the focal-person's satisfaction with his/her supervisor and peers. The results also support this hypothesis, which indicates that there was a spillover effect of psychological contract breach by the organisation on the focal-person's satisfaction with his/her supervisor (t(-3.95) = -0.35, p < .001) and peers (t(-4.18) = -0.43, p < .001). The target-similarity hypothesis, H_{15}, was also proved because psychological contract breach by the organisation had a greater effect size on the focal-person's satisfaction with his/her organisation than on the the focal-person's satisfaction with his/her supervisor and peers.

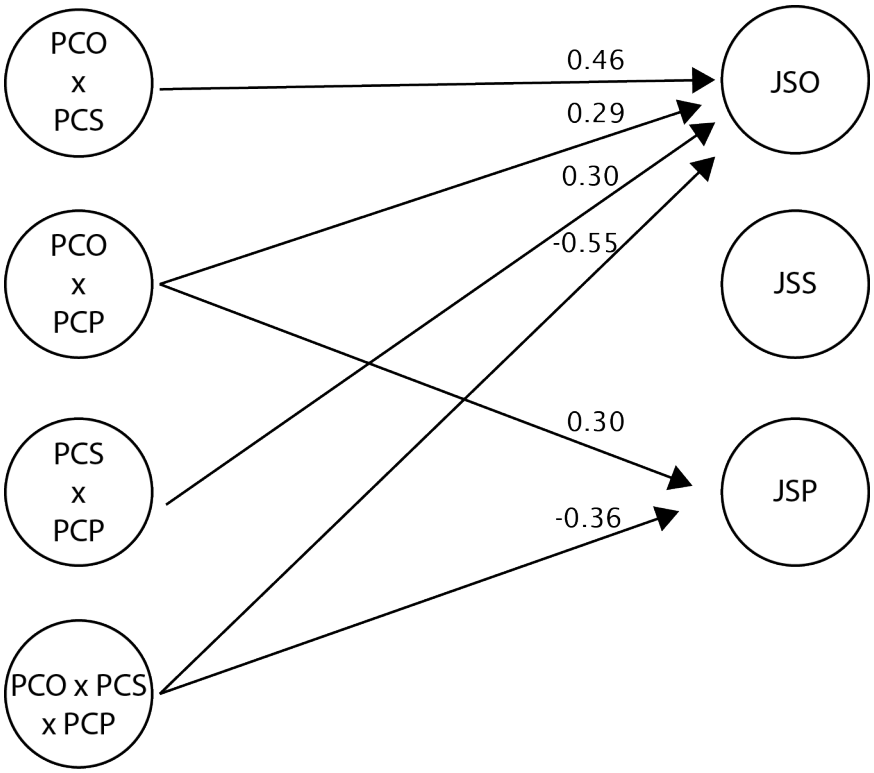
All three hypothesis relating to psychological contract breach by the supervisor found support from the data. Hypothesis H_{16} had predicted that psychological contract breach by the supervisor would be negatively linked to the focal-person's satisfaction with his/her supervisor, the re-

sults confirm this (t(-8.73) = -1.32, p < .001). Hypothesis H_{17} predicted the spillover effect of psychological contract breach by the supervisor on the focal-person's satisfaction with his/her organisation and peers. The results (Figure 7.2) from this study also confirmed this hypothesis by showing that psychological contract breach by the supervisor was negatively related to the focal-person's satisfaction with his/her organisation (t(-6.64) = -0.90, p < .001), and peers (t(-1.77) = -0.21, p < .1). Hypothesis H_{18} was also proven because the target-similarity effect was greater than the spillover effects.

Finally, hypothesis H_{19} predicted that psychological contract breach by the peers would be negatively linked to the focal-person's satisfaction with his/her peers. The results prove this hypothesis as psychological contract breach by the peers was negatively related to the focal-person's satisfaction with his/her peers (t(-5.98) = -0.92, p < .001). Hypothesis H_{20} had predicted that psychological contract breach by the peers will be negatively related to the focal-person's satisfaction with his/her organisation and supervisor. Results did support this hypothesis, which indicates that there was spillover effect of psychological contract breach by the peers on the focal-person's satisfaction with his/her organisation (t(-4.93) = -0.46, p < .001) and supervisor (t(-1.88) = -0.16, p < .1). The target-similarity hypothesis, H_{21}, was also proven because the target-similarity effect was greater than the spillover effects.

Figure 7.5 describes the results for the two-way and three-way interaction effects of foci-specific psychological contract breach on the focal-person's satisfaction with the different organisational foci. Hypothesis H_{22} had predicted the two-way and three-way interaction effects of the foci-specific psychological contract breachs to influence the focal-person's satisfaction with his/her organisation. The results from this study confirm this hypothesis and report that the two-way interaction between the psychological contract breachs by the organisation and supervisor (t(3.30) = 0.46, p < .001), and between the psychological contract breachs by the organisation and peers (t(2.30) = 0.20, p < .05), and between the psychological contract breachs by the supervisor and peers (t(2.17) = 0.30, p < .05) will negatively influence the focal-person's sat-

Figure 7.3: *Interaction-Effects of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction*



isfaction with his/her organisation. Furthermore, the results from this study confirm that the three-way interaction between the psychological contract breachs by the focal-person's organisation, supervisor, and peers will negatively influence (t(-2.89) = 0.55, p < .001) the the focal-person's satisfaction with his/her organisation.

Hypothesis H_{23} had predicted the two-way and three-way interaction effects of the foci-specific psychological contract breachs to influence the focal-person's satisfaction with his/her supervisor. The results from this study indicate that non of the two-way and three-way interaction effects significantly influenced the focal-person's satisfaction with his/her supervisor. Thus, Hypothesis H_{23} was rejected. Whereas Hypothesis H_{24} had predicted the two-way and three-way interaction effects of the foci-specific psychological contract breachs to influence the focal-person's

satisfaction with his/her peers. The results from this study confirm that the two-way interaction between the psychological contract breachs by the organisation and peers (t(2.12) = 0.30, p < .05), and the three-way interaction between the psychological contract breachs by the focal-person's organisation, supervisor, and peers will negatively influence (t(-2.89) = 0.55, p < .1) the the focal-person's satisfaction with his/her peers. Thus, H_{24} is partly supported.

The overall results for this study indicate that a focal-person's satisfaction is influenced by multi-foci psychological contract breach. The target-similarity model predicts that the focal-person's satisfaction with a specific organisational agent will be dependent on whether that agent fulfils or breaches its psychological contract with the focal-person. Results from this study also indicate that foci-specific psychological contract breach has a spillover effect on the focal-person's satisfaction with the other foci.

The results shown in Figure 7.2 indicate that the psychological contract breach by supervisor exerts the strongest overall influence on a focal-person's satisfaction with the different organisational foci, when the effects of the three foci-specific psychological contract breachs are added up. Furthermore, the results indicate that the the focal-person's satisfaction with his/her organisation is influenced the most by multi-foci psychological contract breach , if the individual effects of the psychological contract breach by the three foci are added up for each target. The conclusion that can be drawn from these results is that the supervisors wield the strongest influence on a focal-person's overall job satisfaction.

These results are similar to that obtained by Chou and Robert (2008) who found that support provided by the organisation, supervisors, and the co-workers uniquely contribute to a focal-person's job satisfaction. Results from the current study and those obtained by Chou and Robert (2008) differ with regards to the foci that exerts the strongest influence on job satisfaction. Chou and Robert (2008) concluded that it was the institutional support that exerted the strongest influence on job satisfaction, whereas the results from this thesis indicate that it is the supervisors that exert the most influence on a focal-persons satisfaction. The

difference between these results is because of the different measures of job satisfaction used by the Chou and Robert (2008) and that by the current thesis. The current thesis employed a foci-specific measure of job satisfaction where three items relating to each foci were used to assess the focal-person's satisfaction with each foci. Whereas, Chou and Robert (2008) used a global measure of job satisfaction which had total of eight items, six of which pertained to the institutional support, whereas supervisor and co-workers support were measured using one item each.

Previous research has show that supervisors that meet the expectations of their followers generally inspire positive job related attitudes, and this leads to an increased satisfaction with their supervisor (Mulki, Jaramillo, & Locander, 2008). Trust plays an important role in mediating the relationship between the supervisors' behaviour and followers' work-related outcomes (Liu, Siu, & Shi, 2010). Trust also plays an important role in the formation of psychological contracts (Atkinson, 2007). Research on trust has shown that trust in the organisation and trust in the supervisor have distinct antecedents and outcomes from each other (Tan & Tan, 2000). (Tan & Tan, 2000) report that trust in supervisor, and not trust in the organisation, predicts the satisfaction with the supervisors. This offers support for the results arrived at for this thesis which indicates that psychological contract breach by the supervisor, and not the breach of the psychological contracts with the organisation or the peers, is a better predictor of the focal-person's satisfaction with his/her supervisor .

Support for the current study's results on the target-similarity effects of psychological contract breach on the focal-person's satisfaction with various organisational foci can also be found in the literature on multi-foci commitment. For example, (Wasti & Can, 2008) could not find any relationship between effective and normative commitment with the organisation and satisfaction with supervisors and co-workers. Whereas commitment with the supervisor was related to the satisfaction with the supervisors and commitment with the co-workers was only related with the satisfaction with the co-workers. Previous research also informs us that psychological contract breach is negatively related to commitment (Zhao

et al., 2007). Although the relationships between foci-specific psychological contract breach , commitment, and satisfaction was explicitly tested for this thesis (this is left for future researchers), nevertheless this does offer a plausible explanation for the results that were obtained. Foci-specific psychological contract breach would reduce the focal-person's commitment to the party at breach, this in return will lead to the focal-person becoming less satisfied with that party.

In conclusion, the results from this second study confirm the advantages of using foci-specific measures of psychological contract breach. This allows for the testing of target-similarity effects of psychological contract breach on foci-specific outcomes. This is also made possible by using foci-specific measures of the outcome variables such as OCB and job satisfaction.

7.3 Discussion Study 3

The purpose for study 3 was to determine the content of a peer-to-peer psychological contracts and to investigate the effects of the breach of these contracts on a focal-person's satisfaction with his peers. The existing literature on psychological contracts predominantly focuses on the the relationship between the employee and a unitary employer. This conceptualisation of the psychological contract construct limited its use to studying vertical social exchange relationships. Very few studies have used the psychological contract framework to understand the lateral social exchanges between co-workers or peers.

Results indicate that for the participants of this study the most important expectations they had of their peers were that they would share their knowledge with them, provide them with a fair performance assessment, give them due credit for their work, help them with their work, support their career growth, and finally allow them to innovate. Most of these items have been highlighted in previous research studies as being important contents of support provided by the co-workers. For example, the respondents for this study placed highest value on the peers role as sources of knowledge. Chou and Robert (2008) note that one of the most

a focal-person's peers act as sources of knowledge that helps with reducing role ambiguity, conflict, and over-load. Similarly (Barclay & Harland, 1995) highlight the role of the focal-person's peers as performance raters. They make the case that peers are in a better place to rate their colleagues performance than are the supervisors. Helping co-workers with their work is a form of OCB. Studies, such as that by (Willenbrock & Grohmann, 2013), have confirmed that peers influence their colleagues behaviours by directing OCBs towards them.

Results from this study also confirm that peer-to-peer psychological contract breach is significantly related to the focal-person's satisfaction with his/her peers. These results are in line with results obtained studies that have investigated the effects of peers/co-workers related constructs on job satisfaction. For example, Banks et al. (2013) report a positive relationship between team-member exchange (TMX) and job satisfaction.

These results also supports the findings from previous research which has aimed to prove the uniqueness of the peers/co-workers' influence from other social environmental factors. For example, Chiaburu and Harrison (2008) used the meta-analysis technique to prove that co-workers' support uniquely influenced the focal-person's job satisfaction. Chiaburu and Harrison (2008) used a global measure of job satisfaction thus making it difficult to ascertain which aspect of job satisfaction is influenced by peers and what facets of job satisfaction are susceptible to the influence of the supervisor's behaviour. This is where the current thesis contributes to the literature on job satisfaction, by proving the target-similarity effect of co-worker related construct (peer to peer psychological contract) to co-worker related job satisfaction.

7.4 General Discussion

The three independent research studies which make up this thesis were designed to test the hypothesis relating to multi-foci psychological contract theory. The quantitative instrument used for testing the theory (in the first two studies) was based on the vignette technique. A series of eight vignettes was provided to the respondent, each representing a dif-

ferent context of psychological contract breach or fulfilment. For each of the vignettes the respondents were asked to register how they viewed the vignette context influencing Ali's behaviour towards the three foci (organisation, supervisor, and peers) of his psychological contracts. The objective for the third study was to identify the content of the peer-to-peer psychological contract and to test how a breach of this contract would influence the OCBs directed at the peers, and the focal-person's satisfaction with his/her peers.

The following paragraphs will provide a comparative analysis of the first two studies. These two studies were similar in that they tested the target-similarity effect of psychological contract breach on different work related outcome. The difference between the two studies being the outcome that was focused on. Study one focused on work-related behaviour (OCB), whereas study two focused on a attitudinal outcome (focal-person's with the different organisational foci). This comparative analysis will be followed by a brief reflections on the use vignettes in a quantitative design.

Figures 7.4 and 7.5 represent the results for study one and two respectively. Its is apparent from these figures that foci-specific psychological contract breach had a greater effect size on focal-person's satisfaction than on his/her desire to participate in OCBs. These results are similar to Cantisano et al.'s (2008) results in that they also confirmed, through a meta-analysis of 41 studies, that psychological contract breach had a greater effect size on attitudinal outcomes than on behavioural outcomes. The rational that Cantisano et al. (2008) offer for these results is that behaviours are blatant or visible outcomes, whereas change in attitudes are more subtle and less visible. These results should be read with caution because both studies used different samples, but because the sample were drawn from the same population, the comparative analysis still holds some validity.

Building on Cantisano et al. (2008) rational, the results depicted in figure 7.4 become even more evident. The OCBs directed at the organisation and peers were influenced by the breach of the psychological contract with the supervisors in addition to the breach of the psycho-

Figure 7.4: *Effect of Foci-Specific Psychological Contract Breach on Foci-Specific OCBs*

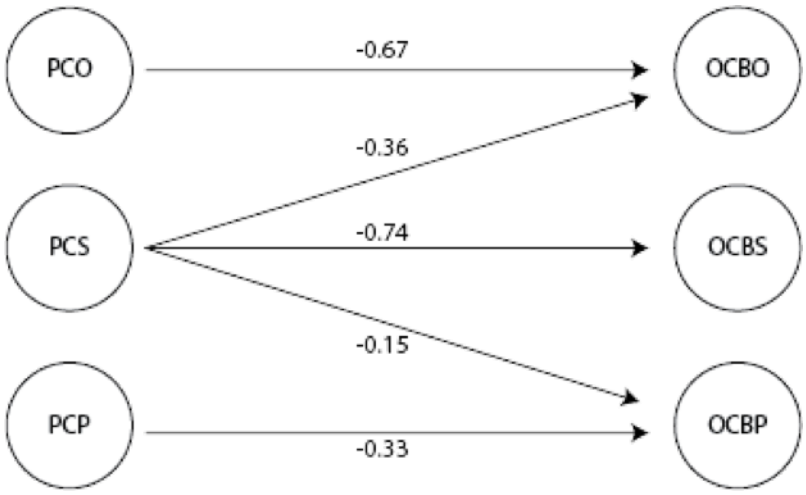
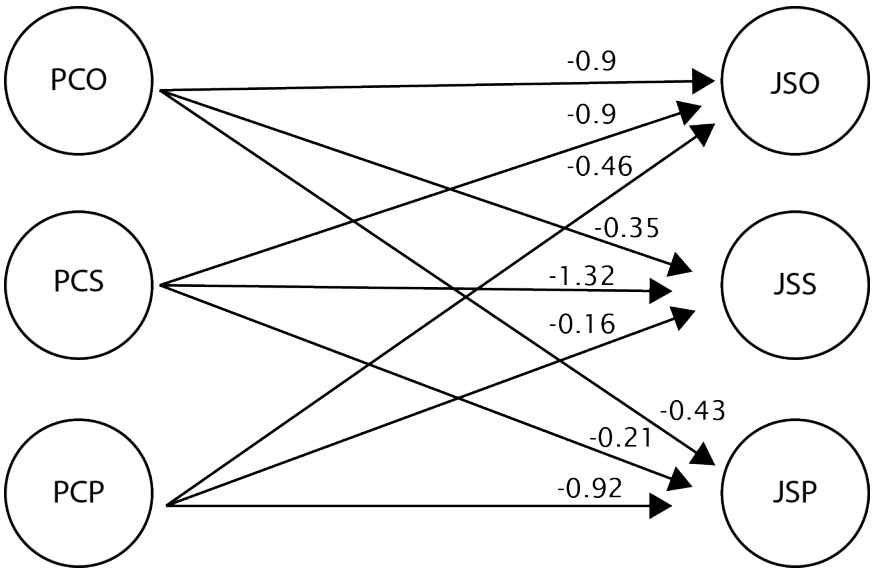


Figure 7.5: *Effect of Foci-Specific Psychological Contract Breach on Focal-Person's Foci-Specific Satisfaction*



logical contracts by the related foci (the organisation and peers). What this implies is that for the participants of these studies, the supervisors represented the most proximal entity, and the organisation peers were viewed as distant entities. The focal-person remained willing to direct OCBs towards the supervisor regardless of the breach of the psychological contract by the organisation and peers. The results were different for the satisfaction study, the breach of psychological contract by the organisation and peers did influence the focal-person's satisfaction with his/her supervisor. Taking these results together implies that the participants of these studies saw the vignette protagonist changing his attitude towards all foci as a result of the breach of the psychological contracts, but not willing to show a change of behaviour towards his/her supervisor. The reason being that the supervisor is in a position not only to notice a change in the behaviour but also capable of reprimanding this change in behaviour.

Overall the results from these two studies prove the " supervisor's effects" highlighted by Askew et al. (2013). Askew et al. (2013) concluded from their study that affective commitment to the supervisor was a better predictor of OCBs directed at the supervisors, organisation, and co-workers, than the commitment to the organisation and co-workers. This, they argued, was because of the formal authority vested in the supervisors to manage and evaluate the performance of their subordinates. Because of this authority employees invest far more in their social-exchange with the supervisor than with other foci.

An important aspects of leadership theory, the distance of leadership, is pertinent to this discussion on the supervisor effect. The concept of distance between the leaders and followers is defined by Antonakis and Atwater (2002) in terms of (a) physically distance, (b) psychological distance, and (c) contact frequency. There is an implied consent amongst the leadership theorist that the distance between the leaders and followers is an important determinant of the followers behaviours. Researchers have explicitly looked at the concept of leadership distance have identified it as an antecedent of charismatic leadership (Katz & Kahn, 1978), limiter of the effects leaders' behaviours have on the followers (Howell,

Bowen, Dorfman, Kerr, & Podsakoff, 1997), and a moderator of the nature of charismatic leadership that might emerge (Shamir, 1995; Yagil, 1998).

Antonakis and Atwater (2002, p. 682) defines psychological distance as "perceived differences in status, rank, authority, social standing, and power, which influence the degree of intimacy and social contact that develop between followers and their leader". Within the literature on leadership their are differing opinions on how social distance influences the leader-member relationship. For example, Bogardus (1927) had argued that that social distance allows to obfuscate a leader's shortcomings from his/her followers, which allows the leader influence their subjects. Bogardus (1927) do not rule out the emergence of effective leadership in close dyadic relationships, they argue that leaders who exhibit high levels of skills and credibility can influence proximal followers. Socially distant followers attribute charisma to their leaders by forming their perceptions based on the information that they receive from their environments, such as the performance of the organisation, activities that the leader undertakes for perception-management, the articulation of the leader's vision and other organisational and social cues (Shamir, 1995). Socially distant leaders can also utilise technologies to breach the social divide between themselves and their followers (Antonakis & Atwater, 2002) thus reducing the limiting effect of social distance on their ability to influence their followers.

J. T. Wright (1988) recommend that under certain conditions, for example, when the leader is "first among equals", a leader can benefit from increasing the social distance between herself and her followers. This allows the leader to become more effective, enforce his vision, and play her role in conflict management. Studies into organisational commitment, such as that by Keef and Harcourt (2001) also report that employees develop differing level of attachments with proximal and distal leaders. Although Keef and Harcourt (2001) did not explicitly discuss the issue of leadership distance, but it can be implied from their results that the fire fighters did not develop any attachments to the the supervisors because of the social divide between them (the supervisor were representatives

of the fire insurance companies).

The second form of distance that leadership theorist consider whilst determining the effects of the leaders behaviours on the followers is the psychical distance between the leader and the follower. Unlike the other two forms of distance (i.e. the social distance and frequency of interactions) this is form of distance is a measured of the geographic distance between the leaders and followers (Antonakis & Atwater, 2002). Research on leadership informs us the physical proximity is beneficial for stimulating a positive relationship between the leaders and the followers. Theorist such as Kerr and Jermier (1978) and Howell et al. (1997) see physical distance as inversely related to the leadership effectiveness and as such recommend that organisation work towards reducing the physical distance between the leaders and followers. Modern information and communication technologies provide organisations with tools that can be used to breach the physical divide between the leadership team and their followers (Antonakis & Atwater, 2002).

Finally, the third type of distance that exists between leader and follower is a measure of the frequency of interactions between the leaders and the followers. According to Antonakis and Atwater (2002) a high frequency of interaction between the leaders and followers ensures a "closer" relationship and when the frequency of interaction is low the leaders seems far away to the followers. Antonakis and Atwater (2002) offer a contrast of situations where a high frequency of interaction would be favoured over a low frequency of interactions and vice versa. They note that in situations where the task to be performed by the followers is ambiguous, the followers will seek a greater amount of feedback from their leaders and in these situations they followers would prefer a higher frequency of interactions with the leader. On the other hand, if the followers are assigned which they have the ability to accomplish themselves and they require no feedback, a high frequency of interaction with the supervisor might prove to be counter productive. Antonakis and Atwater (2002) developed a typology of leadership based on the distance of the leaders from the follower (see Table 7.6).

Relating this discussion on leadership distance back to the results of

Figure 7.6: *Typologies of Distant Leadership* (Antonakis & Atwater, 2002)

Perceived Social Distance	Perceived Physical Distance		Perceived Frequency of Interactions
	High	Low	
High	Virtually distant leadership	Socially distant leadership	High
Low	Virtually close leadership	Proximal leadership	High
High	Distal leadership	Manor house leadership	Low
Low	Avuncular leadership	Hands-off leadership	Low

the current study, the first note that should be made is that there has been no research study (to the best of my knowledge) that has looked at the leadership distance and its impact on the followers psychological contracts. There have been studies that have looked at the impact of leadership styles on the followers psychological contracts, these to do not explicitly discuss the issue of leadership distance. The exception to the above is the study conducted by McDermott, Conway, Rousseau, and Flood (2013) who looked at the alignment between HR policies and Leadership styles as an antecedent of psychological contract fulfilment. They focused on transactional and transformational styles of leadership and indicated that the transformational leadership styles fostered relational psychological contracts in the followers, whereas employees perceived to have transactional psychological contract with a leaders who exhibited transactional leadership styles. Contrasting transactional and transformational styles, McDermott et al. (2013) elaborate that transactional style is preferred style of leadership if their is a high physical and social distance and low frequency of interactions.This aligns with Antonakis and Atwater (2002) of the conceptualisation of distal leadership (see

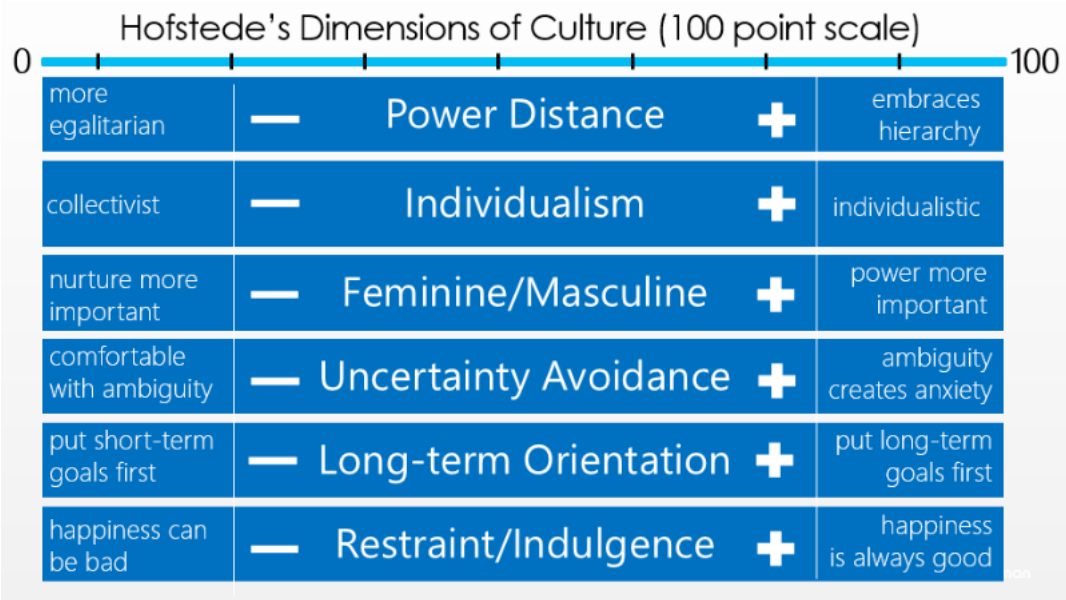
Table 7.6). Whereas the conceptualisation of transformational leadership provided by McDermott et al. (2013) is akin to the description of proximal leadership provided by Antonakis and Atwater (2002).

Proximal leaders are physically co-located with their followers, this allows their followers to observe a greater amount of their behaviours. Whereas with distal leaders the followers have to rely on different organisational cues to susses the leader's actual behaviour. This implies that an individual's psychological contract with his proximal leader (the supervisor) will be based on the supervisor's actual behaviour and will be a better predictor of their relationship with the proximal leader. This would also imply that the psychological contract with the proximal leaders will have a greater number of content than with the distal leader. What can also be construed from the above discussion is that an individual's psychological contract with the proximal leader will have a greater amount of relational content then transactional content and for the distal leader this ratio would be inverse. Furthermore, individuals would be in a better position to observe whether the proximal leader has breached their psychological contracts, than they would be able to observe the distal leader. So this should lead the focal-person to report a greater amount of psychological contract breaches by the proximal leader than by the distal leader.

Another boundary condition for the current study is its cultural context. The study draws its sample from Pakistan, a predominantly Muslim country located in South Asia. Each country has a unique national culture, which influences the organisational culture of the firms that operates within that country and also shapes the world-view of its citizenry. Hofstede (1980, p. 25) defines national culture as "the collective programming of the mind which distinguishes the members of one human group from another.". Hofstede compared individual countries on five cultural dimensions including power distance, individualism/collectivism, feminine/masculine, uncertainty avoidance, long-term orientation, and restraint/indulgence (Figure 7.7). According to Hofstede (2001) Asian countries are typically high on context, high on collectivism, and high on power distance. The graph in Figure 7.8 provides a comparison of

Pakistan to the US, and China on Hofstede's cultural attributes.

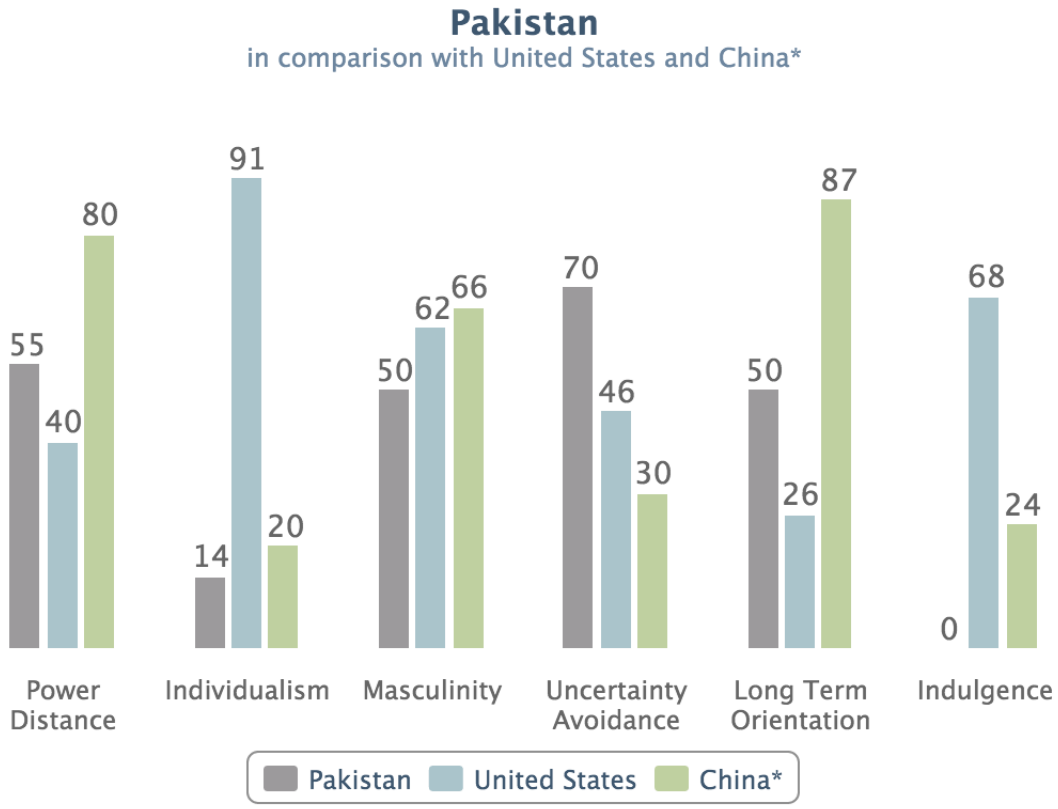
Figure 7.7: *Hofsede's Dimensions of Culture, Based on Hofstede (2001)*



Power distance (PD) is a cultural attitude which describes the willingness of individuals to obey authority, because those individuals have resigned to the fact that authority rests in the hands of those in higher social or organisational strata. In terms of PD Pakistan is closer to the US than it is to China. The second attribute on which Hofstede differentiated between national cultures was individualism. This is a measure of how much an individual's interest prevails over that of the groups (Hofstede, Hofstede, & Minkov, 2010). In collectivistic cultures (cultures that rank low on the individualistic score) the basic unit of the society is the family and the individuals are expected to give preference to the needs of the family above their own needs. Whereas in individualistic cultures the society celebrates individual achievements and the individuals are expected to look after their own interests rather than that of the group. Pakistan's culture measures very low on the individualist scales (Figure 7.8) and thus is classified as a collectivistic society.

Hofstede also differentiated between cultures on their preference for assertiveness as a behaviour over modesty (Masculinity). This aspect of the culture plays an important roUploads/2016-04-08 10.27.40 le in

Figure 7.8: *Cultural Context of Pakistan (Source http://geert-hofstede.com/pakistan.html)*



assigning gender specific roles to the members of the society. For example, in Pakistan the profession of typists is typically associated with males than females (Hofstede et al., 2010). Pakistan ranks high on the scales for uncertainty avoidance and long-term orientation. Uncertainty avoidance is a measure of how much citizens or a society are willing to take risk. Pakistan ranks very high on this measure (Figure 7.8) which indicates that it has a culture where individuals are not comfortable with ambiguities. Hofstede et al. (2010, p. 239) defined long-term orientation as "the fostering of virtues oriented toward future rewards–in particular, perseverance and thrift". Whereas, the opposite of long-term orientation, the short-term orientation is "fostering of virtues related to the past and present–in particular, respect for tradition, preservation of "face," and fulfilling social obligations". Pakistan’s score on this scale was 50, which

is an indication that the culture of Pakistan appears to be in a transition stage where both long-term and short-term orientations are equally prevalent.

Antonakis and Atwater (2002) identified two aspects of the national culture, power distance and individualism, as having a significant effect on leadership distance. They noted that Hofstede's definition of power distance was similar to their own conceptualisation of social distance. They also noted that there is high correlation between power distance and collectivism, which implies that these two aspects of national culture will exert a common effect. The combined effect of high power-distance and collectivism is that members of the societies would accept leaders who are more autocratic, directive, and as a result the leaders are inaccessible, and organisations are more mechanistic and have tall beaurcpatic structures. In contrast to this in low power distance cultures should the leaders will exhibit a democratic and participative leadership styles, and they will be more accessible, furthermore, this style of leadership will lead to organic and flat organisational structures.

Antonakis and Atwater (2002) also reasoned that in high power distance and collectivist societies the followers would expect that their leaders treat them as a homogeneous group. Whereas in low power distance and individualistic societies the followers would be more concerned about how the leaders treat them as individuals and not as a group. This could in part explain the conditions under which the psychological contract breach by a leader would have a spill effect on the focal-person's attitude and behaviours towards his/her peers. In high power distance and collectivist societies (such as Pakistan) if a leader would to breach the psychological contract of single individual within the group that individual will most likely change his attitudes and behaviours towards his peers. But, under similar circumstances, if the leader is seen as breaching the psychological contract with the entire group, the individual members of the group will not display negative reactions towards each other because they are all facing the same breach from their leaders. Whereas, in societies with low power distance and individualistic values, individuals will form greater idiosyncratic psychological contracts with their supervisors

and the spillover effect of the breach of these contracts will be relatively on the lower side. A case could also be made that individuals there might still be spillover effect of psychological contract breach in this context but that the motives of the individuals would be to punish the supervisor for the breach.

7.5 Using Vignettes in a Quantitative Design

The impetus for using vignettes came from the observation made by Conway and Briner (2005)that there is significant mismatch between the psychological contract theory and the research methods used to test it. The traditional research methods used to investigate the psychological contract theory (such as self-report surveys, and interviews) overtly rely on the respondents' ability of being able to correctly identify instances of psychological contract breach or fulfilment, and then being able to aggregate these instance into forming a judgement on whether their psychological contract stands breached, or fulfilled. These instruments are prone to respondent bias, such as the desire to provide socially acceptable responses, not providing an accurate account of their situation due to the fear of retaliation, and sometime exaggerating situations.

Vignettes invite the participants to reflect on their own experience while responding to how the vignette protagonist would behave faced with a particular situation. What sets the vignette technique apart from other methods of research is that the participants take the role of observers and are not the subjects of the research. This reduces the risk of the respondents providing social acceptable answers, from toning down negative responses due to the fear of reprisal, or providing exaggerated responses. Additionally, because the context is provided through the vignette, they don't need to recall instances on psychological contract breach for registering their response.

Overall the experience of responding to the vignettes was a positive one for the participants of the studies making up this thesis. They felt that the instruments were more interesting than the typical self-report surveys. Although the structure of the instrument did offer a higher level

of complexity, the presence of the researcher to explain the purpose of research and the instruments to the participants (for study 1, which was conducted using MBA students as a sample), and ample guidelines provided on how to complete the form (in case of this sample), did improve the comfort level of the respondents in registering their responses.

The vignette designed for the study captured the essence of the psychological contract theory, in that a focal-person (Ali) was seen as having a strong expectation for receiving training and the wording of vignette clearly indicated that the three foci (organisation, supervisor, and the peers) did offer to meet that requirement. The context to psychological contract breach was introduced into each vignette by wording that one or more of the foci breached their psychological contract with Ali.

The reliability of vignette, and in return that of the studies, was dependent on whether the participants observed this change in the context of the vignettes and responded accordingly by varying the answers that they registered against each vignette. The results from both studies clearly showed that the responses that were registered for each vignette were significantly different from each other. Furthermore, these responses were generally aligned to with the psychological contract theory.

7.6 Limitations

As with any research endeavour, the researcher conducting the research is a source of biases. The researcher has a preconceived notion of what the results for the study should look like. Different researchers, using differently theoretical perspectives can arrive at different conclusion after analysing the same datasets. Researchers can reduce the risk posed these biases to the validity of their research by collecting data from multiple data sources and by using external evaluators. For the current thesis multiple samples were used for the different studies. The researcher's supervisors and other researchers were used as external evaluators. Their feedback and oversight allowed the researcher to be aware of his preconceptions and to take these into account while con-

ducting the analysis.

The choice of research method also adds to the limitations of an empirical study. For the current study vignettes were used to collect data and the respondents were asked to take up the role of observers and to report on the behaviour of the vignettes' protagonist. The literature on the use of vignettes is well established. Although there are no precedents for their use in the psychological contract literature, this to the best of my knowledge, similar techniques have been used (such as the policy capturing technique used by Rousseau & Anton, 1988) have been used to uncover the effects of psychological contract breach. The literature on the use of vignettes provides suggestions of how to best use vignettes in both quantitative and qualitative designs. The researcher followed all these advices to write vigettes which were clear representations of the reality that the researcher wanted to study. During informal discussions the study's participants acknowledged that they could easily relate with the vignettes' protagonist, and that they had either experienced similar situations themselves or individuals within their social circles had gone through similar experiences.

A major limitation with the current study has to do with the design of the instrument used to measure the effects of foci-specific psychological contract breach on the outcome variable. The instrument consisted of 8 vignettes, with each vignette followed by 9 items (three for each foci) this brought the total number of items in the instrument to 72. Adding another outcome measure would have brought the total number of items to 144 which would have made the instrument too long and filling it would have become to cumbersome for the respondents. Researchers, who are interested in using a similar methodology can use the three-form design as prescribed by Enders (2010). Using the three-form method researchers divide their total number of items into four unique sets (X,A,B,C). From these sets three sub-instruments are generated such that each instrument contains X, and is missing either A, B, or C. Using the instrument designed for the current thesis as an example, vignettes 1 and 8 could have been placed in set X, because they represented the two extreme scenarios where all three foci-specific psychological contracts

were either fulfilled or breached.

Table 7.1 shows the above proposed pattern of distributing the vignettes to three sub-items. These items can then be distributed to different participants. Once the data has been collected from the respondents, the researchers can then use techniques such as maximum likelihood estimation and multiple imputation to analyse their data. As Enders (2010) report, distributing the main questionnaire into three sub-questionnaires does results in the loss of some power of the main instrument but the size of this loss is not substantial.

The fist two studies made use of the vignette technique for gathering data. The vignettes for worded to clearly indicate which foci had breached their psychological contracts with the vignette's protagonist. This was done in order to record the responses of the participants, as observers, on how the foci-specific breach of will influence the vignettes' protagonist's behaviour. In real life it is not that easy to ascertain which part has breached its psychological contract. Future researchers might use a more direct approach to assess whether the respondents psychological contract has been breached by a specific foci or not.

The results from this provide support for the supervisor effect hypothesis (Askew et al., 2013) according to which the supervisors, as compared to other organisational foci, have a significant influence on the employees attitudes and behaviours. The support of this hypothesis present has

Table 7.1: Missing Data Pattern for a Three-Form Design

	X	A	B	C
	Vignette Numbers			
	1 and 8	2 and 3	4 and 5	6 and 7
1	✓	✓	✓	
2	✓	✓		✓
3	✓		✓	✓

a significant implication for researchers who are interested in determining the unique effects that co-workers have the employees attitudes and behaviours, in line with the study conducted by (Chiaburu & Harrison, 2008). This line of research can produce meaningful results only after discounting for the supervisor effects on the employees attitudes and behaviours.

Chapter 8

Implications

This thesis consisted of three independent studies. The purpose for the first two studies was to test the target-similarity effect of foci-specific psychological contract breach on foci-specific work-related behaviours and attitudes. The purpose for the third study was to determine the content of peer-to-peer psychological contracts and to determine how the breach of these contracts influences a focal-person's satisfaction with his/her peers. The results obtained form these studies have a number of implications for future research, managers and policy makers. These will be discussed one by on in the following sections.

8.1 Implications for Future Research

Prominent writers on the subject of psychological contracts (such as Conway & Briner, 2005; Guest, 1998; Marks, 2001) have argued that the construct of psychological contracts needs to be reconceptulised in order to reflected the reality of organisations as being nested structures, where the focal-person is not engaged in a single social-exchange with a unitary-employer, but forms multiple social-exchange relationships with different foci that he/she interacts with. Furthermore, the literature on organisational commitment suggests that the strength of these social-bonds depends on the proximity of the focal-person to the target foci.

The results obtained for the studies contained in this thesis can be cautiously interpreted as providing support to the multi-foci conceptualisation of psychological contracts. These results have a number of implications for future research on psychological contract theory. Future

researchers should decide whether their models call for the inclusion of a global or a foci-specific conceptualisation of psychological contracts. This decision should be based on the level of the factors or outcomes included in the model. For example, if the model seeks to explain group or team level outcomes it would be more prudent to operationalise psychological contract breach or fulfilment at the team level rather than the using a global level measure. This will hopefully lead to the development of better models than those that were developed using global measure of psychological contract breach.

This thesis draws upon the social exchange constructs such as LMX and TMX, and various social support constructs such as perceived organisation support, perceived supervisor support, perceived co-worker support. Furthermore, this thesis incorporated the target-similarity model, which is receiving great recognition in the academic circles. This juxtaposition of several established constructs associated with the work-life to explain the construct of multi-foci psychological contract provides additional explanatory power to the hypothesised relationships proposed in this thesis. Future researchers can build upon this effort to propose and test more comprehensive models of psychological contract breach, its antecedents and outcomes.

This results from this thesis, specifically from the third study, which focused on peer-to-peer psychological contracts should be of interest to academics looking into the formation of social exchange relationships in team-building process. The peer-to-peer psychological contract offers a framework which researchers can use to understand why some teams are more effective than others. Examples of such studies that have used the psychological contract framework to understand the effectiveness of teams includes that studies by Galvin and McKinney (2005) and Sverdrup and Schei (2015).

The current thesis also contributes to theory on psychological contract by using a sample from Pakistan. Pakistan provides a different cultural context that Western countries. Although the have been few notable studies in past that have used samples from Pakistan Raja et al. (such as the study by x 2004), the number of such studies is very limited. This thesis

adds to the existing evidence on the generalisability of the psychological contract construct across different cultural contexts. This thesis demonstrated that the target-similarity model proposed by Lavelle et al. (2007) holds with regards to psychological contract breach. Future researchers can build even more comprehensive models by investigating how different cultural factors might influence foci-specific psychological contracts. For example, it could be wroth while to explorer how the contents and feature of peer-to-peer psychological contracts could vary across individualistic or collectivistic societies.

In addition to the implications this thesis holds for theory, it also has methodological contributions. The use of the vignette technique offers an interesting alternative to the predominantly used self-reporting questionnaire based survey method. Future researchers can take advantage of this method and construct vignettes that best capture the context they are interested in studying. The use of OSNs is also a salient feature of the current thesis. As social networks expand and new and better technologies are introduced for collecting data from these networks, future researchers should look into the possibility of recruiting their sample from these online communities.

8.2 Implications for Managers

The results form this thesis have significant implications for managers. The results from this thesis suggest that the organisation policy makers should place greater emphasis on ensuring that the psychological contracts between their managers and their subordinates is fulfilled. The direct and the interaction effects from these studies confirm that the breach of these contracts has a greater influence on the employees' work-related attitudes and behaviours. Supervisors need to be informed on how their behaviours towards their subordinates shape their psychological contract and how the violation of these contracts can have a negative effect on the subordinates desire to exhibit OCBs directed towards them (the supervisors), towards their co-workers, and the organisation as a whole. Organisation could also benefit from engaging in research exer-

cise to determine the contents of the supervisor-subordinate psychological contract. This could become a useful reference for the managers to guide their attempts at establishing high-quality exchanges with their subordinates.

These results inform managers on how their social-exchange with their subordinates shape the subordinates' attitudes and behaviours. In light of these results managers should undertake efforts to determine what their subordinates expect of them. Furthermore, supervisor would also need to clearly communicate to their subordinates what they expect of them. In general the theory of psychological contracts informs the managers to be vigilant of what they communicate to their subordinates, both verbally and through their actions. Subordinate use these verbal and non-verbal cues to form their psychological contracts with their subordinates. Supervisor should also take away from these results that their quality of social-exchange with their subordinates has a significant influence on the subordinates' attitude towards the organisation and co-workers.

Internal HR departments can also be engaged in investigating the contents of the supervisor-subordinate psychological contract. This task can be accomplished by using brainstorming sessions involving supervisors and subordinates to list the important contents of their psychological contracts. HR departments can also be directed to arrange trainings for the supervisors that would lead to them appreciating the concepts of psychological contracts and providing them with tools with which they can manage these contracts. Such training programs could take their cues from the work of Skarlicki and Latham (1996) who implemented a training program to teach managers to become more procedurally fair.

The implications of the outcome of this research will also appeal to the organisational behaviour and HR practitioners. Based on these results these practitioners should be able to develop foci-specific interventions and HR policies that will promote positive foci-specific behaviours, or in some case resolve foci-specific work-related issues.

A key competency that managers have to exhibit in a modern organisation is to instil within their subordinates the ability to work as a team. The

results from this thesis have important implications in this regard. Manager can work towards improving and straightening the relationships between the team-members to enhance the team's performance. The psychological contract theory provides a framework for managers to improve the quality of social exchange between team members. As the results from all three studies in this thesis indicates the breach of the peer-to-peer psychological contract is negatively related to the focal-person's satisfaction with his/her co-workers and also impedes the focal-person's desire to direct OCBs towards their co-workers. Managers should then actively manage the process of peer-to-peer psychological contract formulation and ensure that these contracts are not breached. This could be done by arranging team-development activities where the team-members can draw a list of their expectations from their team-members and what they perceive their team-members exceptions are of them. This would help to make the peer-to-peer contract into an explicit declaration that the team-members may be asked to adhere to in order to facilitate the successful working of the team.

OD practitioners can use the findings from this thesis and other similar studies to propose foci-specific interventions. They can use the psychological contract framework in order to determine whether a the context that they are working with will favour certain interventions or not. For example knowledge sharing is a key behaviour that is required for the establishment of learning culture. Knowledge sharing is form of OCB (Kelloway & Barling, 2000), that is primarily targeted at the co-workers and is influenced by the behaviour of co-workers (Swift & Virick, 2013). Studies that have looked at the effects of psychological contract breach on knowledge sharing (Gupta, Agarwal, Samaria, & Sarda, 2012) have generally used measures of psychological contract which are based on the traditional conceptualisation of the construct. OD practitioners can use peer-to-peer psychological contract measures to obtain a better understanding of the willingness individuals to share knowledge with their co-workers. This would be the better option because the knowledge sharing and the psychological contract will have the same targets.

Chapter 9

Summary and Conclusions

The current study addresses the impact of psychological contract breach by different organisational foci, such as the organisation, supervisors, and co-workers. The first study examined the effect of foci-specific psychological contract breach on foci-specific OCBs. The results from this study indicates that the psychological contract breach by a specific party is strongly related to the reduction in OCBs directed at the party. These results are in-line with previous research findings (see for example Conway et al., 2014) that individuals only target the party breaching their psychological contracts with negative behavioural outcomes (such as withdrawing the OCBs that were directed at that specific party). Lavelle et al. (2007) labelled this as the target-similarity effect. All the hypothesised target-similarity effects were proven, whereas the spillover effect was only proven in regards to the effect of psychological contract breach by the supervisor on the focal-person's desire to direct OCBs towards the organisation and co-workers. No significant interaction effects were recorded.

The second study investigated how a focal-person's satisfaction with different organisational foci was influenced by foci-specific psychological contract breach. As with the first study all the target-similarity hypothesis were proven. What was different though was that the foci-specific psychological contract breachs had significant influence on the focal-person's satisfaction with the organisational foci in addition to the one breaching the psychological contract. The interaction effects were also significant, which could be tentatively interpreted as indicating that a

focal-person will be least satisfied with an organisational foci if all the proximal foci breach the focal-person's psychological contracts.

Comparing the results from the first two studies indicates that the breach of foci-specific psychological contracts has a greater effect size on target-specific attitudinal outcomes, than on behavioural outcomes directed at the same targets. Zhao et al. (2007) also arrived at a similar conclusion. They argued that because behaviours were more visible, individuals are less willing to exhibit a change in their behaviour, fearing any negative outcomes that might follow.

In comparing which foci-specific psychological contract breach had the greatest influence on the focal-person's work-related outcomes, the answer was the psychological contract breach by supervisors. This reaffirms the centrality of the supervisors role in the organisational setting. For many employees, the supervisor is the organisation, and for most organisation the supervisors serve as the means of managing their employees. Because of the authority gap between the supervisor and the subordinates, employees are reluctant to display any negative changes in their behaviour. When supervisors breach their subordinates psychological contracts, the subordinates not only target the supervisor with the negative outcomes associated with the breach, they also target the organisation and their co-workers with similar negative reactions. These are compelling reasons for organisations policy makers to place emphasis on training their supervisor to best manage the psychological contracts that they establish with their subordinates.

Finally, the findings from this thesis also contribute to the literature of work-group behaviour, and team-work.Practitioners and researcher who are interested in understanding the dynamics of the social-exchange relationship that exists between co-workers can take advantage of operationalising psychological contracts at the level of the work-group or team. This line of research can take advantage of the reach legacy of psychological contract research that is already available and can contribute to this literature by antecedents and outcomes that would be defined at the level of the work-group. Considering the ever increasing reliance of organisation to perform their functions through specialised teams and

work-groups, its high time that researchers start taking interest in these psychological contracts.

Chapter 10

Appendix

10.1 Study 3 Online Questionnaire

Figure 10.1: Study 3 on-line questionnaire introduction page

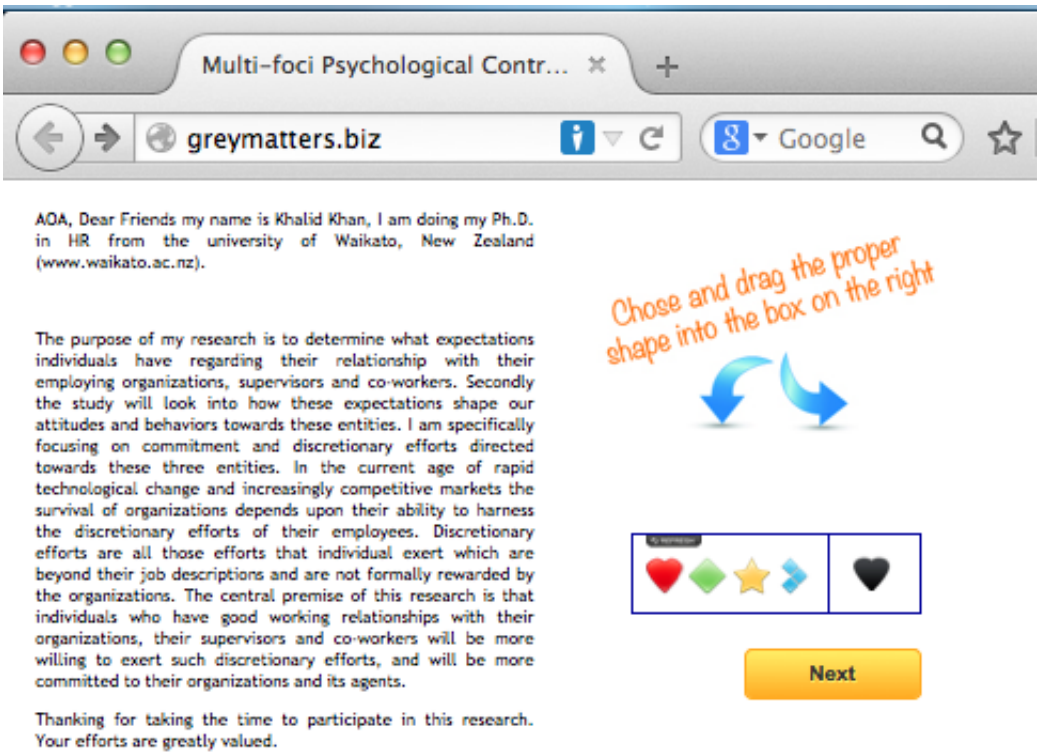


Figure 10.2: Study 3 on-line questionnaire demographics form

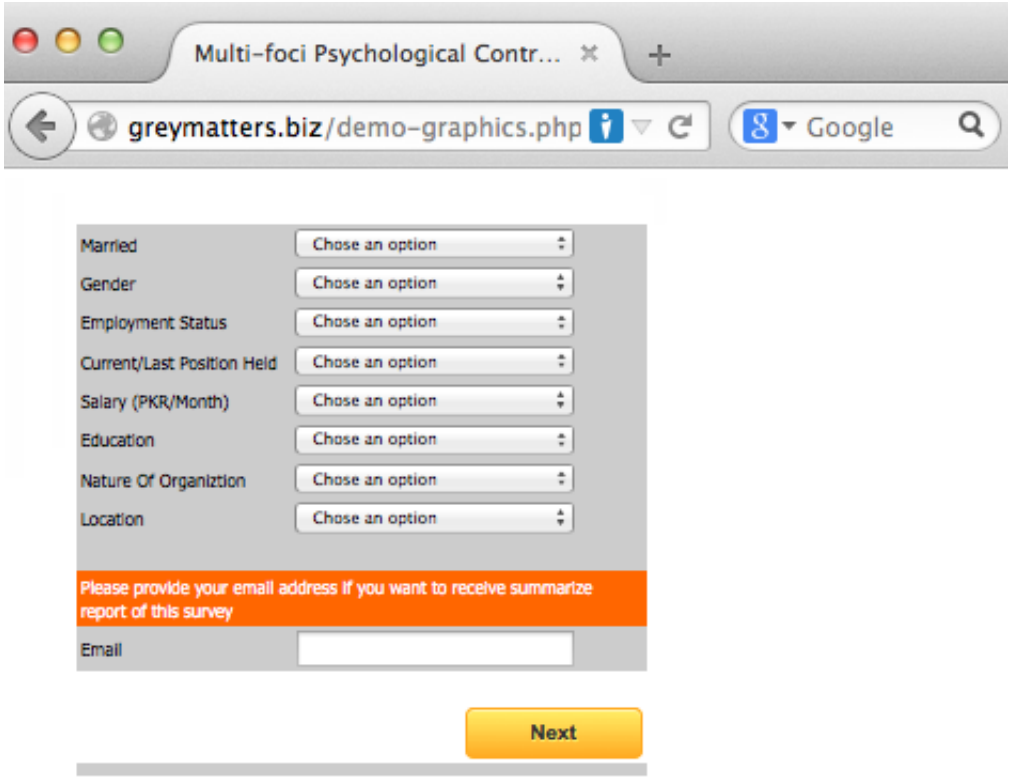


Figure 10.3: Study 3 default peer-to-peer psychological contract content selection form

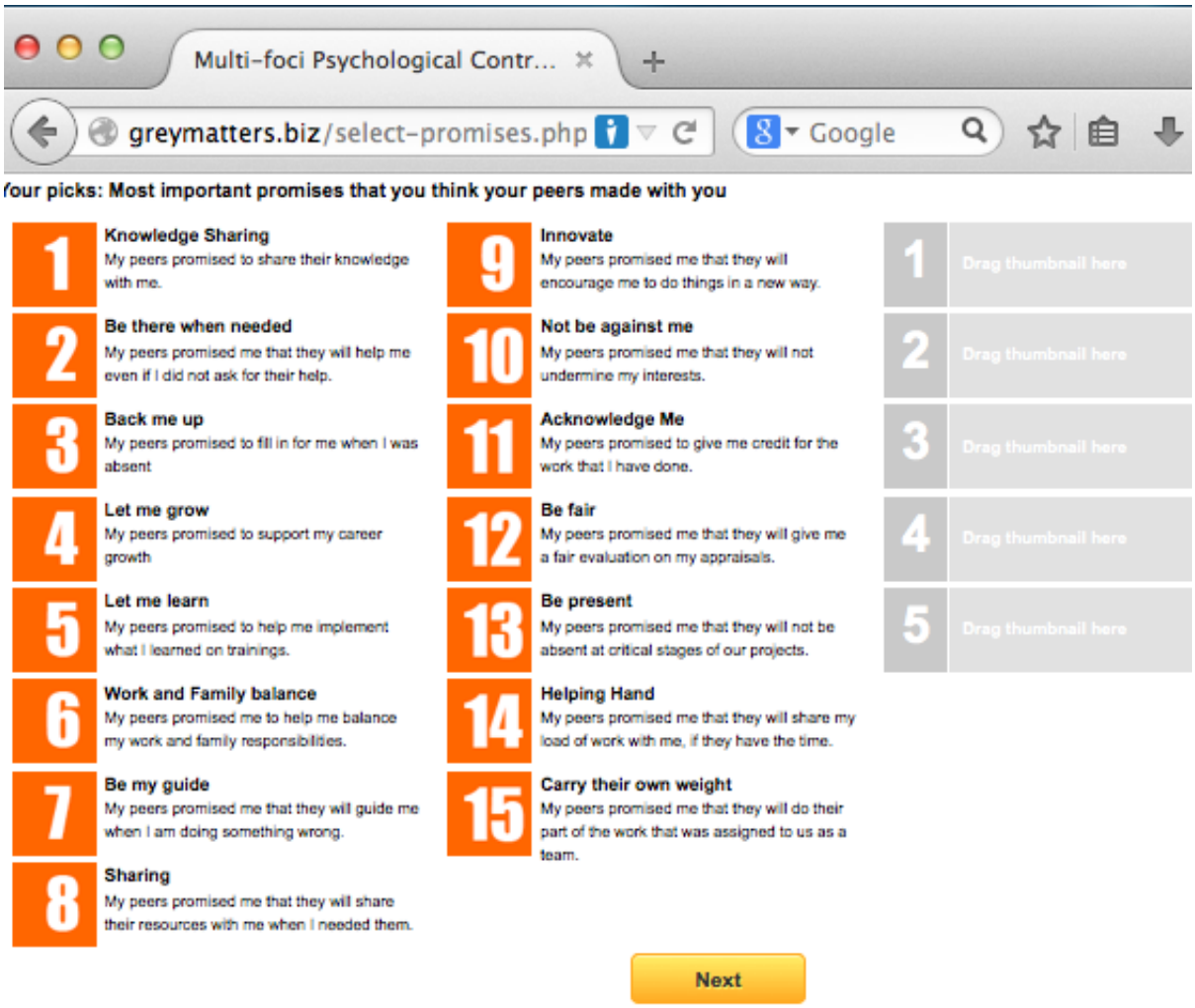


Figure 10.4: Study 3 filled peer-to-peer psychological contract content selection form

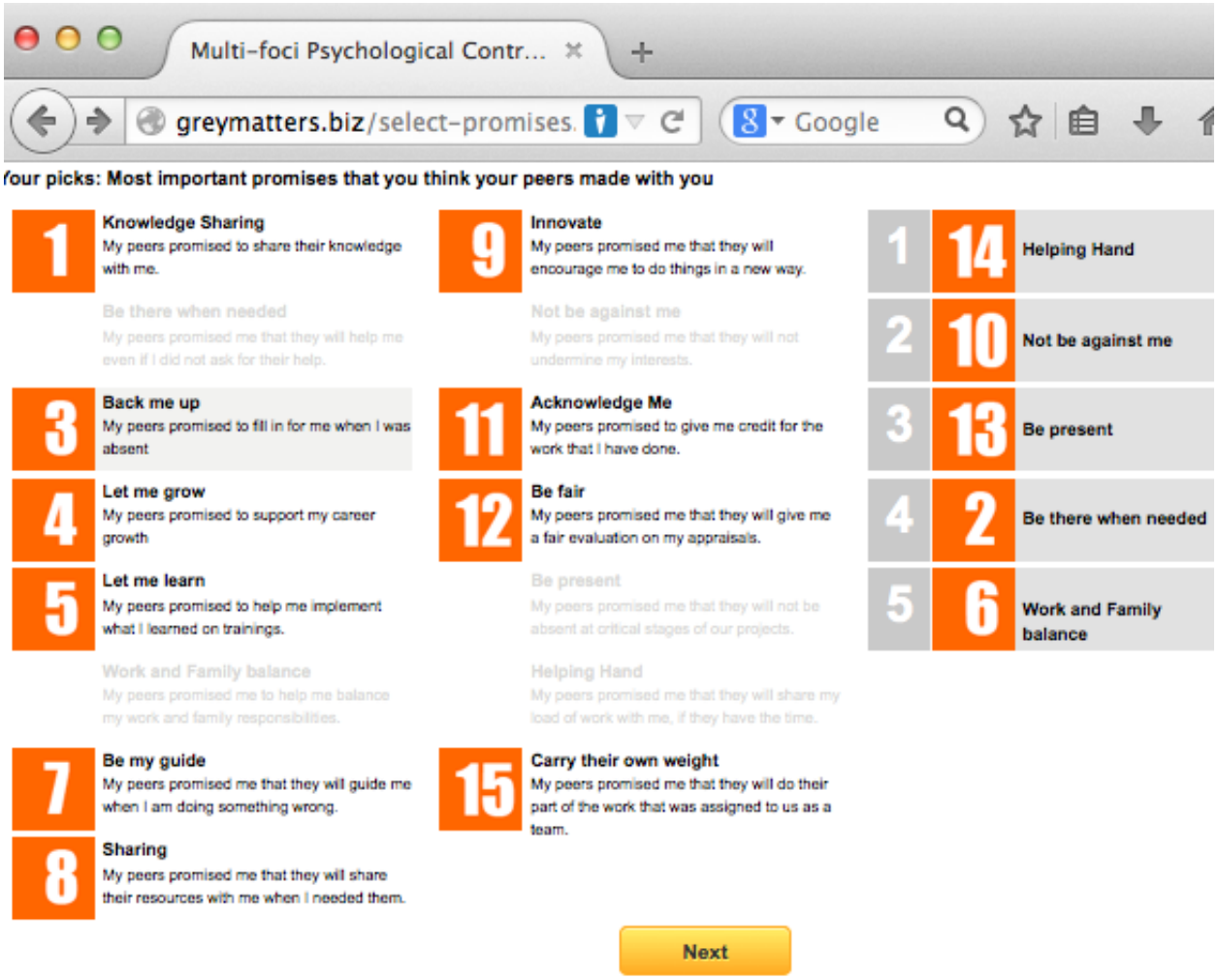


Figure 10.5: Study 3 peer-to-peer psychological contract breach form

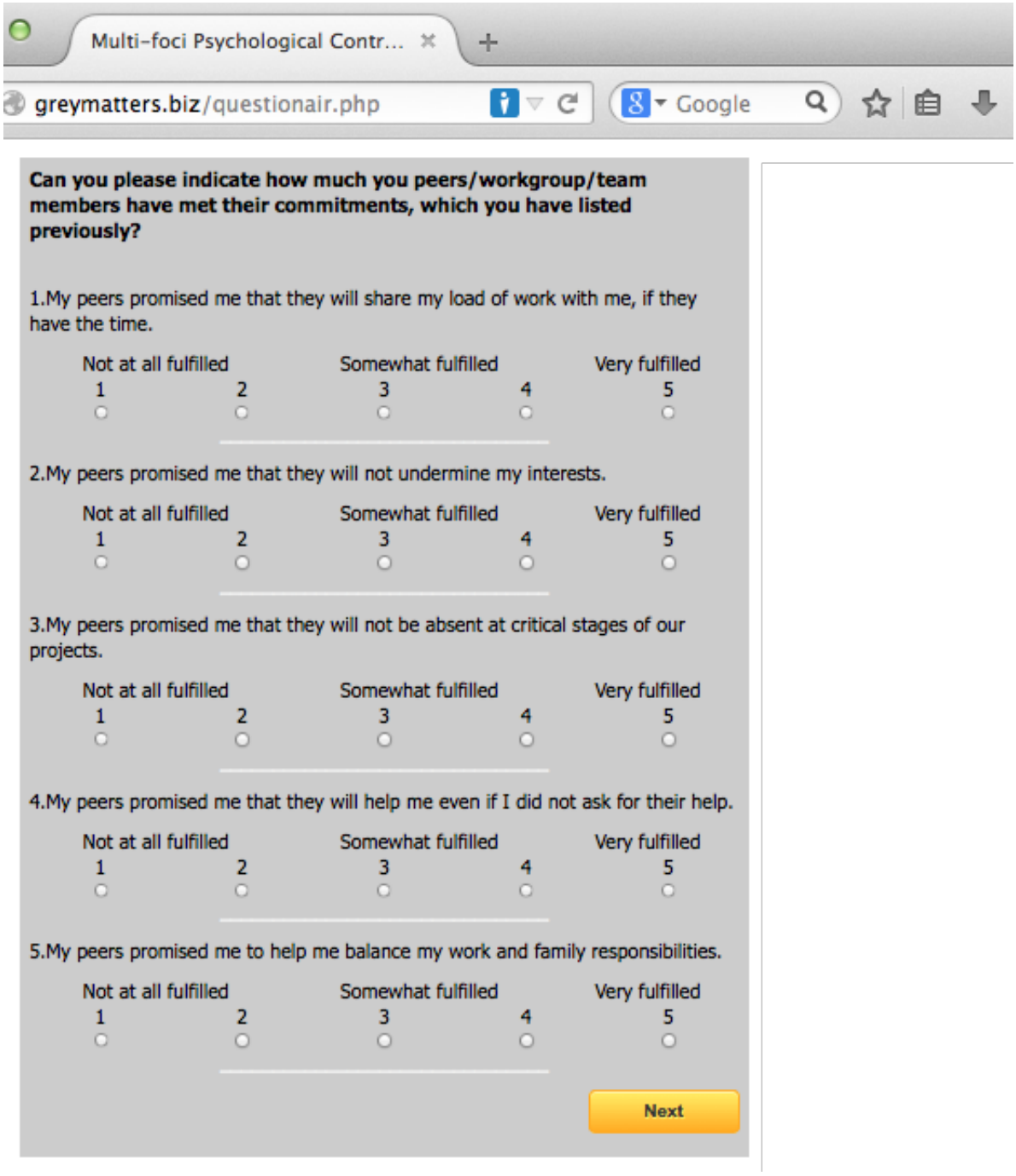


Figure 10.6: Peer specific OCB and satisfaction form

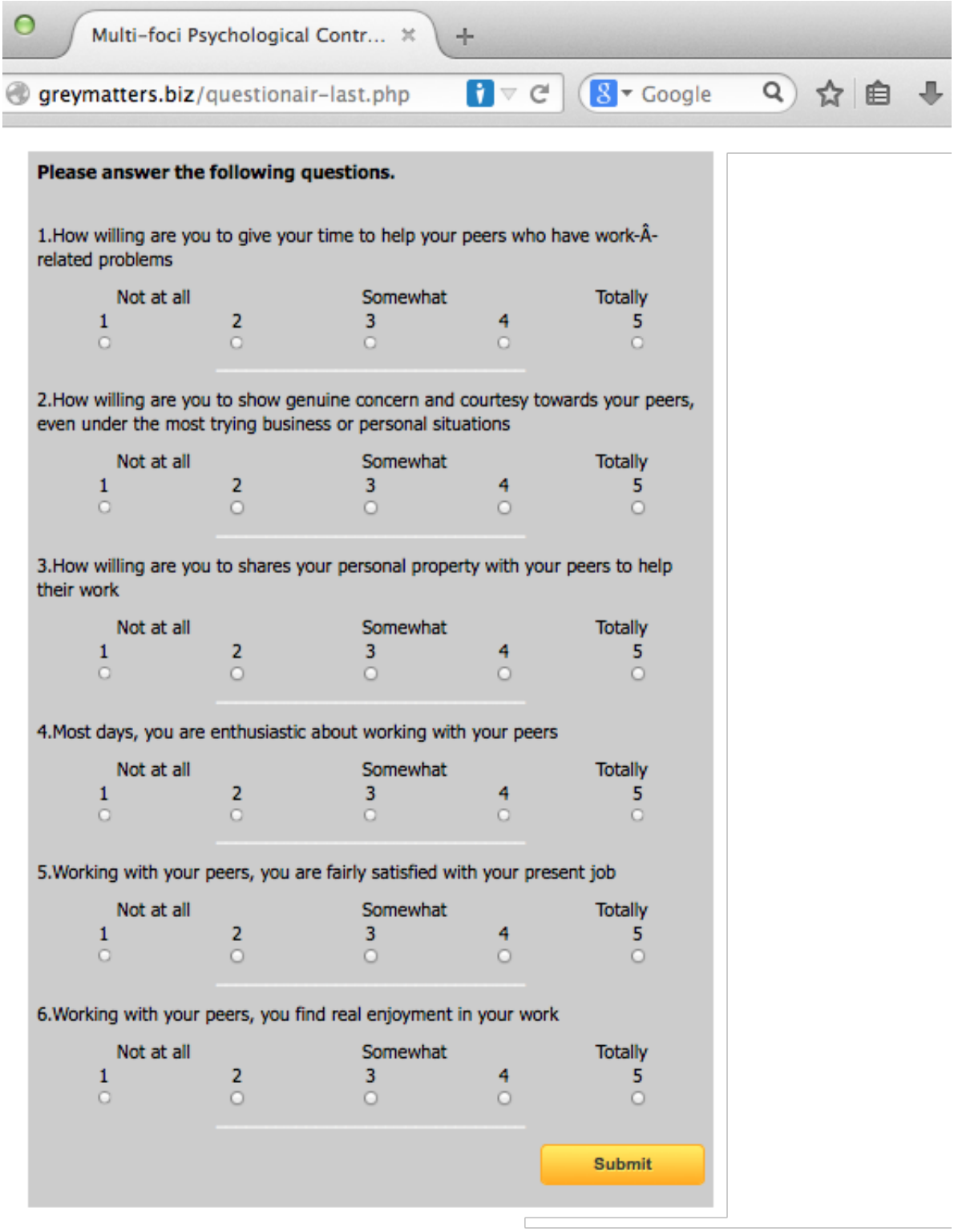
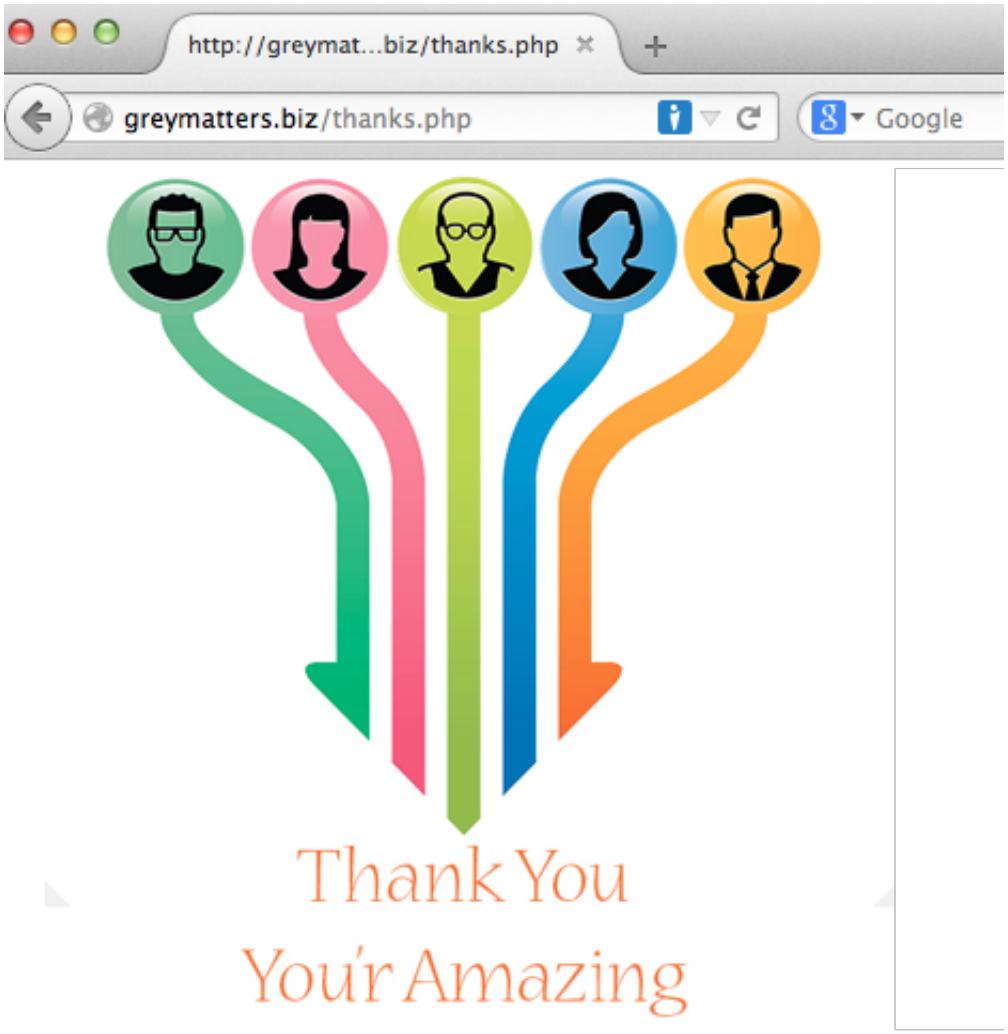


Figure 10.7: Study 3 thank you page



10.2 Histograms for Foci-Specific Citizenship Behaviours Directed at the Organisation

Figure 10.8: Histogram of OCB directed at the organisation: Scenario 1

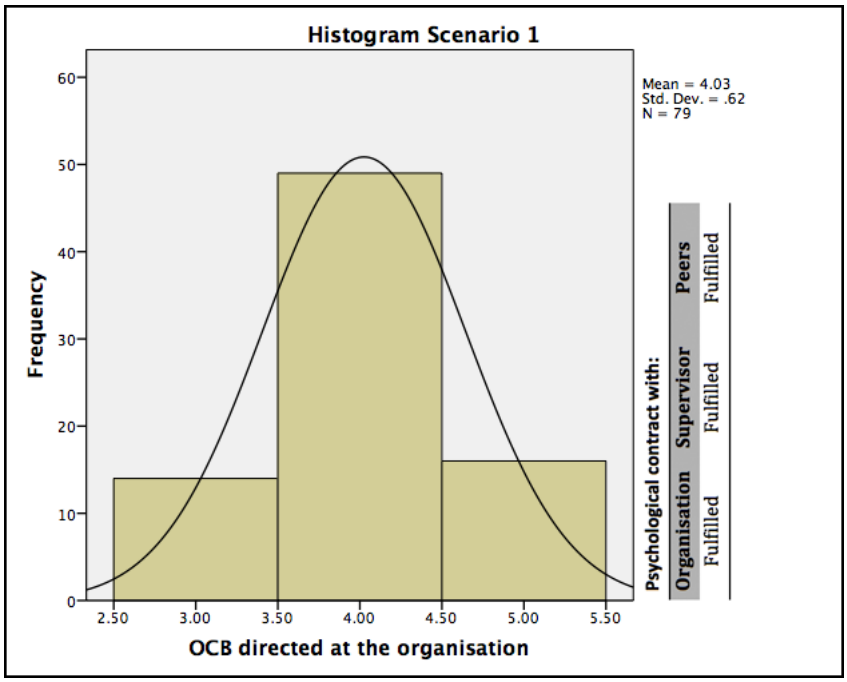


Figure 10.9: Histogram of OCB directed at the organisation: Scenario 2

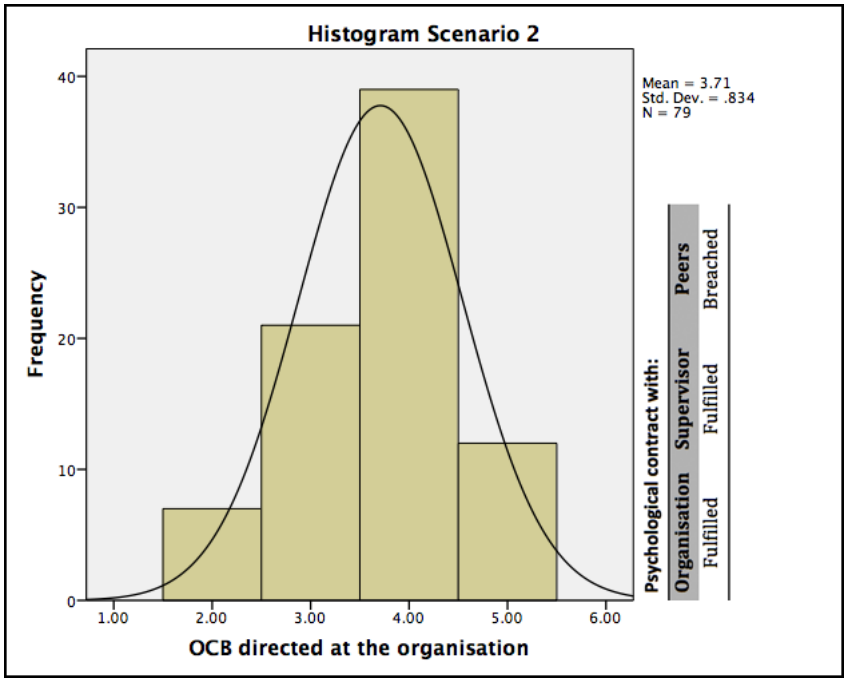


Figure 10.10: Histogram of OCB directed at the organisation: Scenario 3

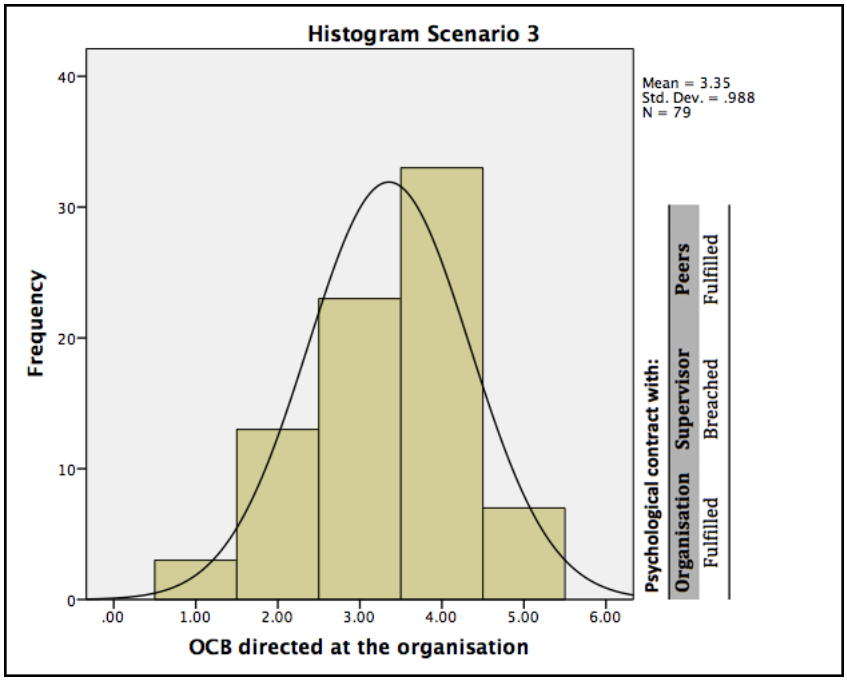


Figure 10.11: Histogram of OCB directed at the organisation: Scenario 4

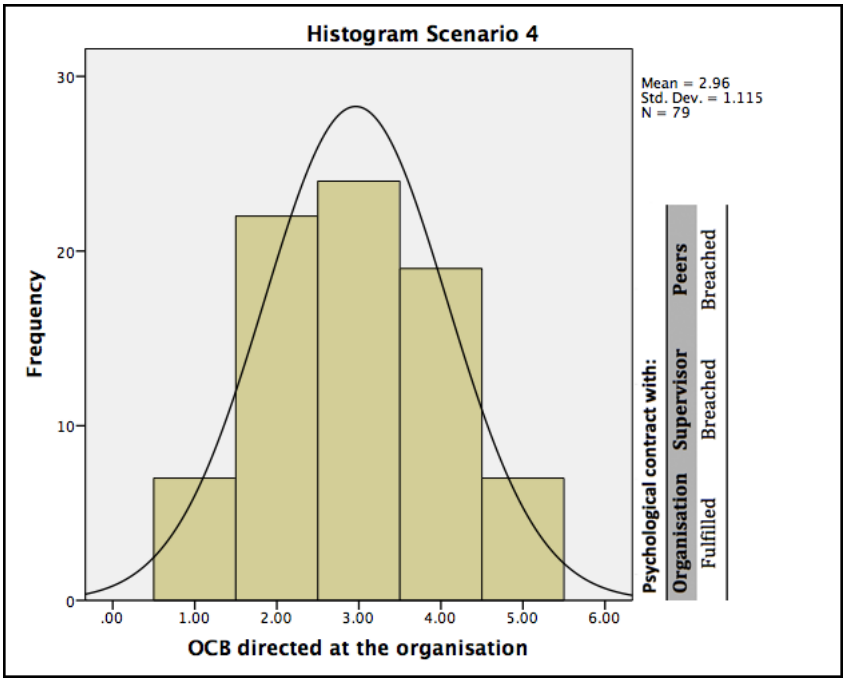


Figure 10.12: Histogram of OCB directed at the organisation: Scenario 5

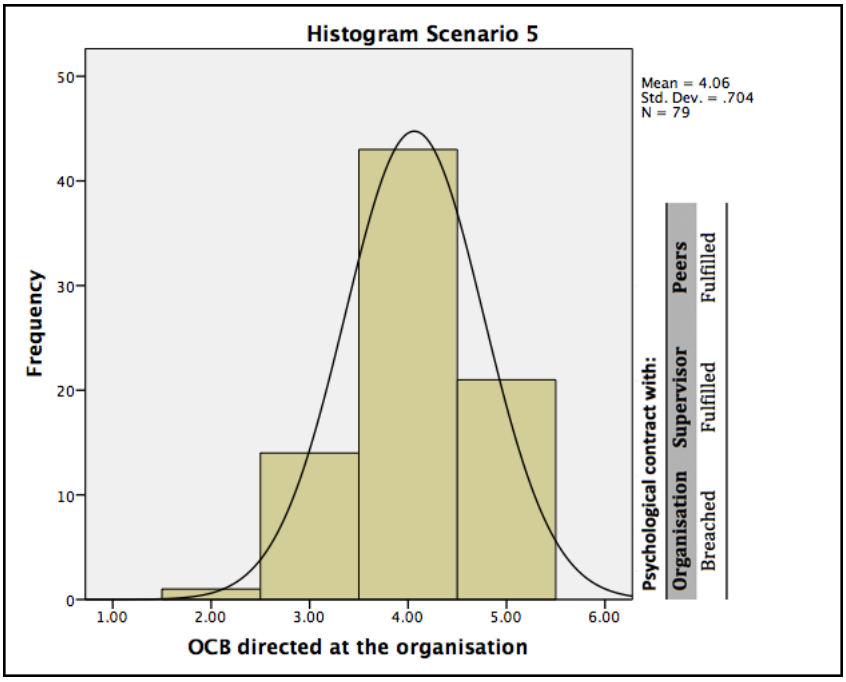


Figure 10.13: Histogram of OCB directed at the organisation: Scenario 6

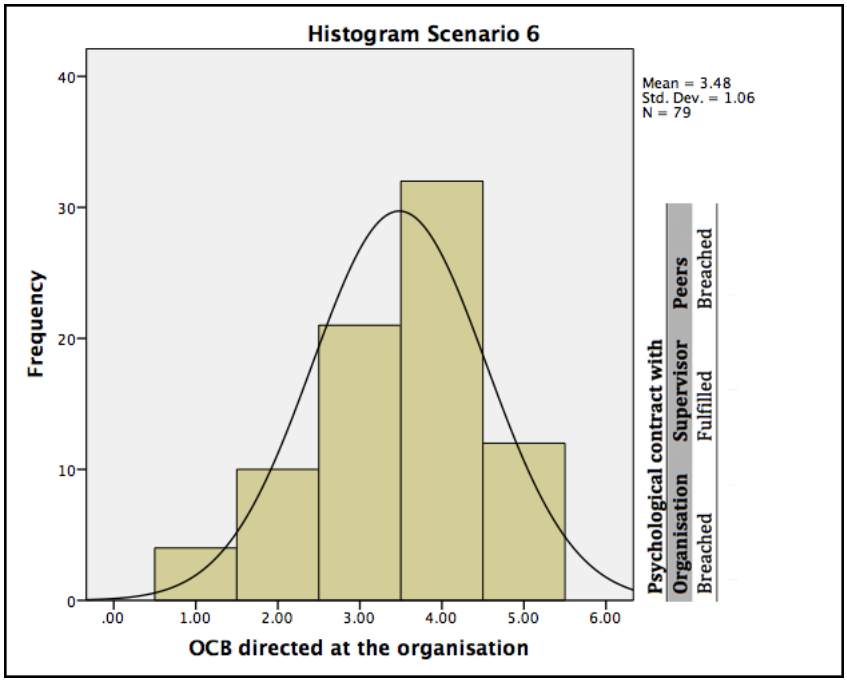


Figure 10.14: Histogram of OCB directed at the organisation: Scenario 7

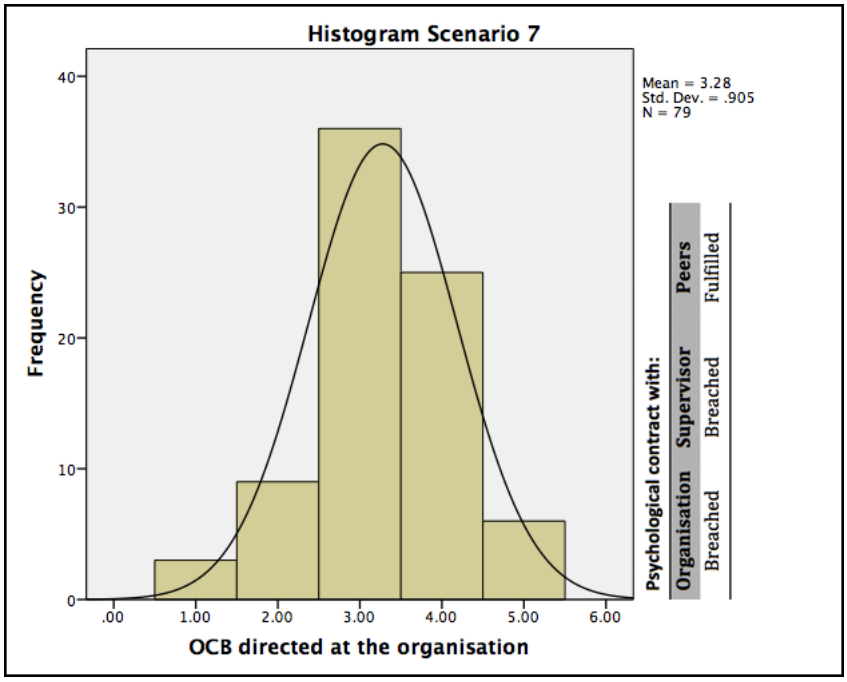
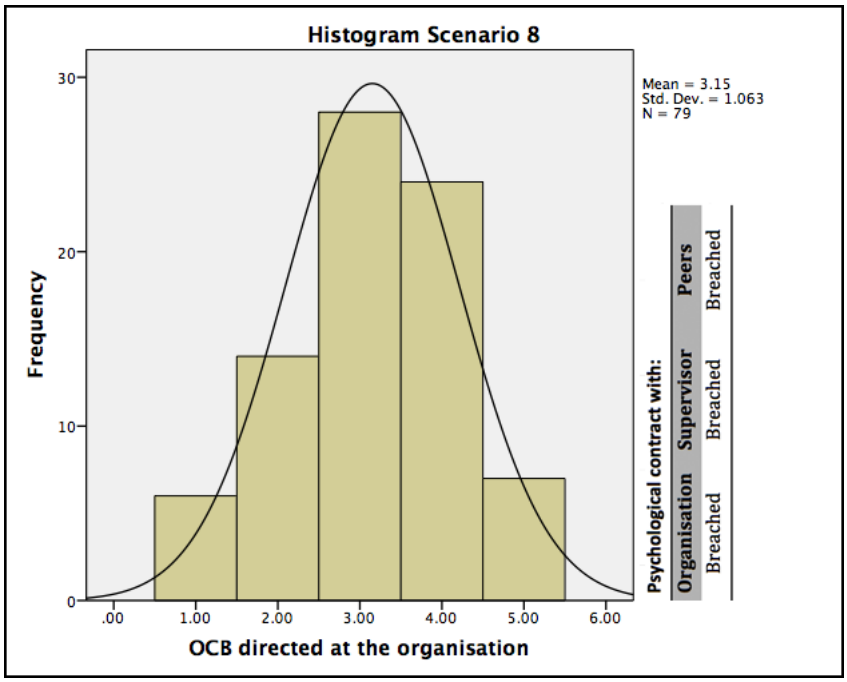


Figure 10.15: Histogram of OCB directed at the organisation: Scenario 8



10.3 Histograms for Foci-Specific Citizenship Behaviours Directed at the Supervisor

Figure 10.16: Histogram of OCB directed at the supervisor: Scenario 1

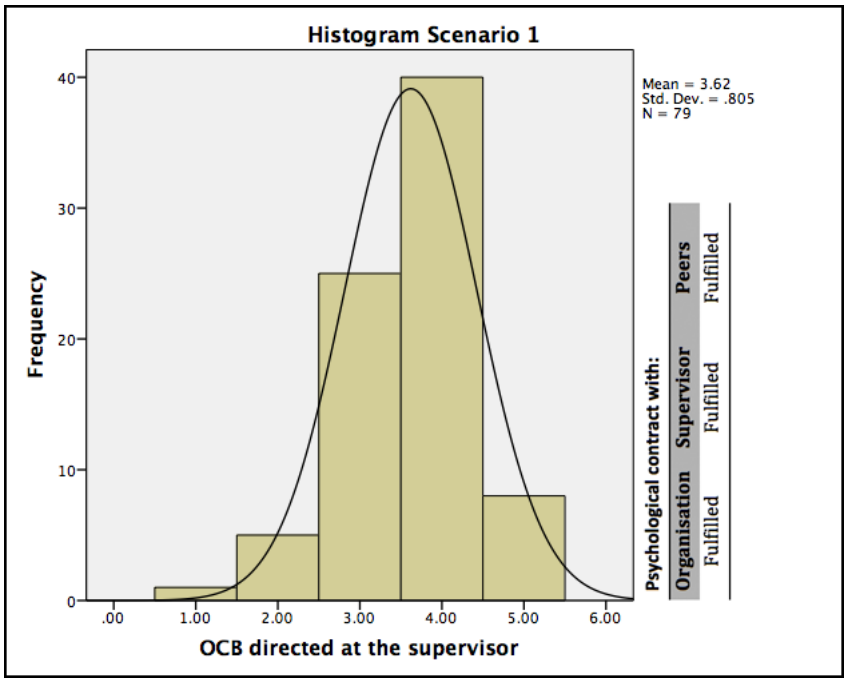


Figure 10.17: Histogram of OCB directed at the supervisor: Scenario 2

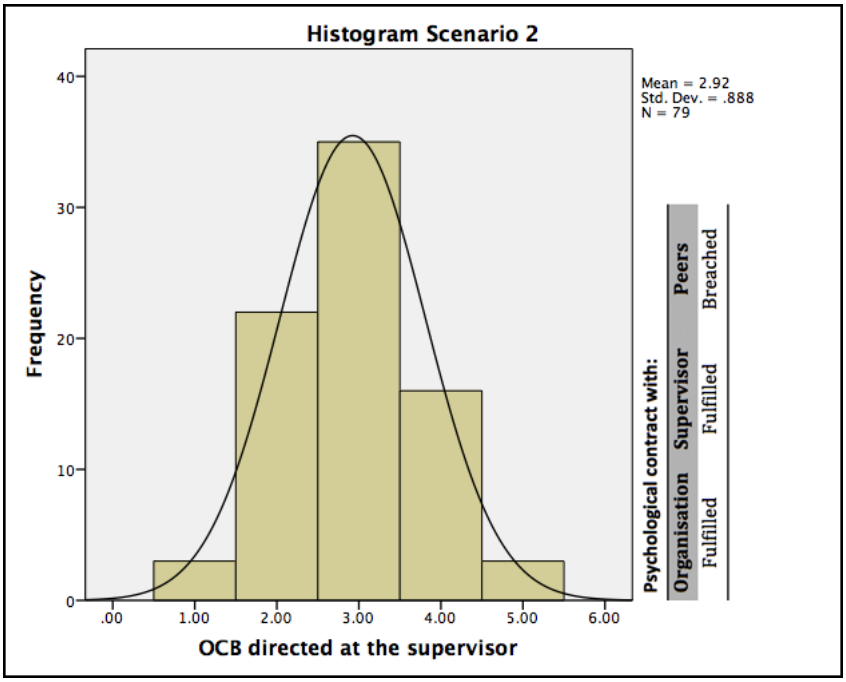


Figure 10.18: Histogram of OCB directed at the supervisor: Scenario 3

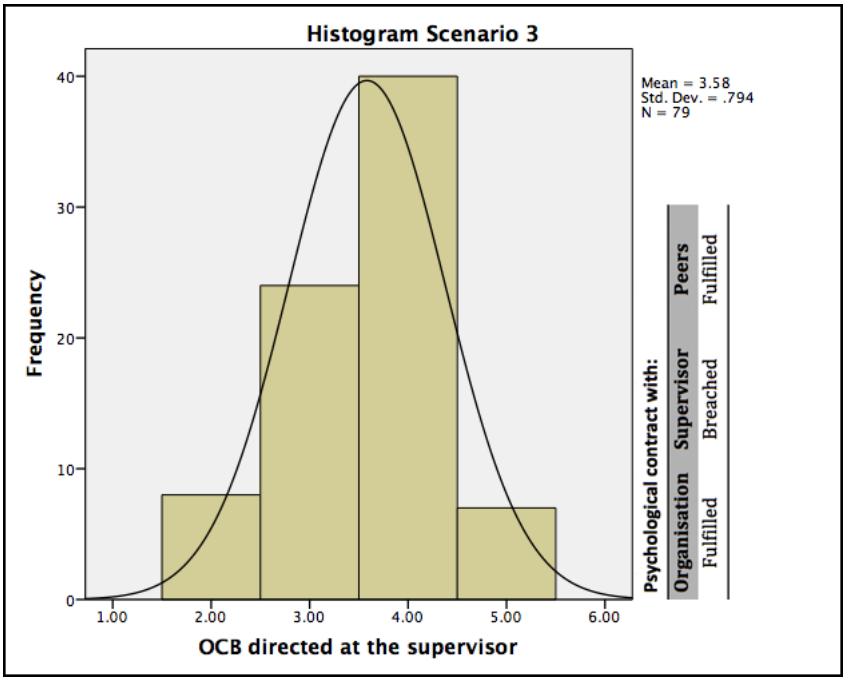


Figure 10.19: Histogram of OCB directed at the supervisor: Scenario 4

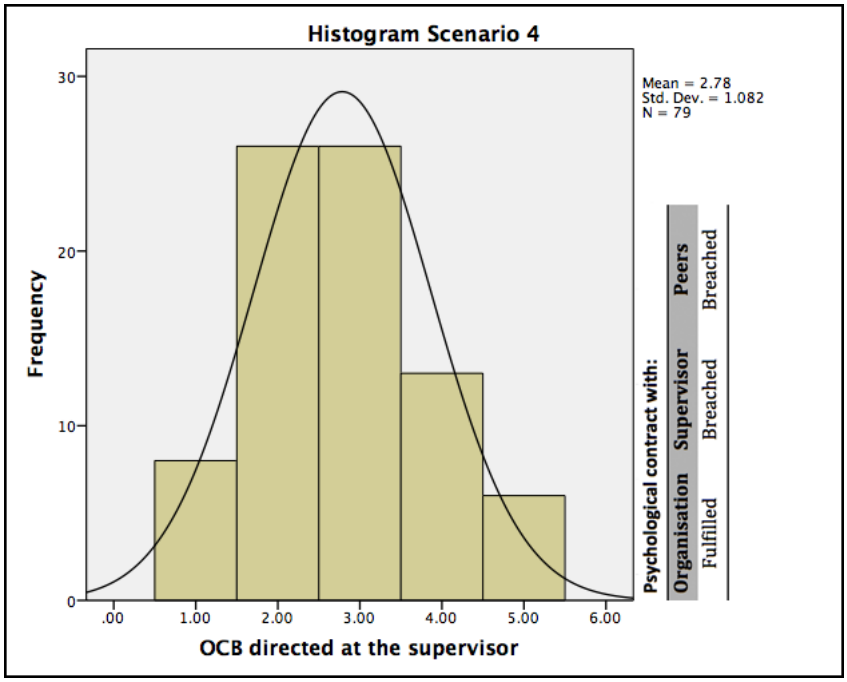


Figure 10.20: Histogram of OCB directed at the supervisor: Scenario 5

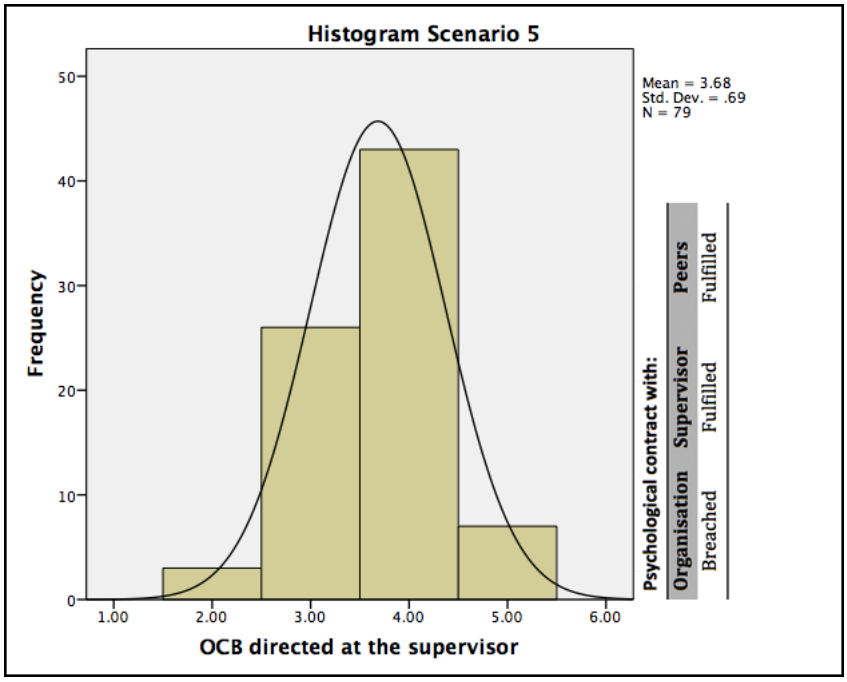


Figure 10.21: Histogram of OCB directed at the supervisor: Scenario 6

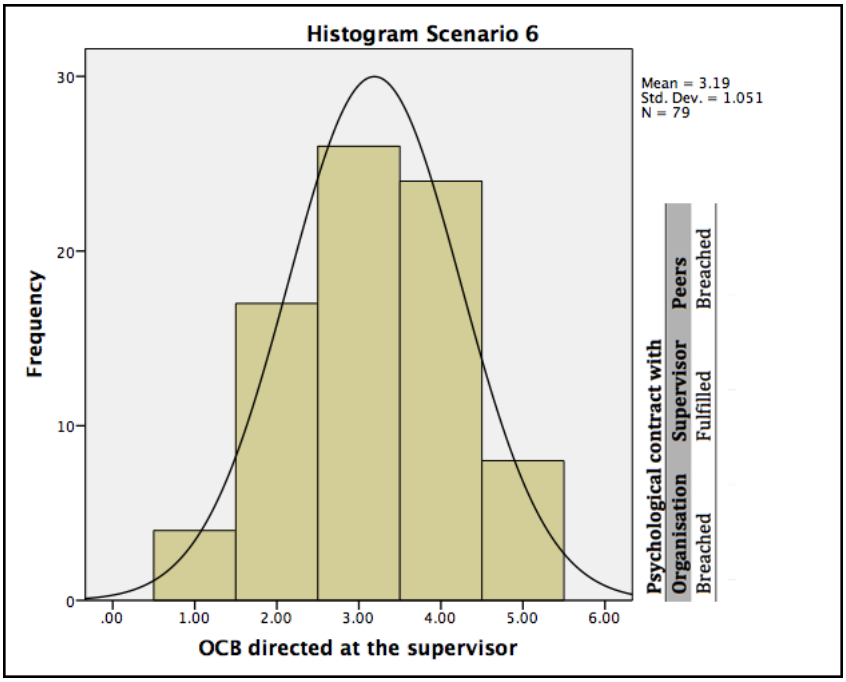


Figure 10.22: Histogram of OCB directed at the supervisor: Scenario 7

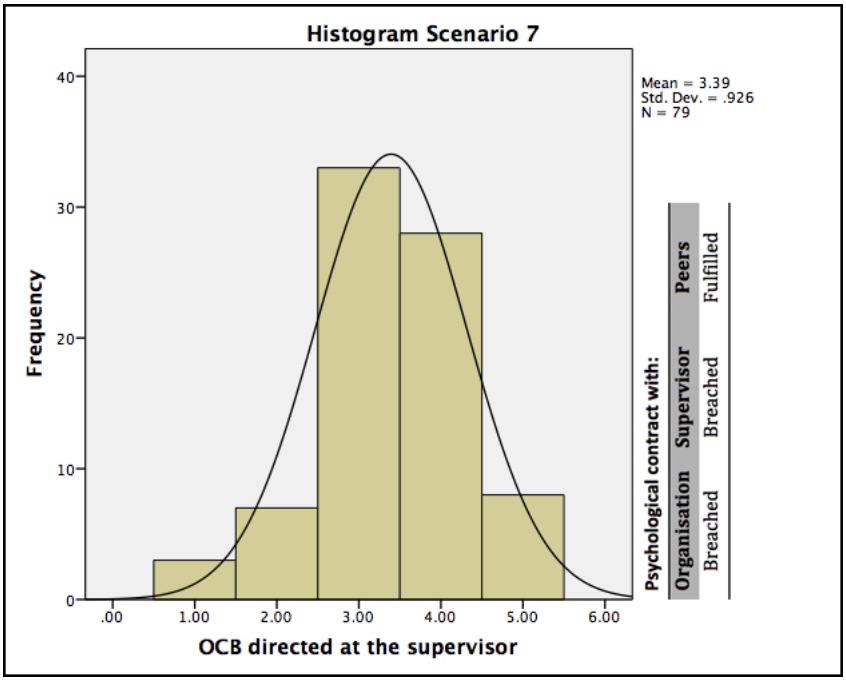
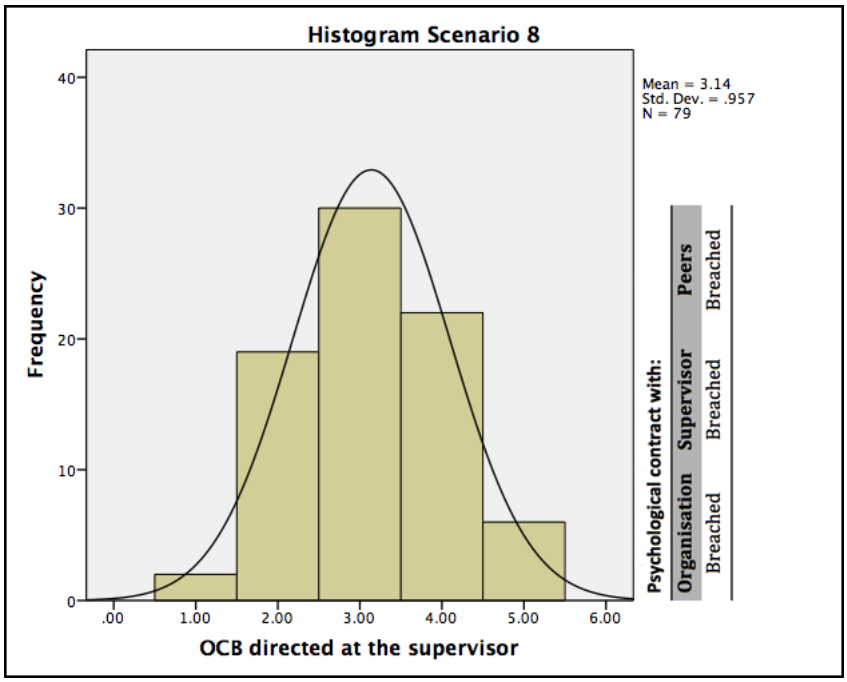


Figure 10.23: Histogram of OCB directed at the supervisor: Scenario 8



10.4 Histograms for Foci-Specific Citizenship Behaviours Directed at the Peers

Figure 10.24: Histogram of OCB directed at the peers: Scenario 1

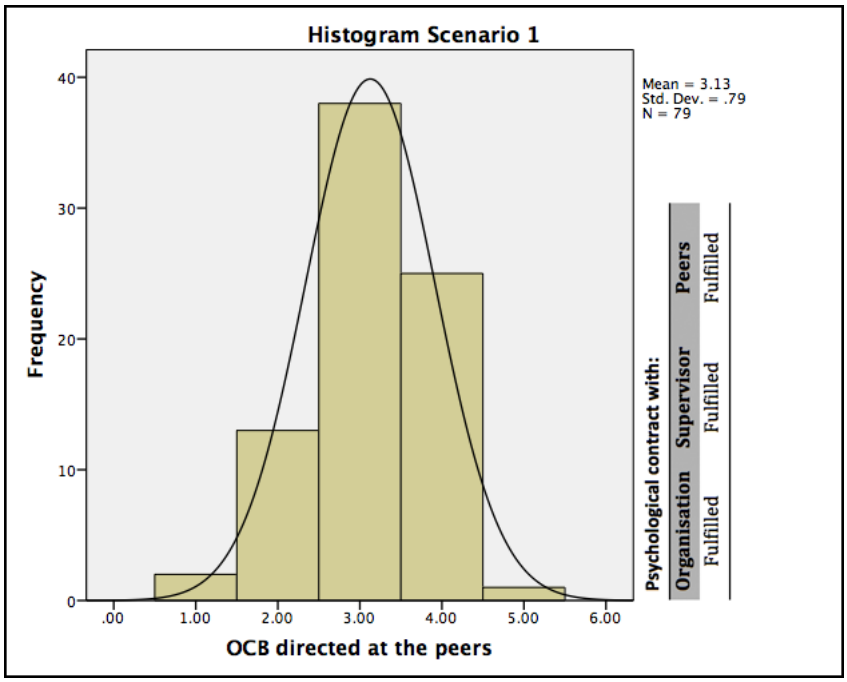


Figure 10.25: Histogram of OCB directed at the peers: Scenario 2

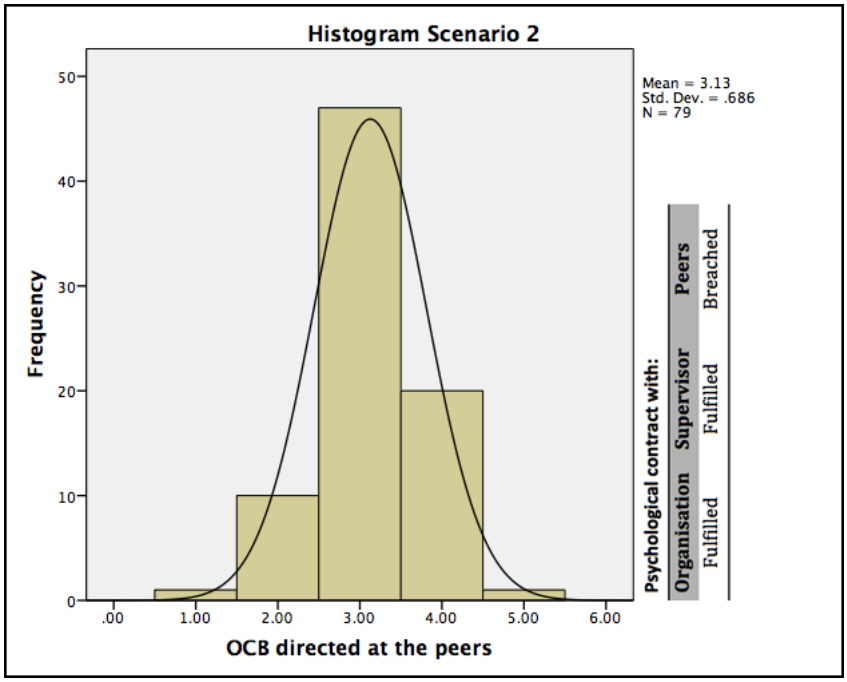


Figure 10.26: Histogram of OCB directed at the peers: Scenario 3

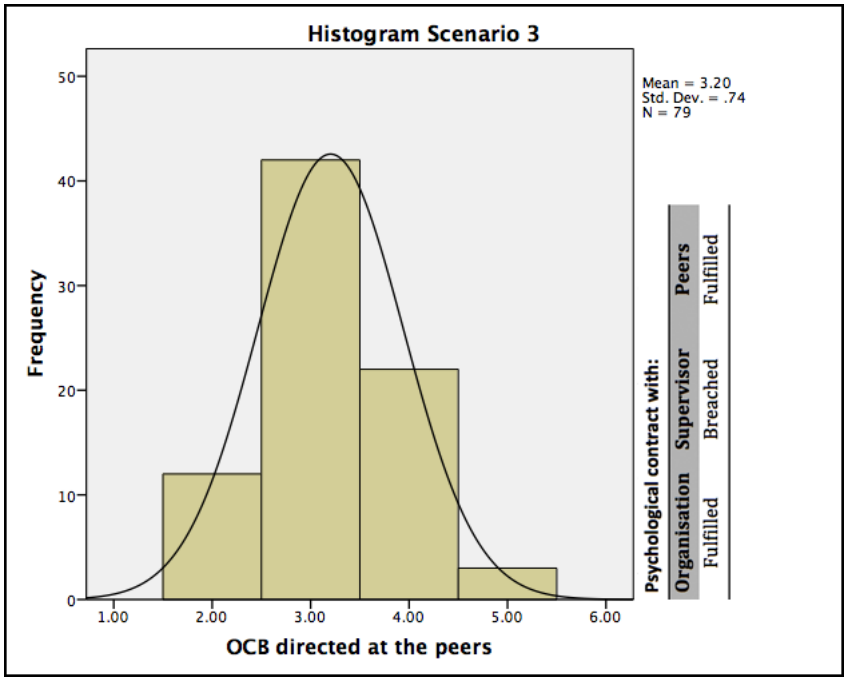


Figure 10.27: Histogram of OCB directed at the peers: Scenario 4

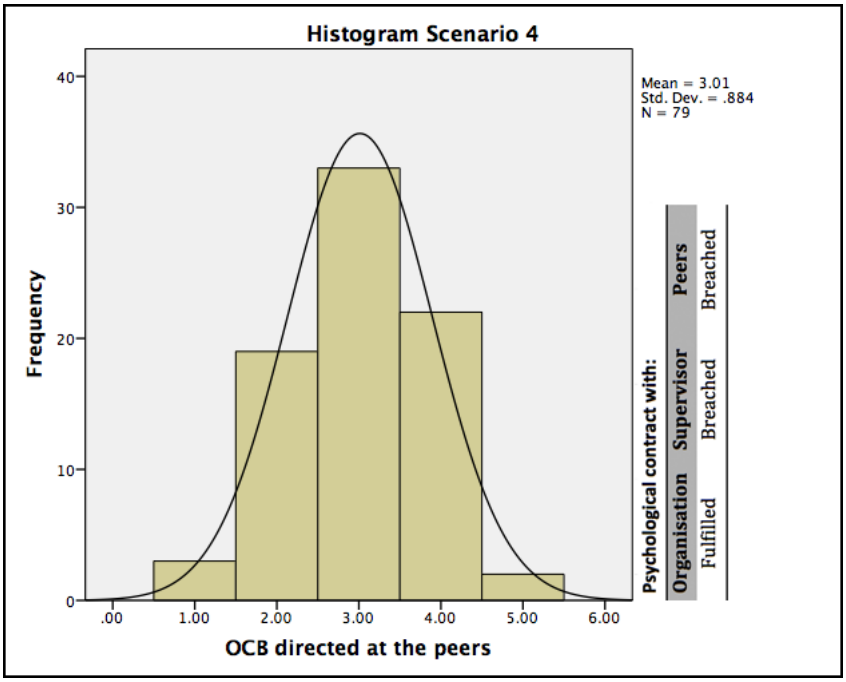


Figure 10.28: Histogram of OCB directed at the peers: Scenario 5

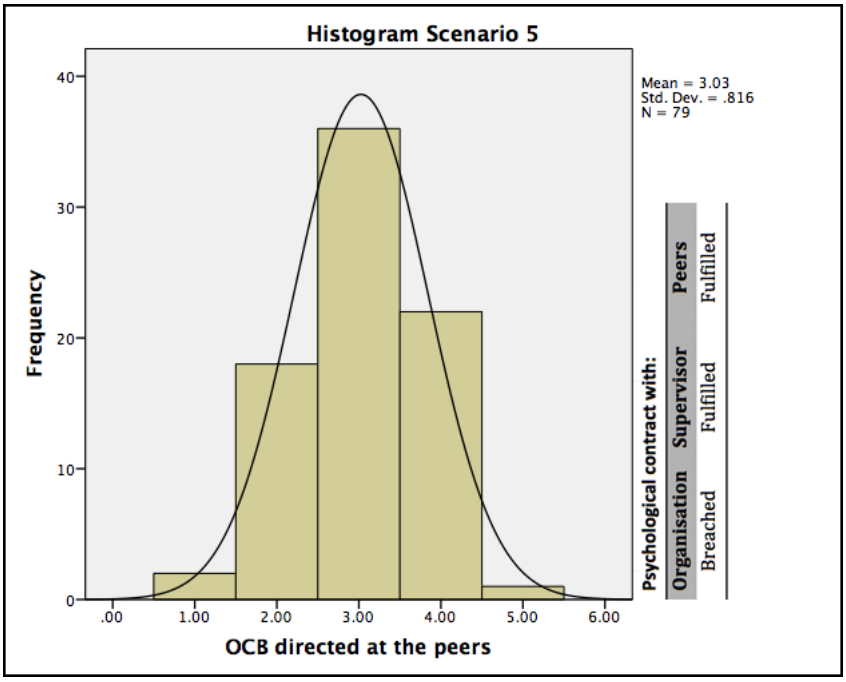


Figure 10.29: Histogram of OCB directed at the peers: Scenario 6

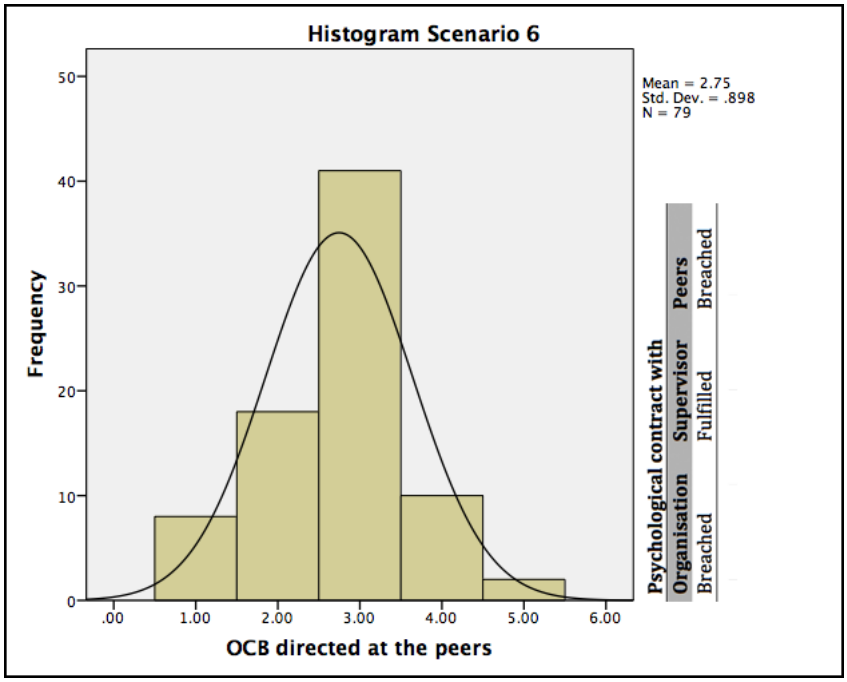


Figure 10.30: Histogram of OCB directed at the peers: Scenario 7

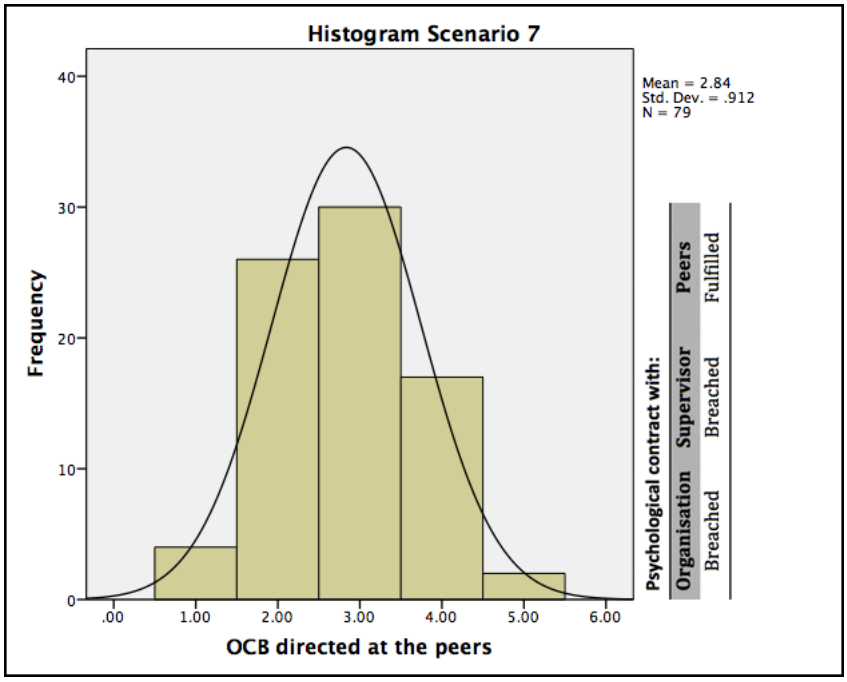
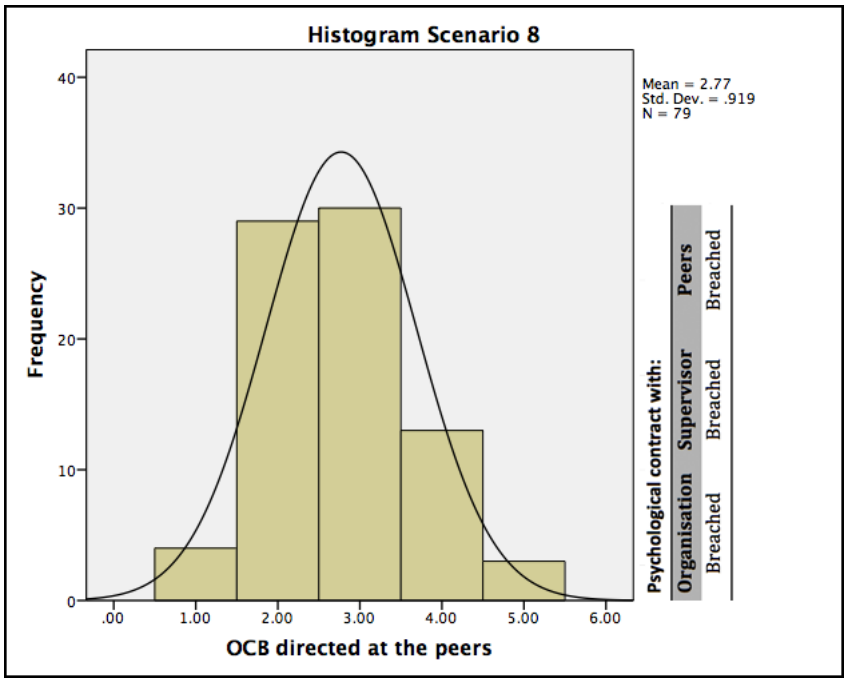


Figure 10.31: Histogram of OCB directed at the peers: Scenario 8



10.5 Histograms for Ali's Reported Satisfaction with His Organisation

Figure 10.32: Histogram of Ali's reported satisfaction with his organisation: Scenario 1

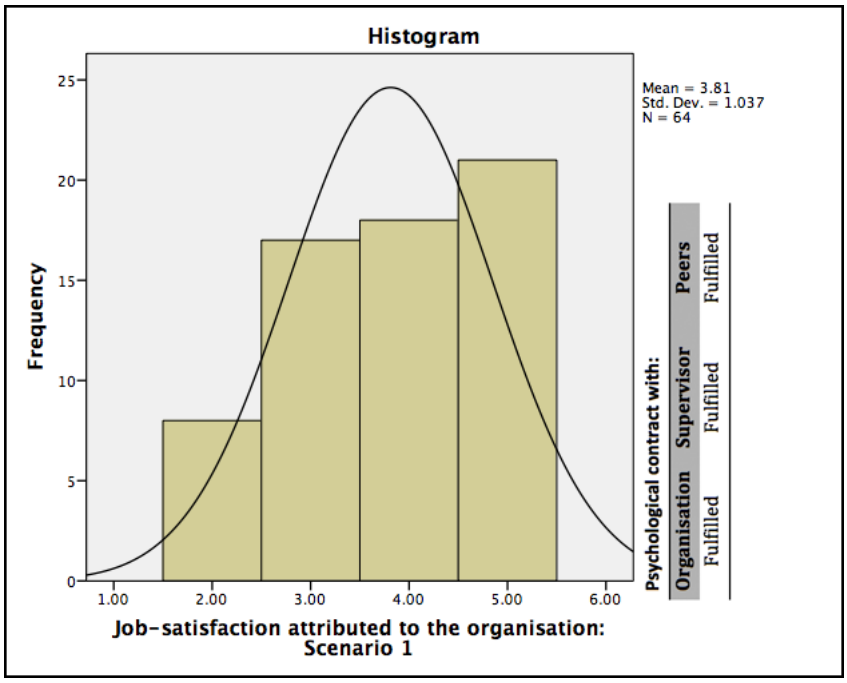


Figure 10.33: Histogram of Ali's reported satisfaction with his organisation: Scenario 2

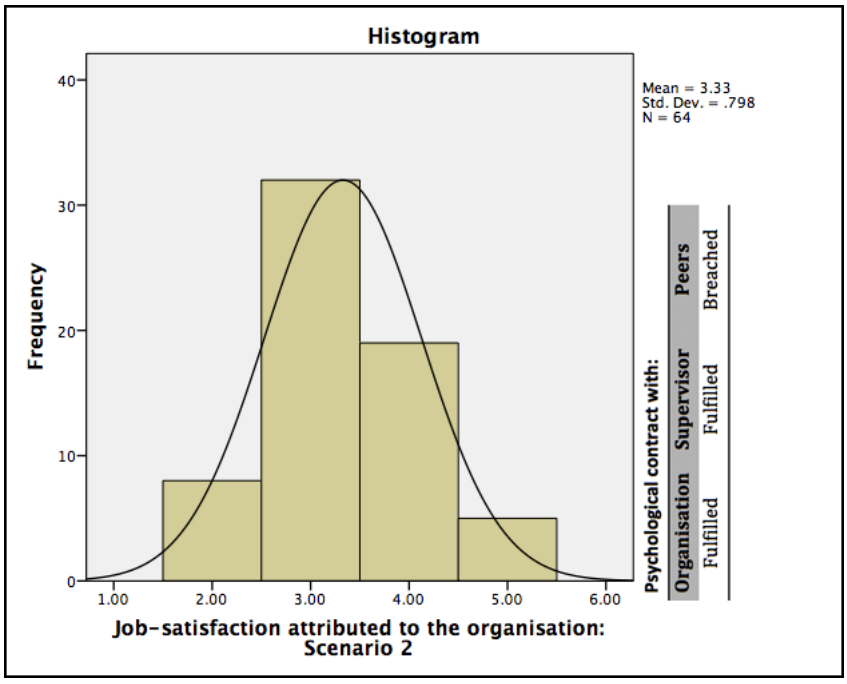


Figure 10.34: Histogram of Ali's reported satisfaction with his organisation: Scenario 3

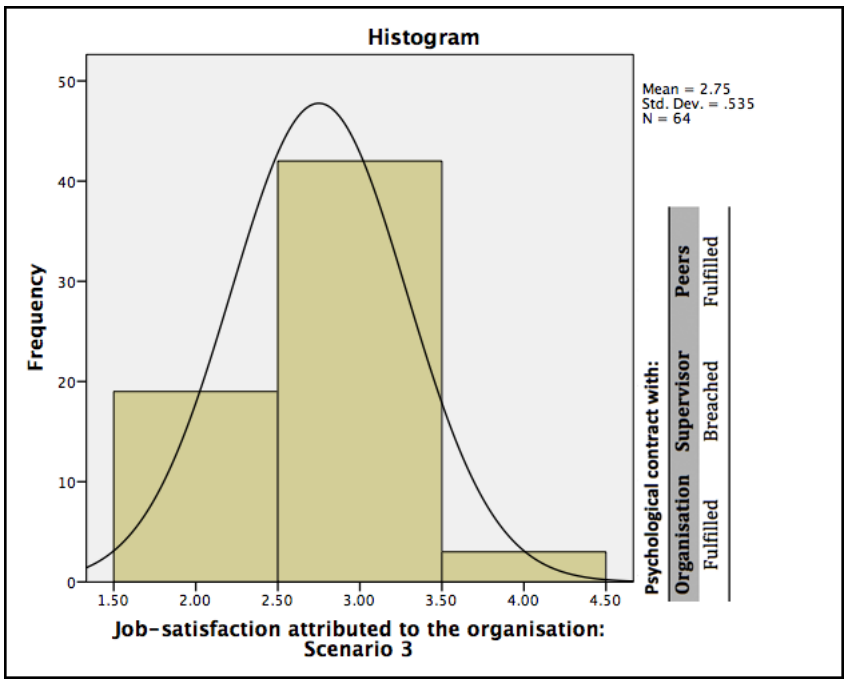


Figure 10.35: Histogram of Ali's reported satisfaction with his organisation: Scenario 4

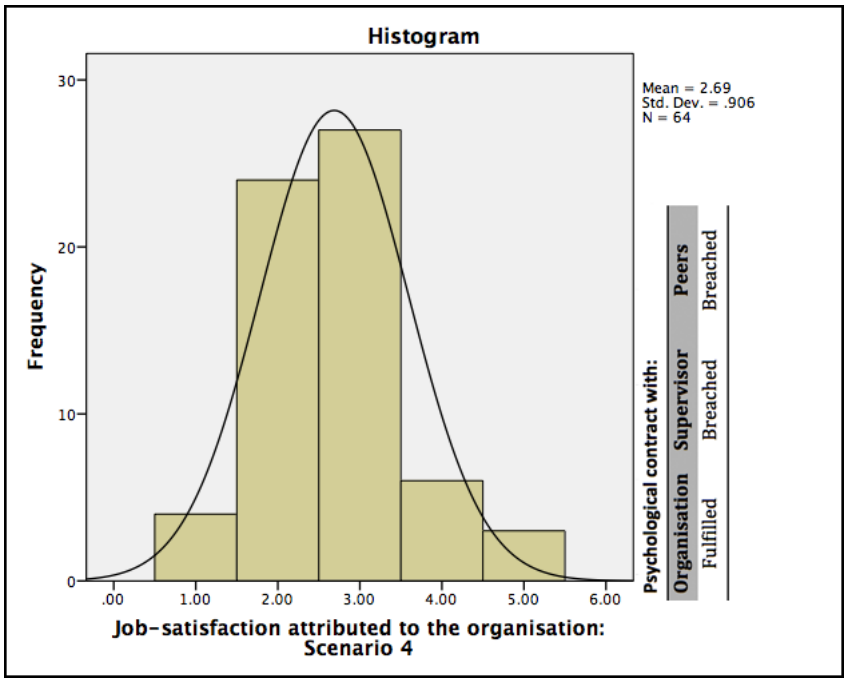


Figure 10.36: Histogram of Ali's reported satisfaction with his organisation: Scenario 5

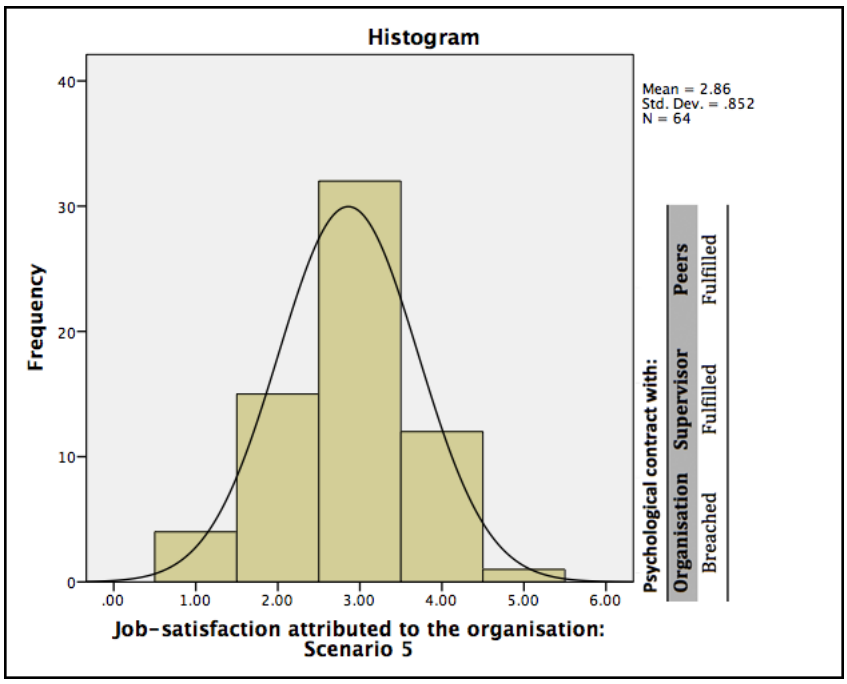


Figure 10.37: Histogram of Ali's reported satisfaction with his organisation: Scenario 6

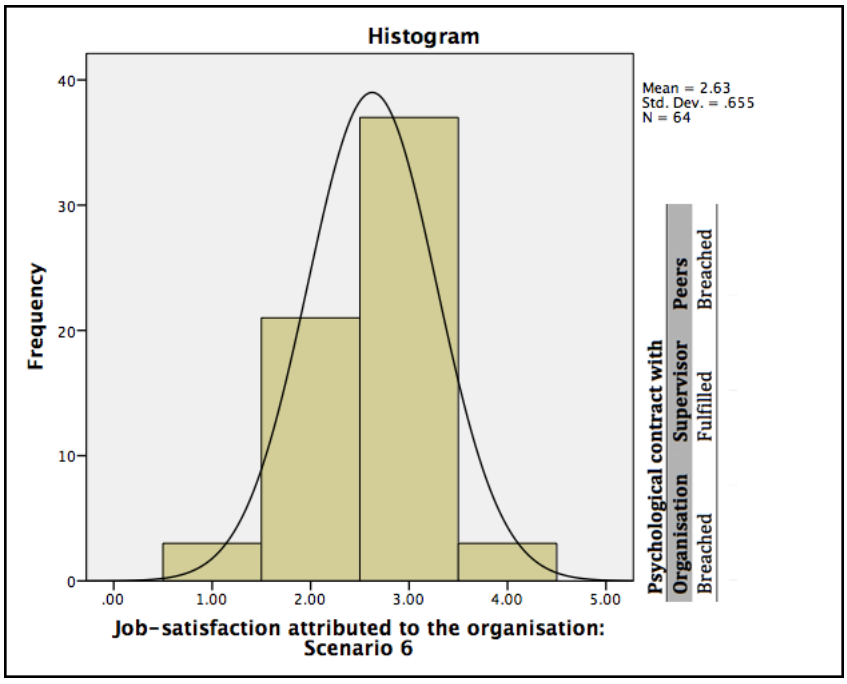


Figure 10.38: Histogram of Ali's reported satisfaction with his organisation: Scenario 7

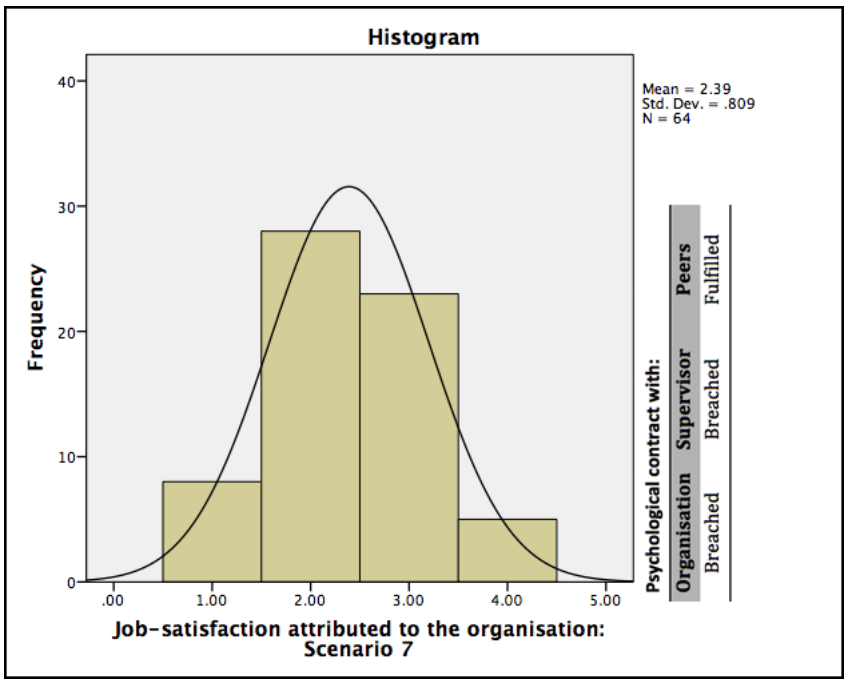
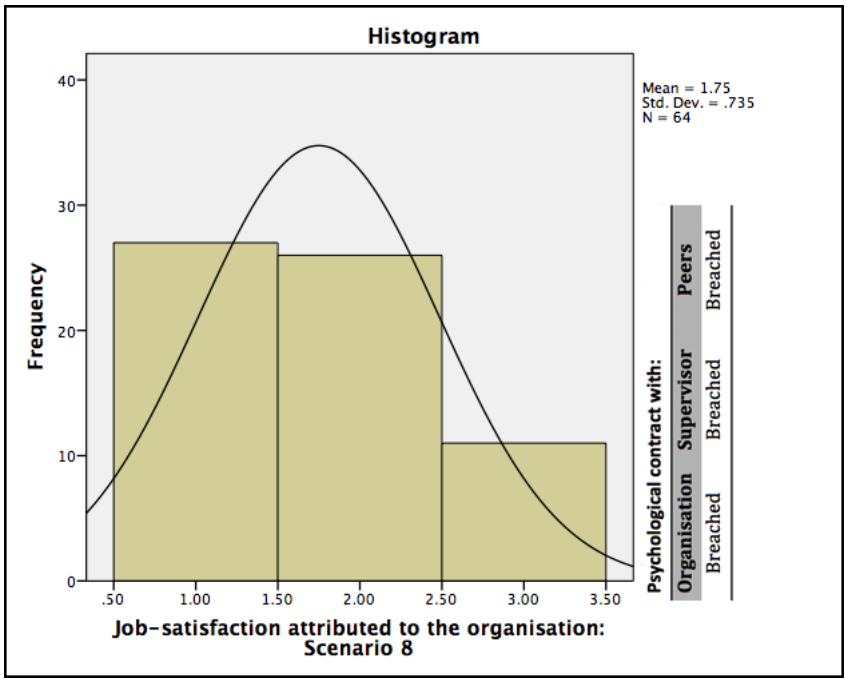


Figure 10.39: Histogram of Ali's reported satisfaction with his organisation: Scenario 8



10.6 Histograms for Ali's Reported Satisfaction with His Supervisor

Figure 10.40: Histogram of Ali's reported satisfaction with his supervisor: Scenario 1

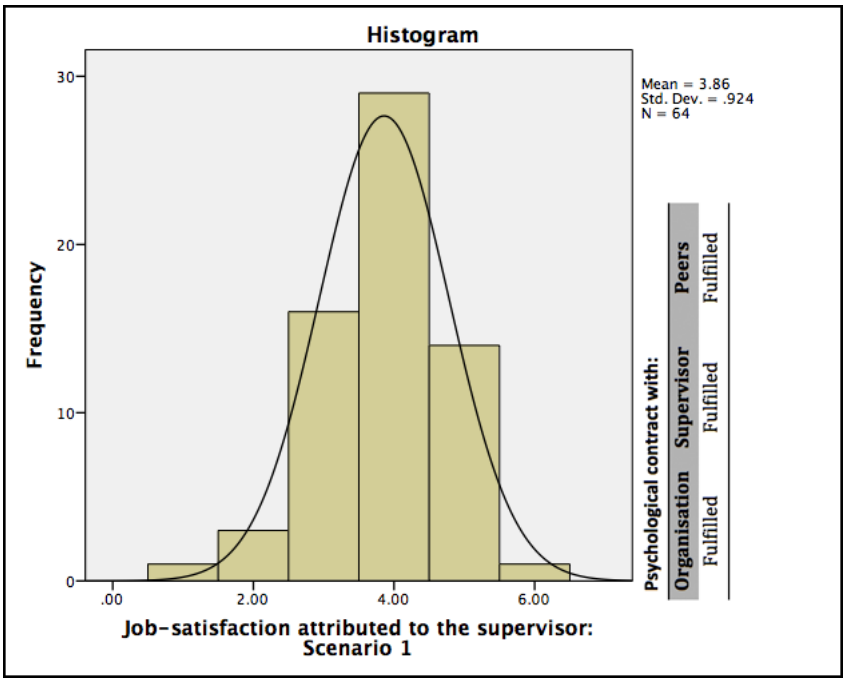


Figure 10.41: Histogram of Ali's reported satisfaction with his supervisor: Scenario 2

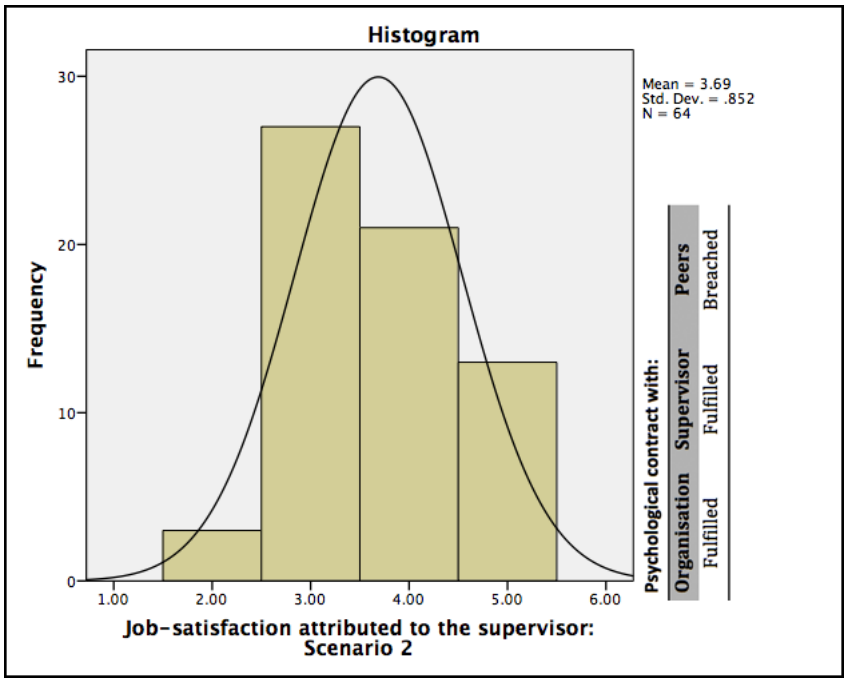


Figure 10.42: Histogram of Ali's reported satisfaction with his supervisor: Scenario 3

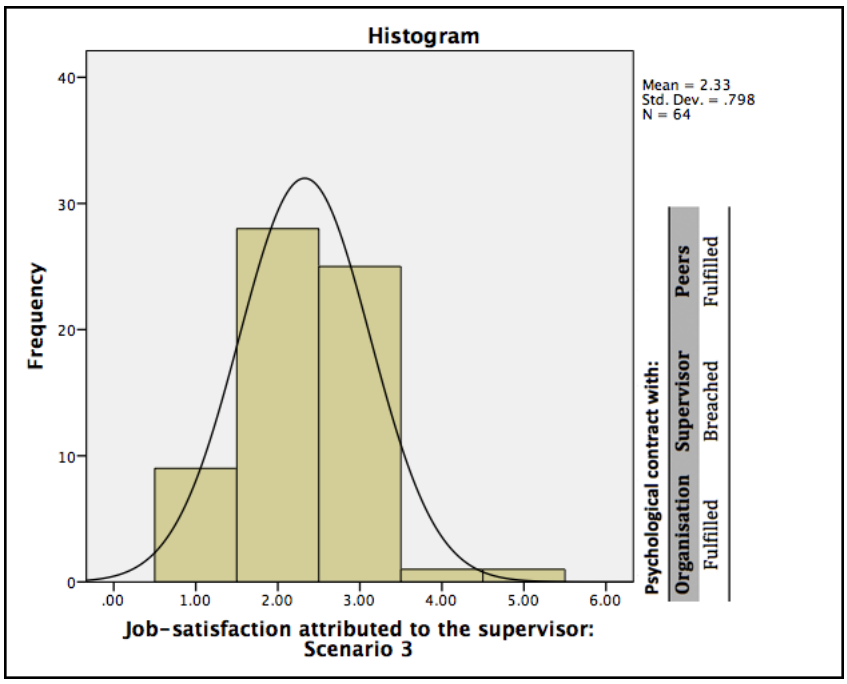


Figure 10.43: Histogram of Ali's reported satisfaction with his supervisor: Scenario 4

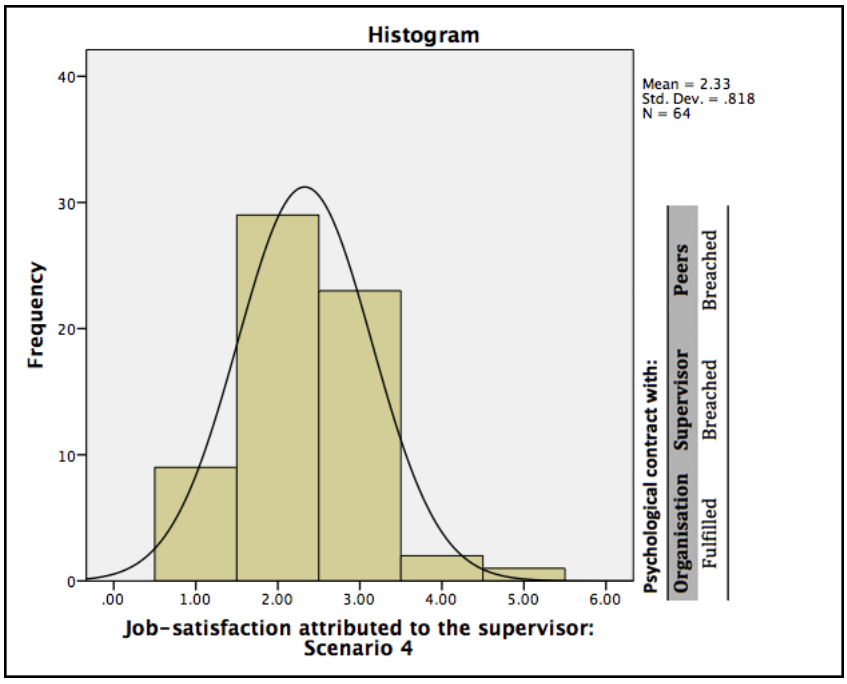


Figure 10.44: Histogram of Ali's reported satisfaction with his supervisor: Scenario 5

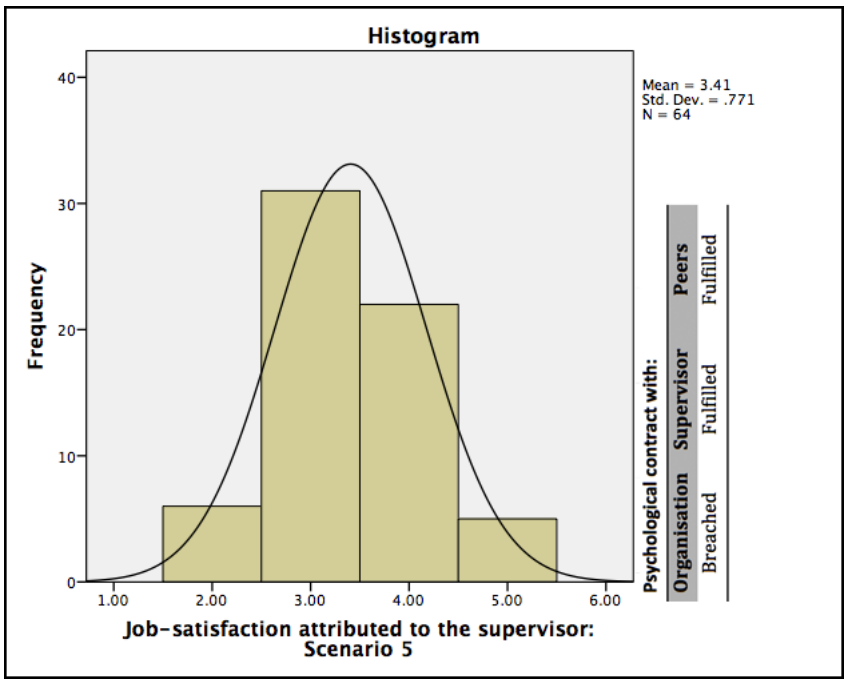


Figure 10.45: Histogram of Ali's reported satisfaction with his supervisor: Scenario 6

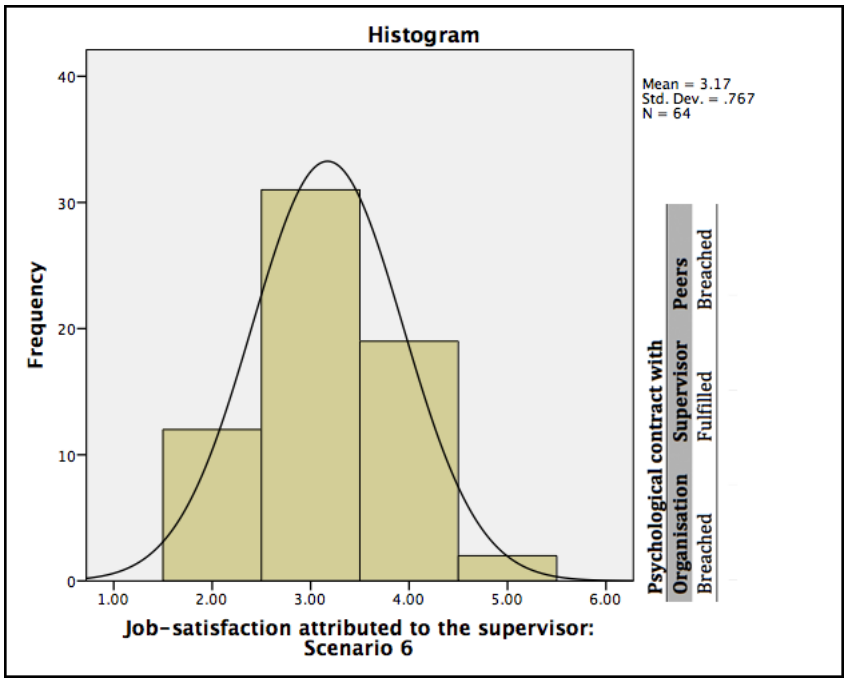


Figure 10.46: Histogram of Ali's reported satisfaction with his supervisor: Scenario 7

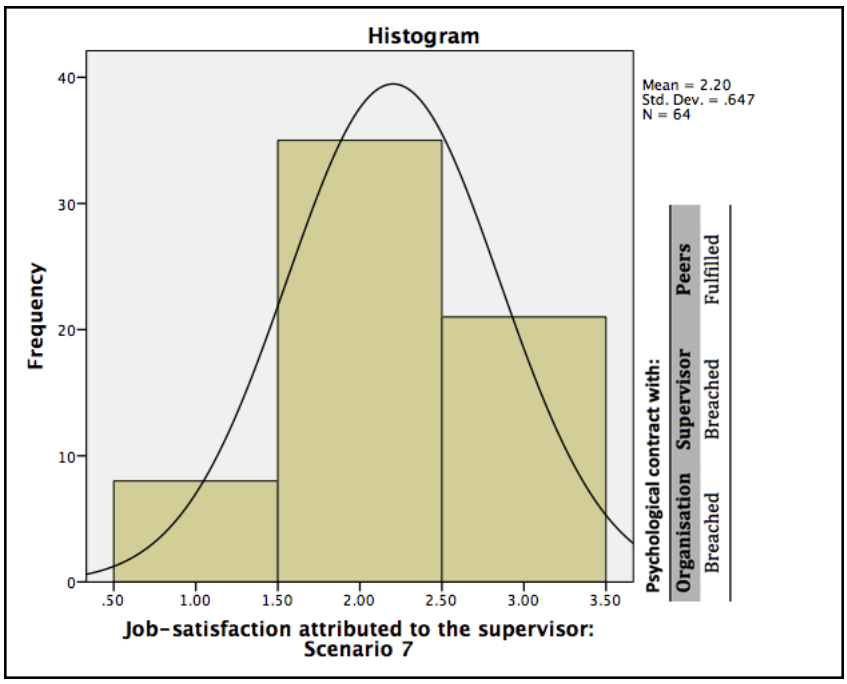
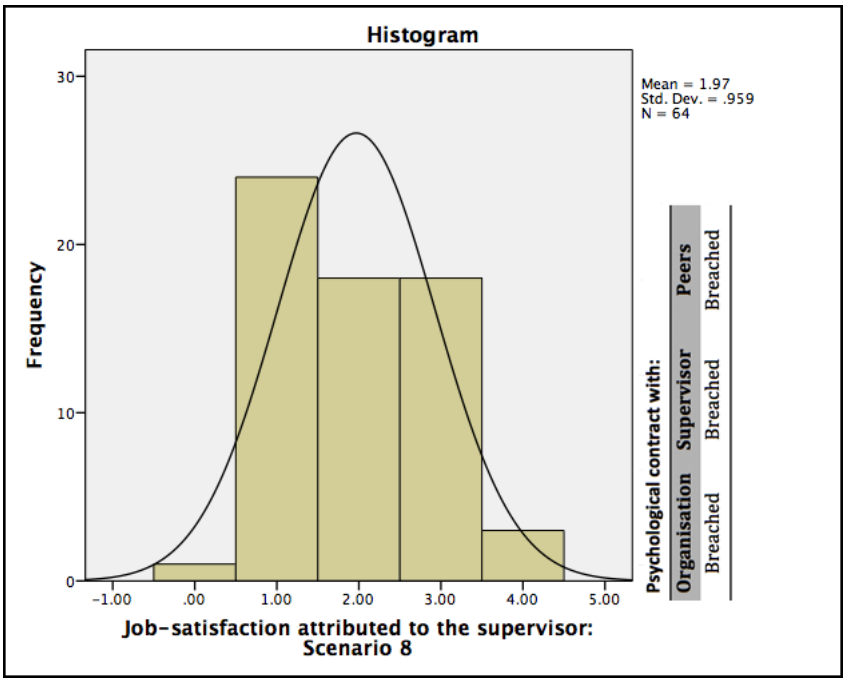


Figure 10.47: Histogram of Ali's reported satisfaction with his supervisor: Scenario 8



10.7 Histograms for Ali's Reported Satisfaction with His Peers

Figure 10.48: Histogram of Ali's reported satisfaction with his peers: Scenario 1

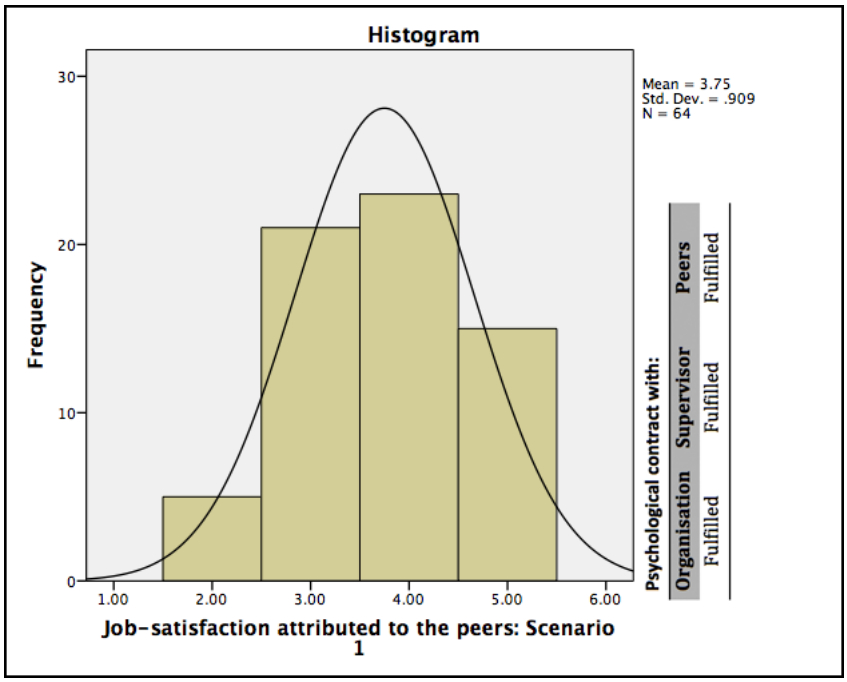


Figure 10.49: Histogram of Ali's reported satisfaction with his peers: Scenario 2

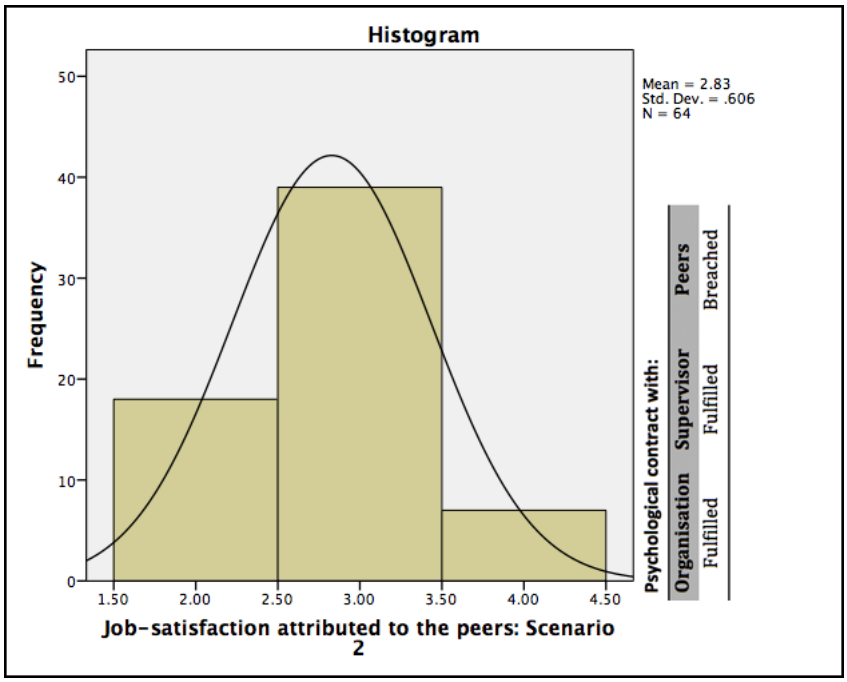


Figure 10.50: Histogram of Ali's reported satisfaction with his peers: Scenario 3

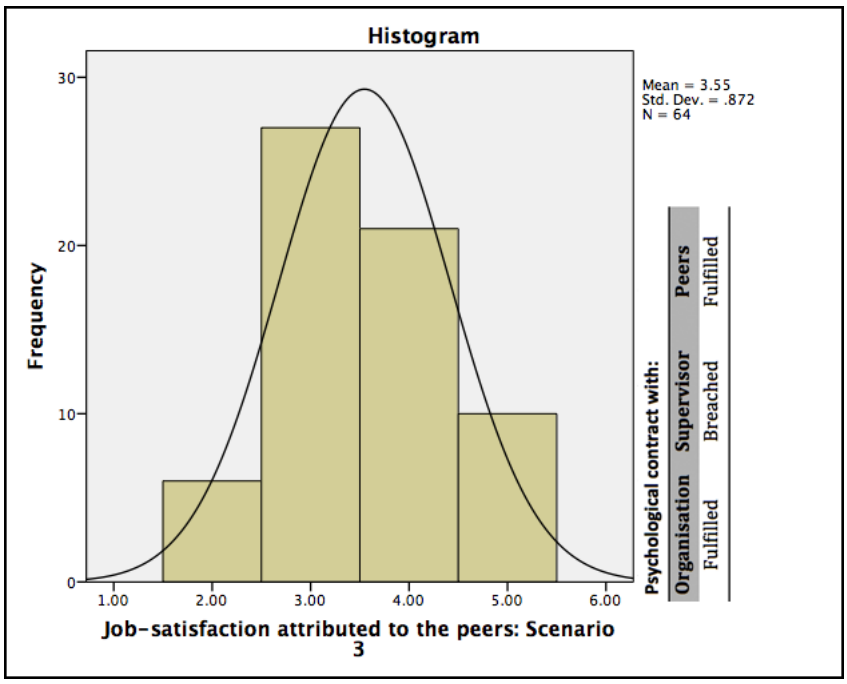


Figure 10.51: Histogram of Ali's reported satisfaction with his peers: Scenario 4

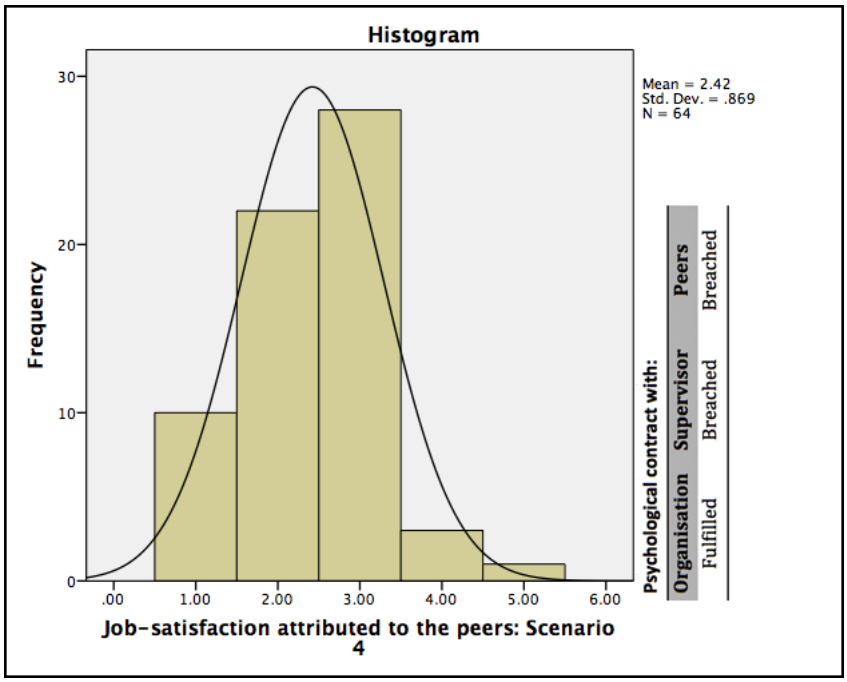


Figure 10.52: Histogram of Ali's reported satisfaction with his peers: Scenario 5

Figure 10.53: Histogram of Ali's reported satisfaction with his peers: Scenario 6

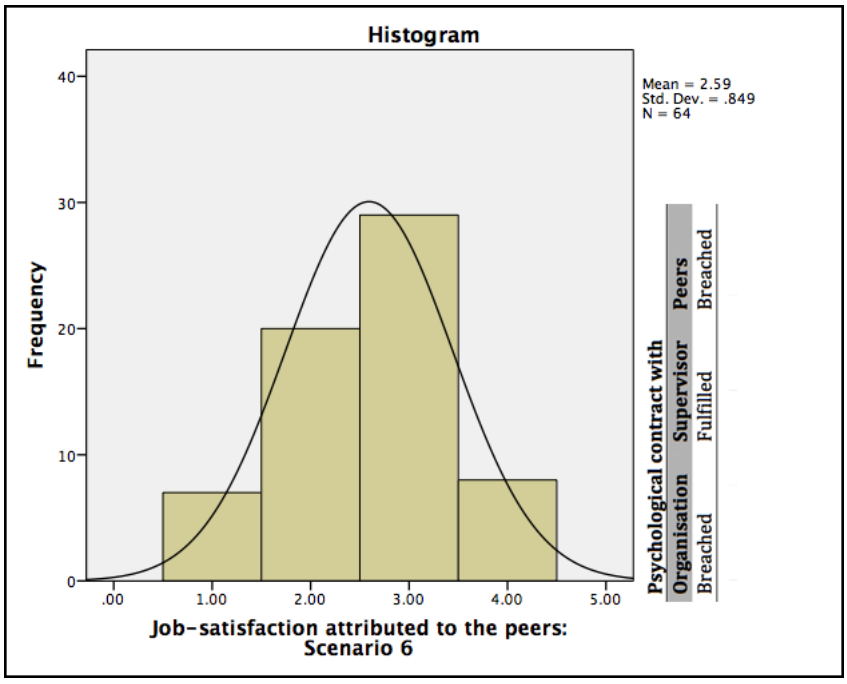


Figure 10.54: Histogram of Ali's reported satisfaction with his peers: Scenario 7

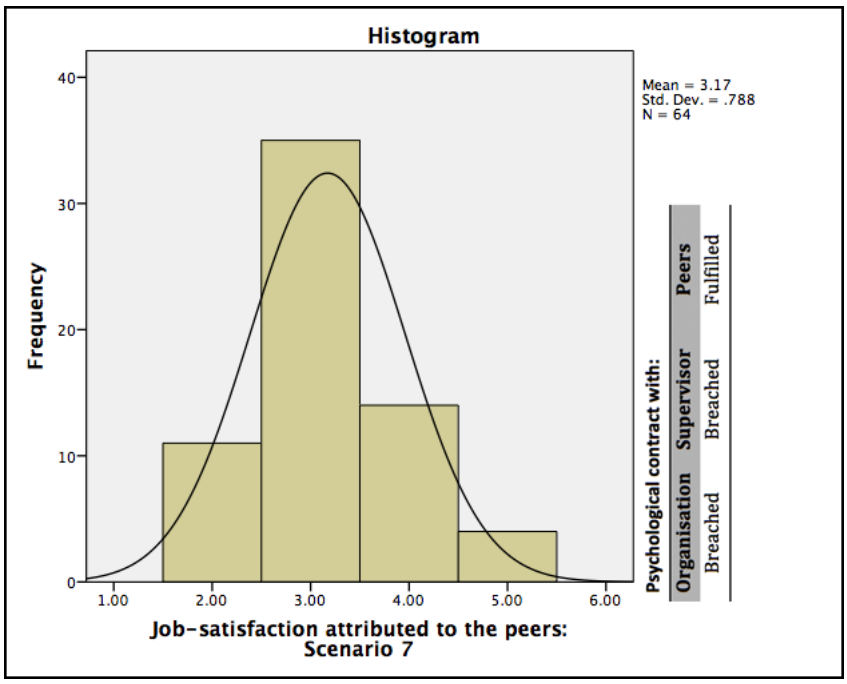
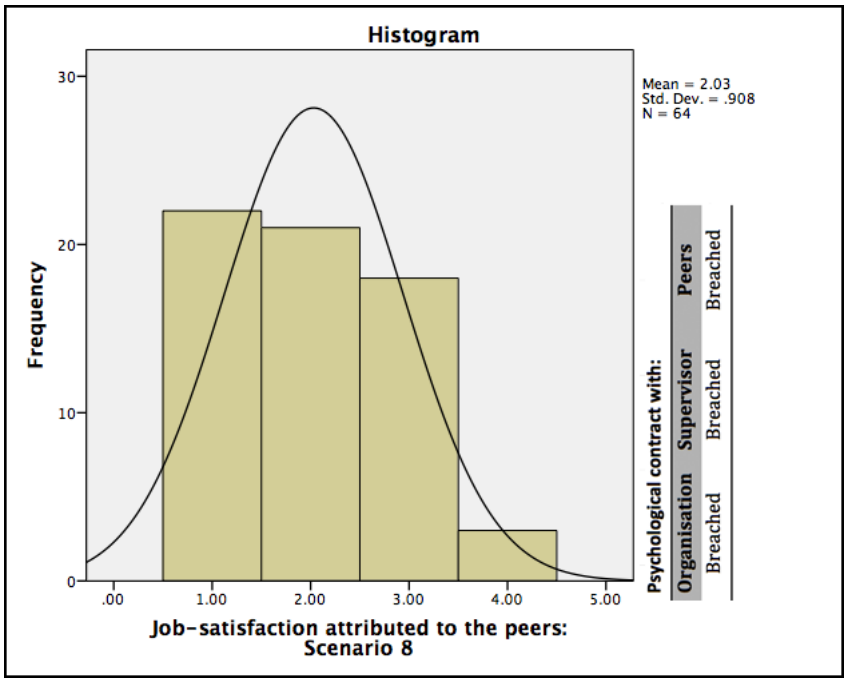


Figure 10.55: Histogram of Ali's reported satisfaction with his peers: Scenario 8



10.8 Stacked Frequency Plots (SFP) for Foci-Specific Citizenship Behaviour

Figure 10.56: Scenario 1: SFP for foci-specific citizenship behaviours

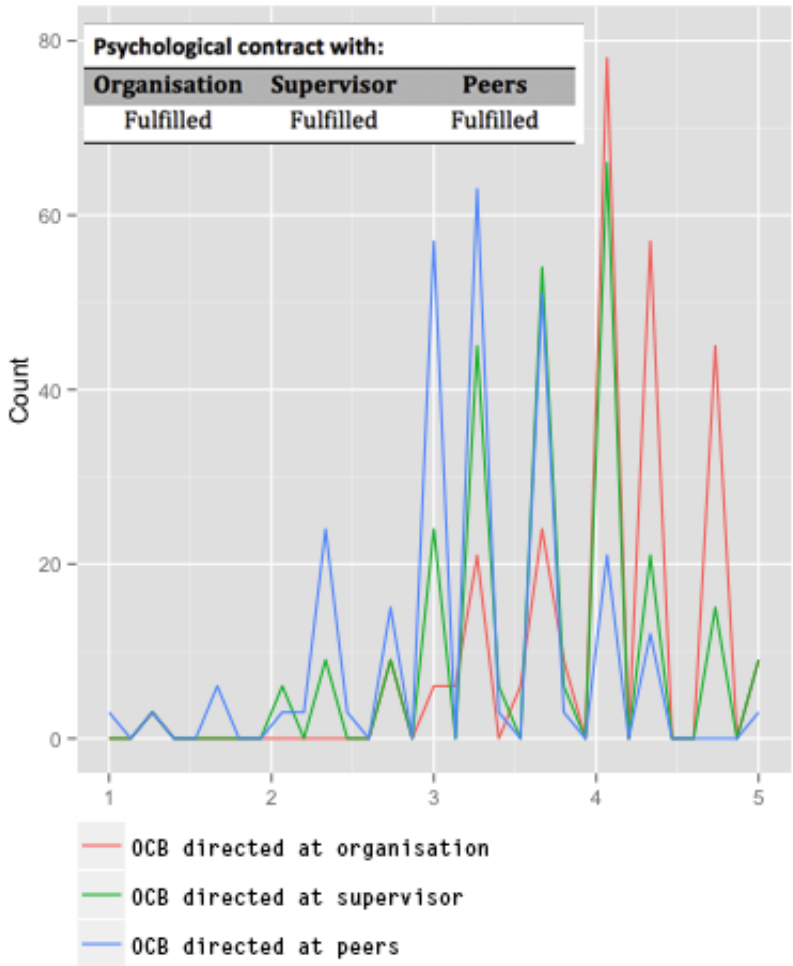


Figure 10.57: Scenario 2: SFP for foci-specific citizenship behaviours

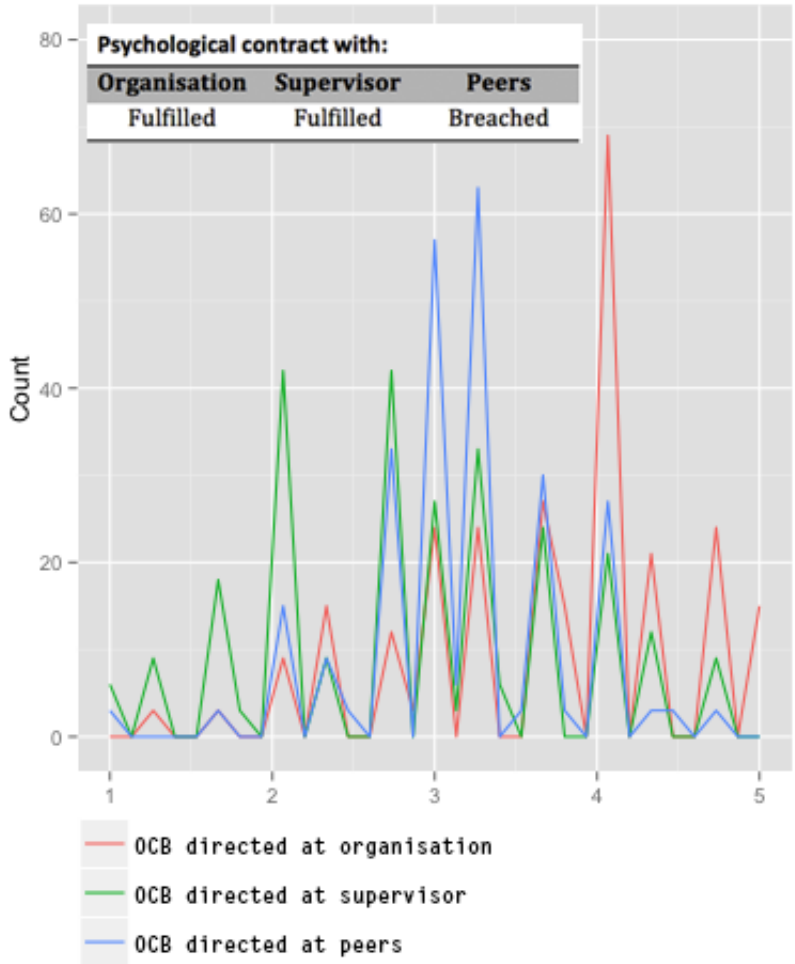


Figure 10.58: Scenario 3: SFP for foci-specific citizenship behaviours

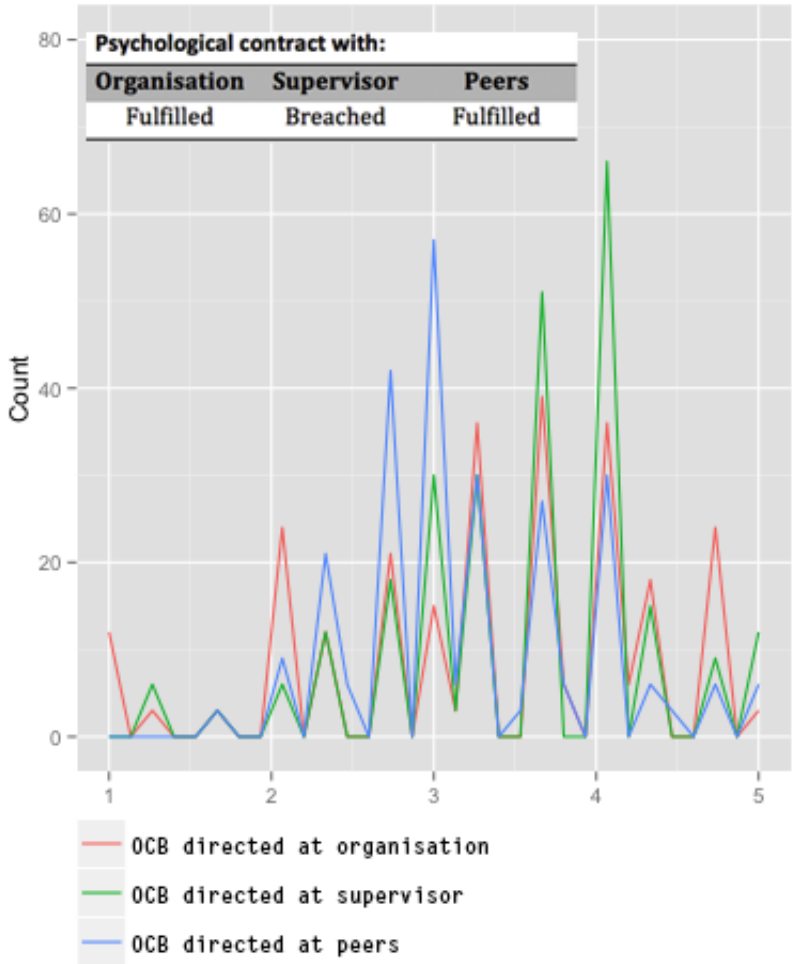


Figure 10.59: Scenario 4: SFP for foci-specific citizenship behaviours

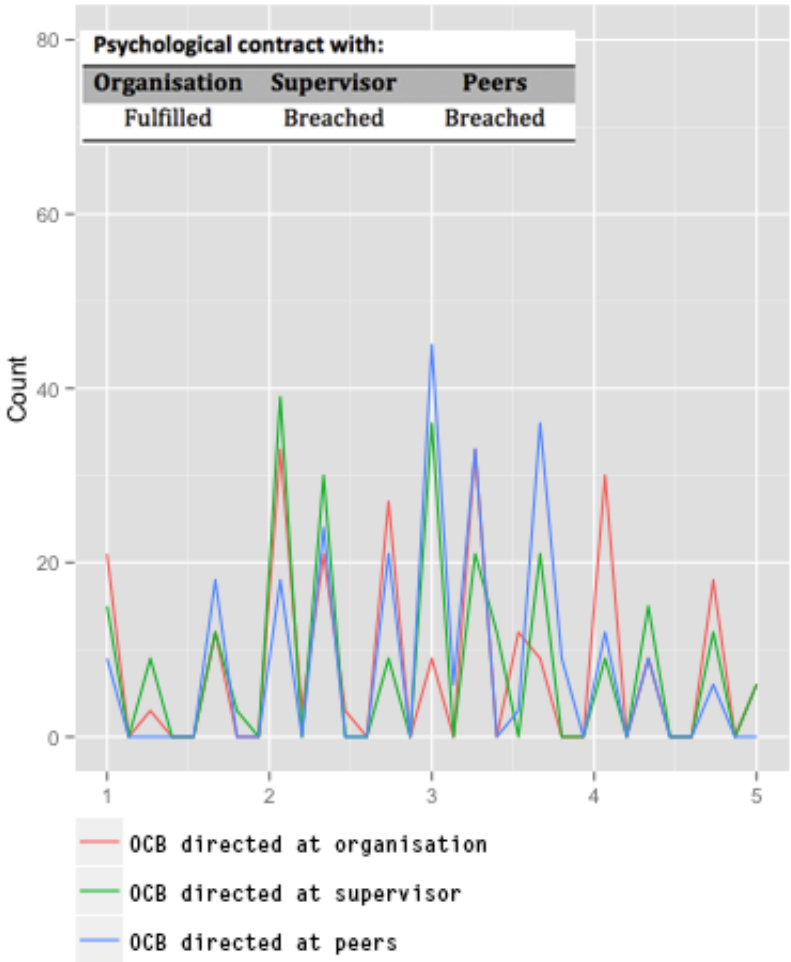


Figure 10.60: Scenario 5: SFP for foci-specific citizenship behaviours

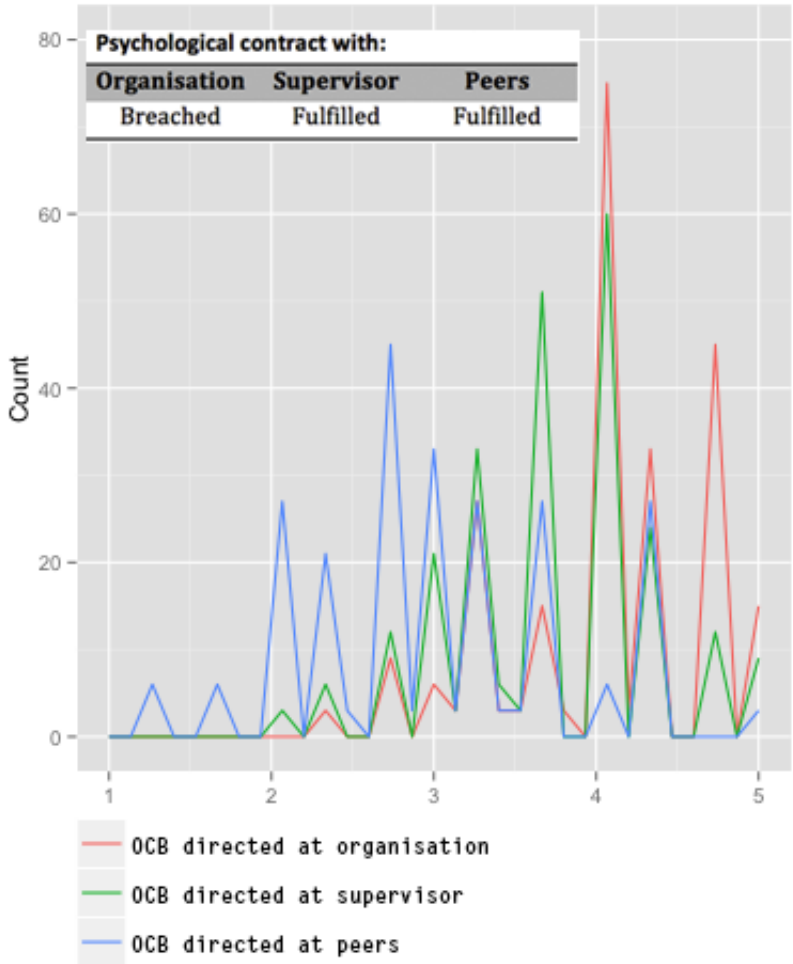


Figure 10.61: Scenario 6: SFP for foci-specific citizenship behaviours

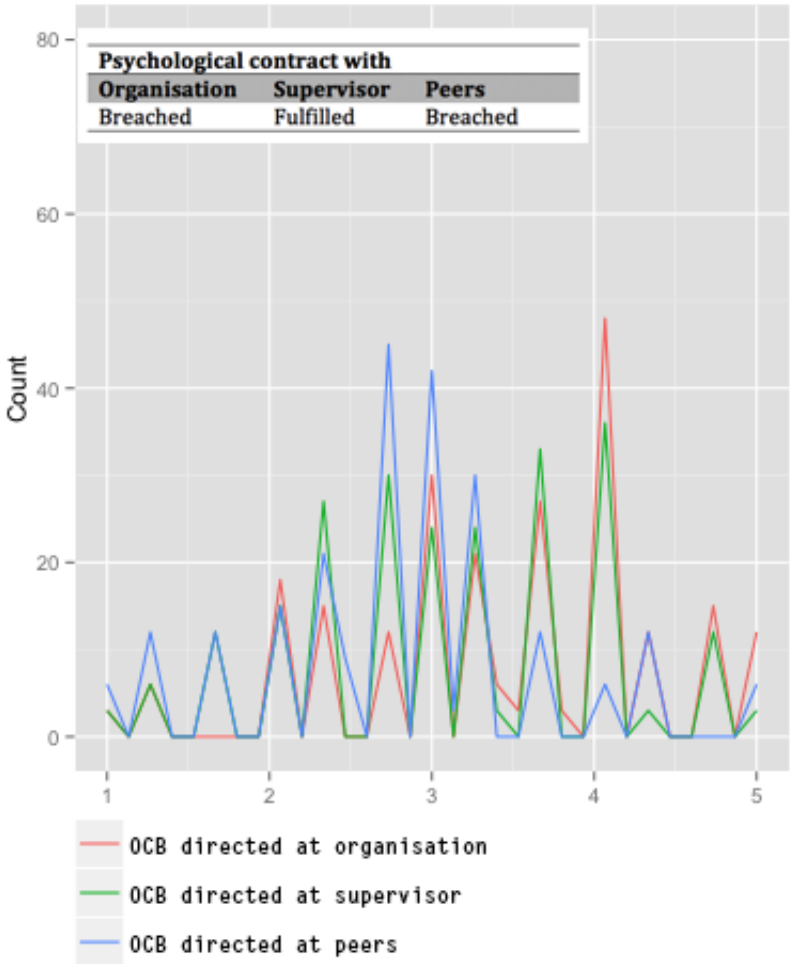


Figure 10.62: Scenario 7: SFP for foci-specific citizenship behaviours

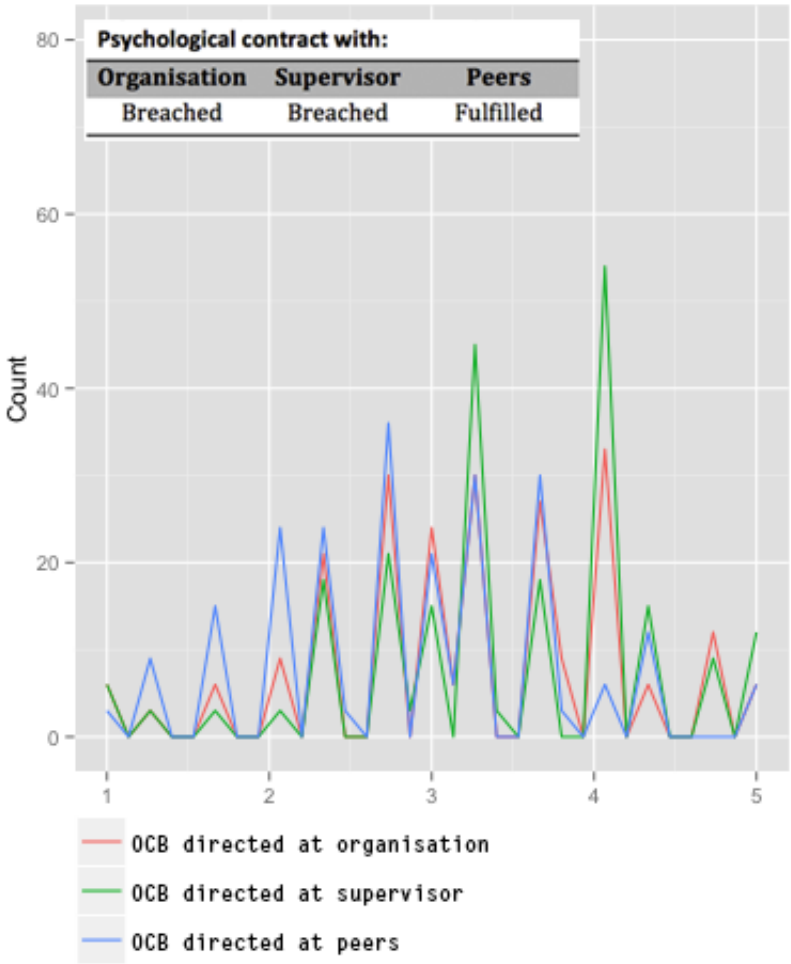
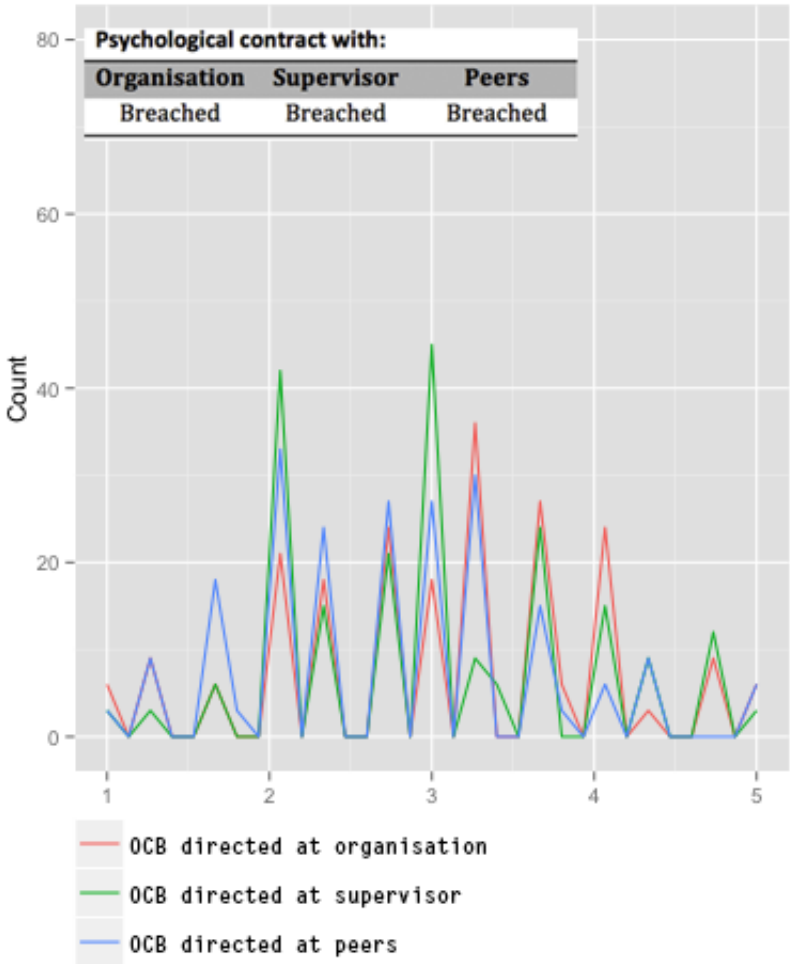


Figure 10.63: Scenario 8: SFP for foci-specific citizenship behaviours



10.9 Stacked Frequency Plots (SFP) for Foci-Specific Satisfaction

Figure 10.64: Scenario 1: SFP for foci-specific satisfaction

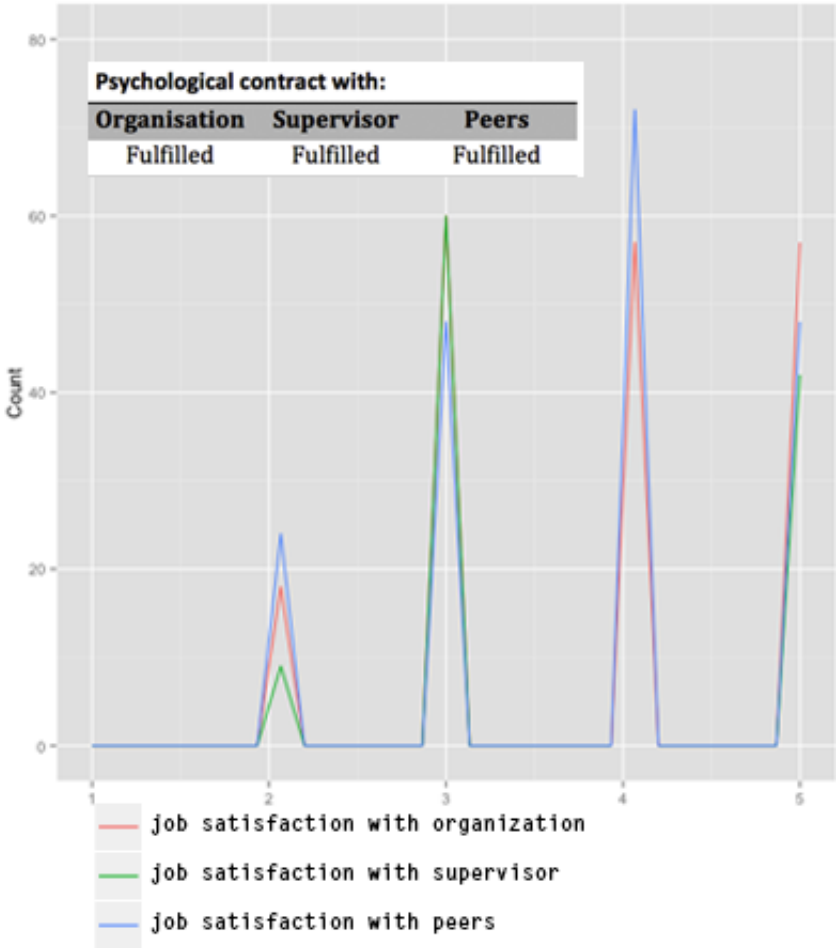


Figure 10.65: Scenario 2: SFP for foci-specific satisfaction

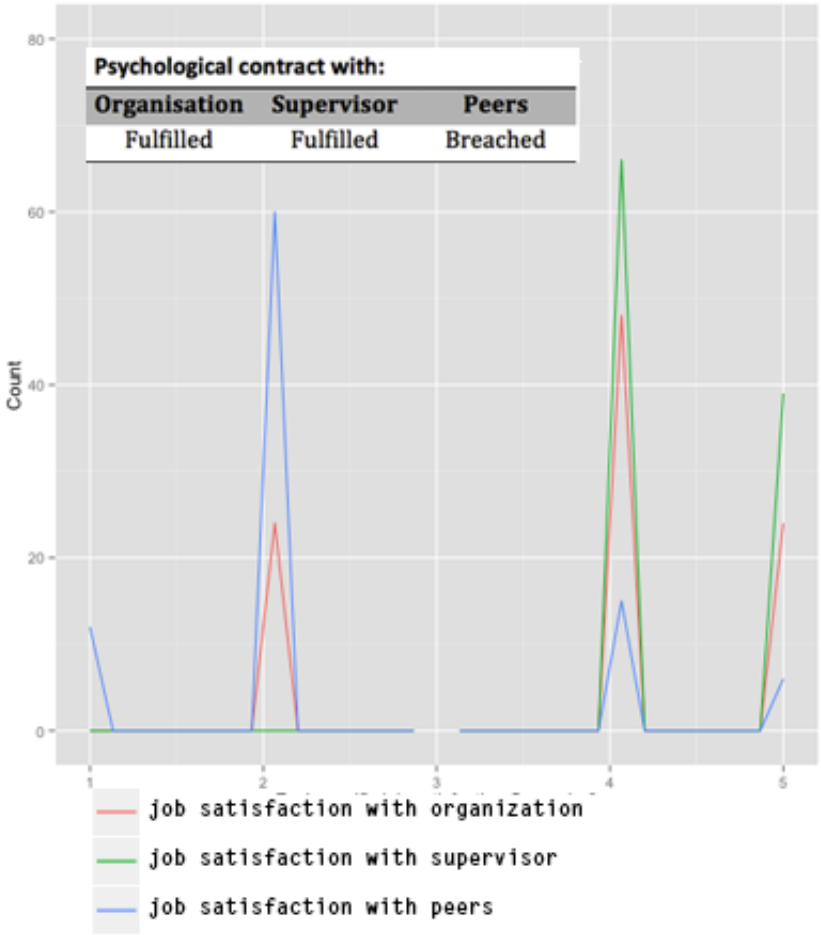


Figure 10.66: Scenario 3: SFP for foci-specific satisfaction

Figure 10.67: Scenario 4: SFP for foci-specific satisfaction

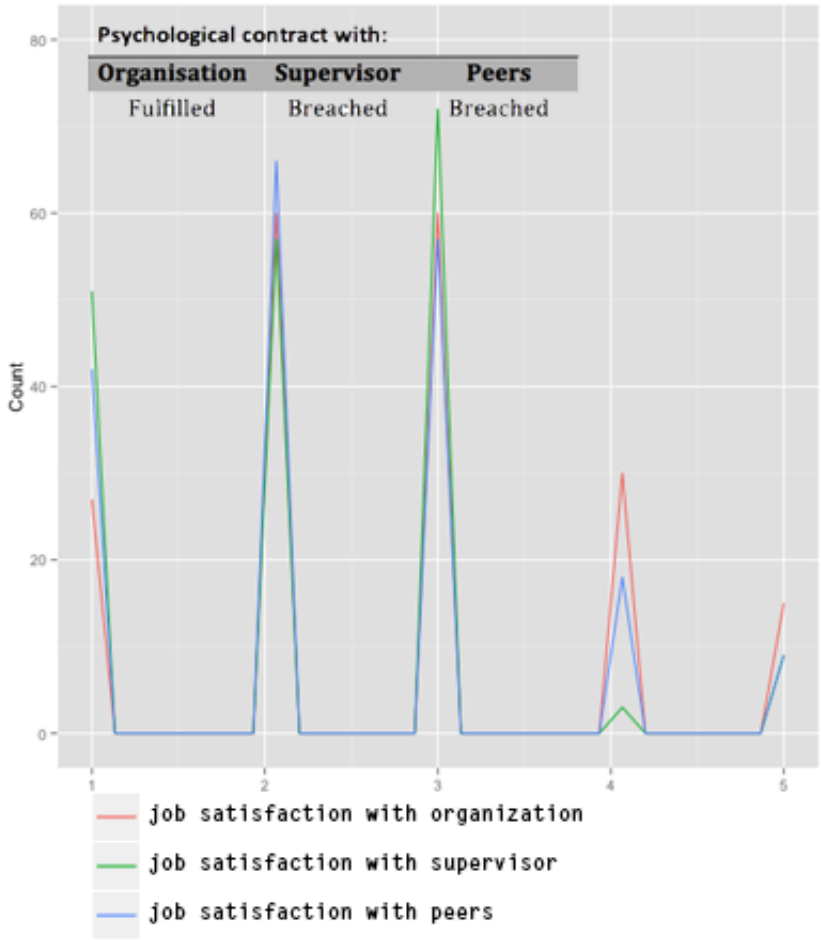


Figure 10.68: Scenario 5: SFP for foci-specific satisfactions

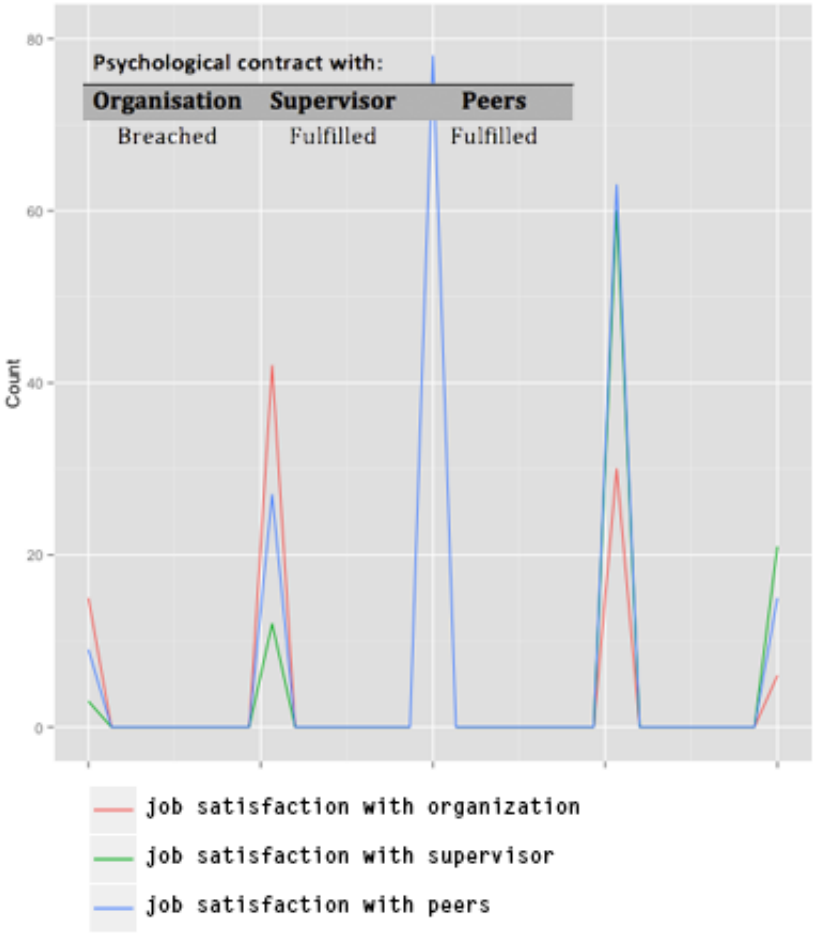


Figure 10.69: Scenario 6: SFP for foci-specific satisfactions

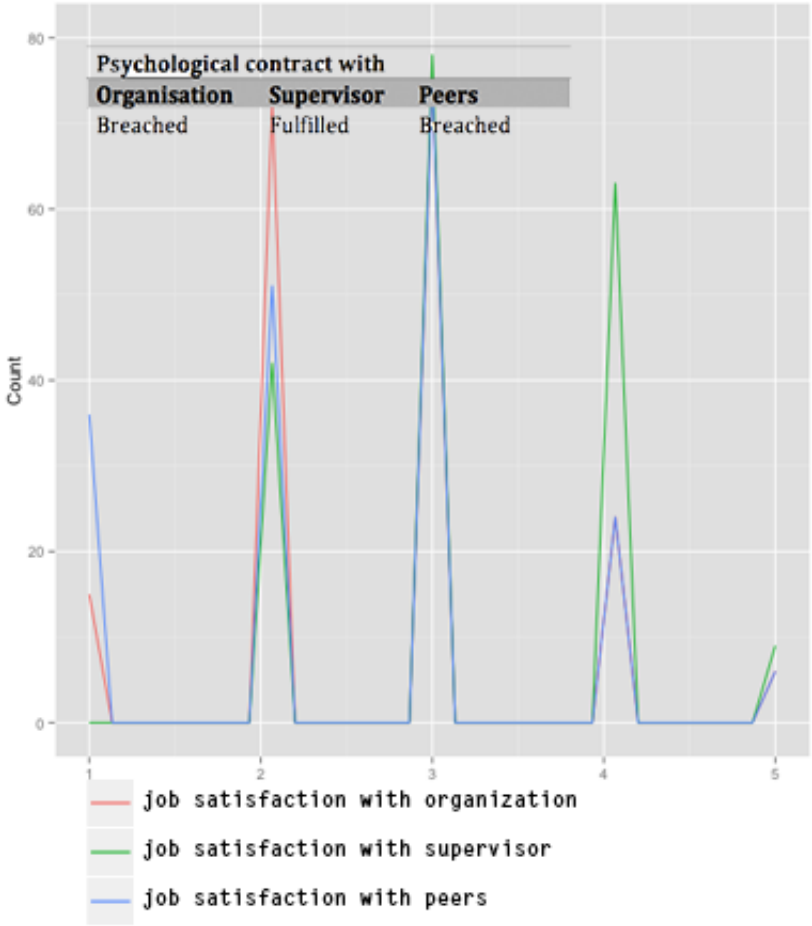


Figure 10.70: Scenario 7: SFP for foci-specific satisfactions

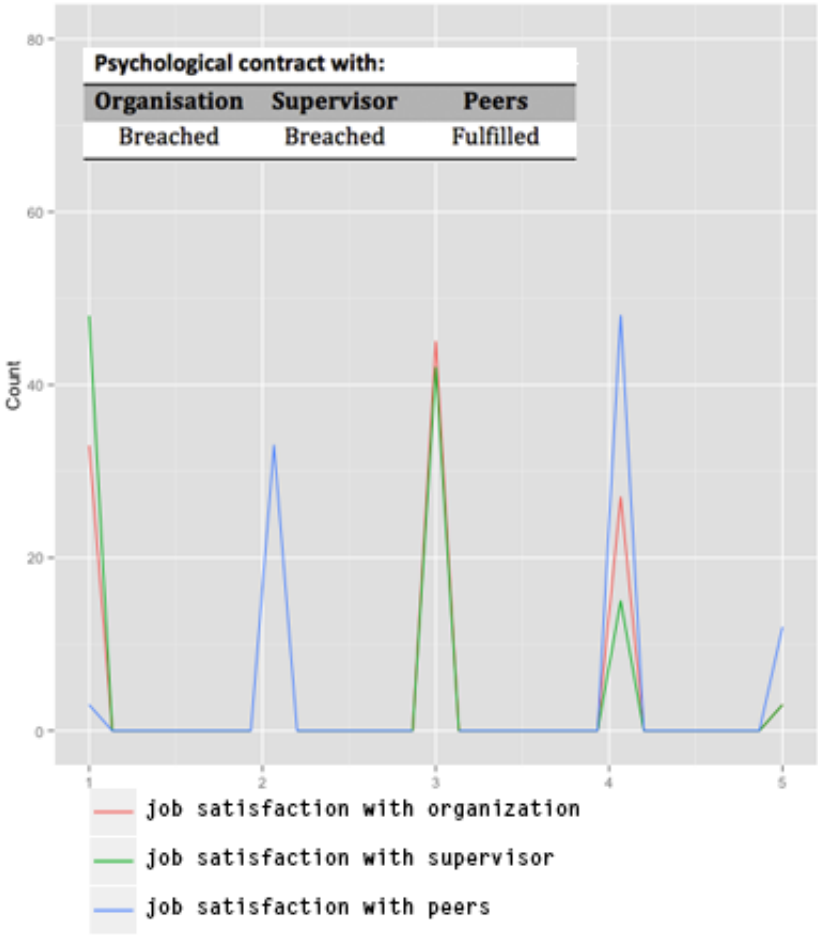
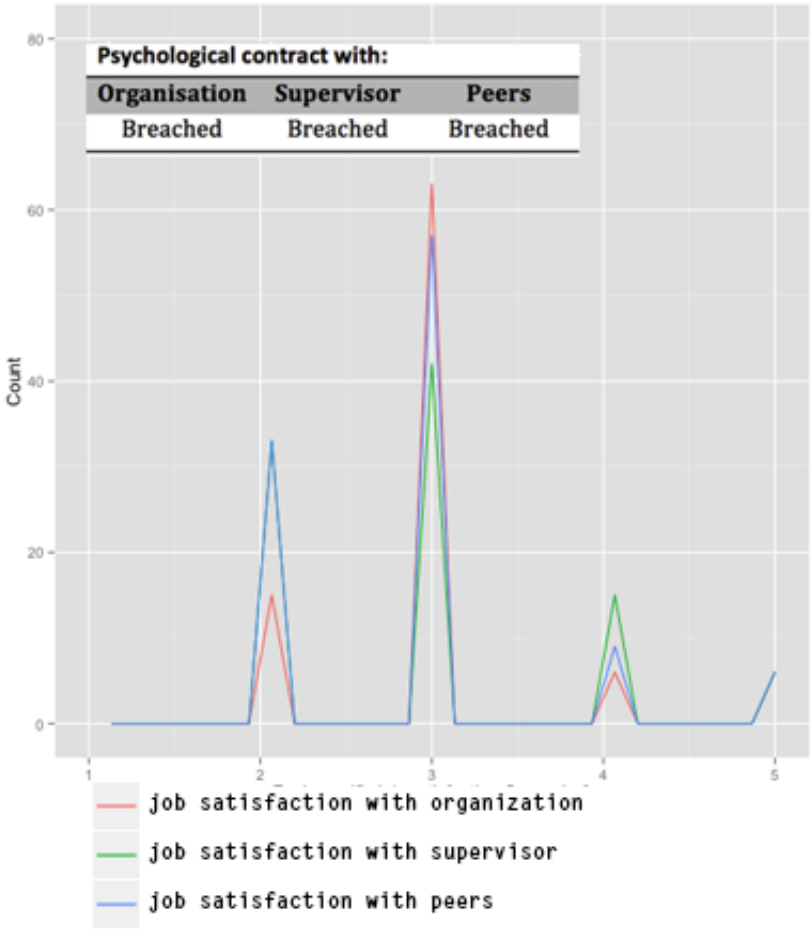


Figure 10.71: Scenario 8: SFP for foci-specific satisfactions



References

Sci Team. (2009). *Science of science tool.*

Adam, D. (2002). Citation analysis: The counting house. *Nature*, *415*(6873), 726–729.

Ajzen, I. (2005). *Attitudes, Personality, and Behavior*. McGraw-Hill International.

Akhtar, M. N., Bal, P. M., Long, L., & Nickson, D. (2016). Exit, voice, loyalty, and neglect reactions to frequency of change, and impact of change: a sensemaking perspective through the lens of psychological contract. *Employee Relations*, *38*(4).

Anand, S., Vidyarthi, P. R., Liden, R. C., & Rousseau, D. M. (2010, October). Good Citizens in Poor-Quality Relationships: Idiosyncratic Deals as a Substitute for Relationship Quality. *Academy of Management Journal*, *53*(5), 970–988.

Antonakis, J., & Atwater, L. (2002). Leader distance: A review and a proposed theory. *The Leadership Quarterly*, *13*(6), 673–704.

Argyris, C. (1959, September). The Individual and Organization: An Empirical Test. *Administrative Science Quarterly*, *4*(2), 145.

Argyris, C. (1960). *Understanding Organizational Behavior*. Homewood, ill.: Dorsey.

Askew, K., Taing, M. U., & Johnson, R. E. (2013). The Effects of Commitment to Multiple Foci: An Analysis of Relative Influence and Interactions. *Human Performance*, *26*(3), 171–190.

Astrauskaitē, M., Vaitkevicius, R., & Perminas, A. (2011). Job satisfaction survey: a confirmatory factor analysis based on secondary school teachers' sample. *International Journal of Business and Management*, *6*(5), 41-50.

Atkinson, C. (2007). Trust and the psychological contract. *Employee*

Relations, *29*, 227–246.

Babin, B. J., & Boles, J. S. (1996). The effects of perceived co-worker involvement and supervisor support on service provider role stress, performance and job satisfaction. *Journal of retailing*, *72*(1), 57–75.

Bakker, A., Demerouti, E., & Verbeke, W. J. M. (2004). *Using the Job Demands-resources Model to Predict Burnout and Performance.*

Bal, P. M., De Lange, A. H., & Jansen, P. (2008). Psychological contract breach and job attitudes: A meta-analysis of age as a moderator. *Journal of vocational . . . .*

Banker, R. D., Field, J. M., Schroeder, R. G., & Sintia, K. K. (1996). Impact of work teams on manufacturing performance: A longitudinal field study. *Academy of Management Journal*, *39*(4), 867–890.

Banks, G. C., Batchelor, J. H., Seers, A., O'Boyle, E. H., Jr., Pollack, J. M., & Gower, K. (2013, July). What does team-member exchange bring to the party? A meta-analytic review of team and leader social exchange. *Journal of Organizational Behavior*, *35*(2), 273–295.

Barclay, J. H., & Harland, L. K. (1995). Peer Performance Appraisals. *Group & Organization Management*.

Barnard, C. I. (1938). *The function of the executive, 30th anniversary*. Cambridge: Harvard University Press.

Barter, C., & Renold, E. (1999). The use of vignettes in qualitative research. *Social Research Update*, *25*, 4–9.

Barter, C., & Renold, E. (2000). 'I wanna tell you a story': exploring the application of vignettes in qualitative research with children and young people. *International Journal of Social Research Methodology*, *3*, 307–323.

Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, *39*(2), 464–482.

Bishop, J. W., & Scott, K. D. (2000). An examination of organizational and team commitment in a self-directed team environment. *Journal of Applied Psychology*, *85*(3), 439–450.

Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.

Bogardus, E. S. (1927). Leadership and social distance. *Sociology and social research*, *12*(1), 173–178.

Boles, J. S., Wood, J. A., & Johnson, J. (2003). Interrelationships of Role Conflict, Role Ambiguity, and Work–Family Conflict with Different Facets of Job Satisfaction and the Moderating Effects of Gender. *Journal of Personal Selling & Sales Management*.

Bolon, D. S. (1997). Organizational citizenship behavior among hospital employees: A multidimensional analysis involving job satisfaction and organizational commitment. *Hospital & Health Services Administration*, *42*(2), 221-241.

Bordia, P., Restubog, S. L. D., Bordia, S., & Tang, R. L. (2010). Breach Begets Breach: Trickle-Down Effects of Psychological Contract Breach on Customer Service. *Journal of Management*, *36*, 1578–1607.

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. *Personnel selection in organizations*, *71*, 98.

Börner, K., Klavans, R., Patek, M., Zoss, A. M., Biberstine, J. R., Light, R. P., . . . Boyack, K. W. (2012, July). Design and Update of a Classification System: The UCSD Map of Science. *PloS one*, *7*(7).

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of applied psychology*, *35*(5), 307.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and social psychology bulletin*, *17*(5), 475–482.

Browne, K. (2005). Snowball sampling: using social networks to research non-heterosexual women. *International Journal of Social Research Methodology*, *8*, 47–60.

Cable, D. A. J. (2008). *The psychological contract: The development and validation of a managerial measure* (Generic). The University of Waikato.

Caldwell, C., & Karri, R. (2005, May). Organizational Governance and Ethical Systems: A Covenantal Approach to Building Trust. *Journal of Business Ethics*, *58*(1-3), 249–259.

Cantisano, G. T., Domínguez, F. M., & Depolo, M. (2008). Psychological contract breach and outcomes: Combining meta-analysis and structural equation models. *Psicothema*, *20*, 487–496.

Chen, & Chiu, S.-F. (2008, September). An Integrative Model Linking Supervisor Support and Organizational Citizenship Behavior. *Journal of Business and Psychology*, *23*(1/2), 1–10.

Chen, Tsui, A. S., & Farh, J.-L. (2002). Loyalty to supervisor vs. organizational commitment: Relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, *75*, 339–356.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*(5), 1082–1103.

Chou, R. J.-A., & Robert, S. A. (2008, #jun#). Workplace Support, Role Overload, and Job Satisfaction of Direct Care Workers in Assisted Living. *Journal of Health and Social Behavior*, *49*(2), 208–222.

Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of Applied Psychology*, *92*(3), 666–680.

Cole, M. S., Schaninger, W. S., Harris, S. G., et al. (2002). The workplace social exchange network a multilevel, conceptual examination. *Group & Organization Management*, *27*(1), 142–167.

Conway, N., & Briner, R. (2005). *Understanding psychological contracts at work: a critical evaluation of theory and research*. Oxford University Press, USA.

Conway, N., & Briner, R. B. (2009). Fifty years of psychological contract research: What do we know and what are the main challenges. *International review of industrial and organizational psychology*, *24*(71), 71–131.

Conway, N., Kiefer, T., Hartley, J., & Briner, R. B. (2014). Doing More with Less? Employee Reactions to Psychological Contract Breach via Target Similarity or Spillover during Public Sector Organizational

Change. *British Journal of Management*, *25*(4), 737–754.

Coyle-Shapiro, J. (2001). Managers: Caught in the middle of a psychological contract muddle. In *Annual meeting of the academy of management.* Washington, DC.

Coyle-Shapiro, J., & Conway, N. (2005). Exchange relationships: Examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*.

Coyle-Shapiro, J., & Kessler, I. (2000). Consequences Of The Psychological Contract For The Employment Relationship: A Large Scale Survey. *Journal of Management Studies*, *37*(7), 903–930.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900.

Cropanzano, R., & Rupp, D. E. (2008). Social exchange theory and organizational justice: Job performance, citizenship behaviors, multiple foci, and a historical integration of two literatures. In S. W. Gilliland, D. P. Skarlicki, & D. D. Steiner (Eds.), *Research in social issues in management: Justice, morality, and social responsibility* (pp. 63–99). Greenwich, CT: Information Age Publishing.

Csoka, L. S. (1995). A New Employer-Employee Contract? *Employment Relations Today*, *22*, 21–21.

Cullinane, N., & Dundon, T. (2006). The psychological contract: A critical review. *International Journal of Management Reviews*, *8*(2), 113–129.

Dabos, G. E., & Rousseau, D. M. (2004). Mutuality and reciprocity in the psychological contracts of employees and employers. *The Journal of applied psychology*, *89*, 52–72.

Dawes, R. M. (1994). *House of cards: Psychology and psychotherapy built on myth.* New York: NY: Free Press.

Dawson, G. S., Karahanna, E., & Buchholtz, A. (2013). A Study of Psychological Contract Breach Spillover in Multiple-Agency Relationships in Consulting Professional Service Firms. *Organization Science*, *25*(1), 149–170.

Delbridge, R. (2006). Extended review: The vitality of labour process analysis [Book reviews]. *Organization Studies*.

de Vos, A., Buyens, D., & Schalk, R. (2003). Psychological contract development during organizational socialization: adaptation to reality and the role of reciprocity. *Journal of Organizational Behavior*, *24*(5), 537–559.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method* (Vol. 2). Wiley New York.

Douglas, C., & Gardner, W. L. (2004). Transition to selfâĂŘdirected work teams: implications of transition time and selfâĂŘmonitoring for managers' use of influence tactics. *Journal of Organizational Behavior*, *25*.

Edwards, B. D., Bell, S. T., Arthur, W., Jr, & Decuir, A. D. (2008). Relationships between Facets of Job Satisfaction and Task and Contextual Performance. *Applied Psychology*, *57*(3), 441–465.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500–507.

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, *87*(3), 565–573.

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Publications.

Eschleman, K. J., Bowling, N. A., Michel, J. S., & Burns, G. N. (2014). Perceived intent of supervisor as a moderator of the relationships between abusive supervision and counterproductive work behaviours. *Work & Stress*.

Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet research*, *15*(2), 195–219.

Farnham, D., & Horton, S. (1993). Managing private and public organisations. In *Managing the new public services* (pp. 27–52). Springer.

Fenlason, K. J., & Beehr, T. A. (1994). Social support and occupational stress: Effects of talking to others. *Journal of organizational behavior*, *15*(2), 157–175.

Field, A. (2011). *Discovering Statistics Using SPSS (Introducing Statis-*

tical Method). Sage Publications.

Field, A., Miles, J., & Field, Z. (2013). *Discovering statistics using r*. Sage.

Finch, W. H., Bolin, J. E., & Kelley, K. (2014). *Multilevel modeling using r*. CRC Press.

Fink, A. (2013). *Conducting research literature reviews: From the internet to paper*. Sage Publications.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior*. Reading, MA: Addison-Wesley.

Fletcher, J. (2001). *Disappearing acts: Gender, power, and relational practice at work*. The MIT Press.

Flood, P. C., Turner, T., Ramamoorthy, N., & Pearson, J. (2001). Causes and consequences of psychological contracts among knowledge workers in the high technology and financial services industries. *The International Journal of Human Resource Management*, *12*(7), 1152–1165.

Ford, L. R., & Seers, A. (2006). Relational leadership and team climates: Pitting differentiation versus agreement. *The Leadership Quarterly*, *17*(3), 258–270.

Galvin, J. E., & McKinney, V. R. (2005). From me to we: the role of the psychological contract in team formation. In *Proceedings of the 38th hawaii international conference on system sciences.*

Grace, J. B., & Bollen, K. A. (2005). Interpreting the results from multiple regression and structural equation models. *Bulletin of the Ecological Society of America*, *86*(4), 283–295.

Guchait, P., Cho, S., & Meurs, J. A. (2015). Psychological Contracts, Perceived Organizational and Supervisor Support: Investigating the Impact on Intent to Leave Among Hospitality Employees in India. *Journal of Human Resources in Hospitality & Tourism*, *14*(3), 290–315.

Guest, D. E. (1987). Human resource management and industrial relations. *Journal of Management Studies*, *24*(5), 503âĂŞ521.

Guest, D. E. (1998). Is the psychological contract worth taking seriously? *Journal of Organizational Behavior*, *19*, 649–664.

Guest, D. E., & Conway, N. (2002). Communicating the psychological contract: an employer perspective. *Human Resource Management Journal*, *12*, 22–38.

Gupta, B., Agarwal, A., Samaria, P., & Sarda, P. (2012). Organizational commitment & psychological contract in knowledge sharing behaviour. *Indian Journal of Industrial Relations*, *47*(4), 737–749.

Hackman, J. R., & Oldham, G. R. (1974). *The Job Diagnostic Survey: An Instrument for the Diagnosis of Jobs and the Evaluation of Job Redesign Projects.* New Haven, CT: Yale University, Department of Administrative Sciences.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Pearson Prentice Hall Upper Saddle River, NJ.

Henderson, D. J., Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2008). Leader–member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology*, *93*(6), 1208–1219.

Herman, H. M. T. (2014). Linking leader-member exchange differentiation to work team performance. *Leadership & Organization Development Journal*, *35*(8), 710–724.

Herriot, P., Manning, W. E. G., & Kidd, J. M. (1997). The Content of the Psychological Contract. *British Journal of Management*, *8*, 151–162.

Hoffman, K. D., & Ingram, T. N. (1992). Service provider job satisfaction and customer oriented performance. *Journal of Services Marketing*.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values.* Sage Publications, Inc.

Hofstede, G. (2001). *Culture's consequences: comparing values, behaviors, institutions, and organizations across nations.* Thousand Oaks, CA [etc.]: Sage.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind : intercultural cooperation and its importance for survival* (3rd ed.). New York: McGraw-Hill.

Hood, W. W., & Wilson, C. S. (2003). Informetric studies using databases:

Opportunities and challenges. *Scientometrics*, *58*(3), 587–608.

Howell, J. P., Bowen, D. E., Dorfman, P. W., Kerr, S., & Podsakoff, P. M. (1997). Leadership: understanding the dynamics of power and influence in organizations. In R. P. Vecchio (Ed.), (p. 381-395). Notre Dame, IN: University of Notre Dame Press.

Hughes, R. (2008). Vignettes. In *The sage encyclopedia of qualitative research methods.* Thousand Oaks CA: Sage Publications.

Hughes, R., & Huby, M. (2004). The construction and interpretation of vignettes in social research. *Social Work and Social Sciences Review-An International Journal of Applied Re*, *11*(1), 36–51.

Hutton, D., & Cummins, R. (1997). Development of the Psychological Contract Inventory (PsyCon). *Australian Journal of Career Development*, *6*(3), 35–41.

Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *92*(1), 269–277.

Ironson, G. H., Smith, P. C., & Brannick, M. T. (1989). Construction of a Job in General scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, *74*(2), 193-200.

Janssens, M., Sels, L., & Van Den Brande, I. (2003). Multiple Types of Psychological Contracts: A Six-cluster Solution. *Human Relations*, *56*, 1349–1378.

Jenkins, N., Bloor, M., Fischer, J., Berney, L., & Neale, J. (2010). Putting it in context: the use of vignettes in qualitative interviewing. *Qualitative Research*, *10*, 175–198.

Johannisson, B. (1987). Beyond process and structure: social exchange networks. *International Studies of Management & Organization*, *17*(1), 3-23.

Johnson, J. L., & O'Leary-Kelly, A. M. (2003). The Effects of Psychological Contract Breach and Organizational Cynicism: Not All Social Exchange Violations Are Created Equal. *Journal of Organizational Behavior*, *24*(5), 627–647.

Johnson, P., & Cassell, C. (2001). Epistemology and work psychology: New agendas. *Journal of Occupational and Organizational Psychol-*

ogy(74), 125–143.

Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, *92*(5), 1286–1298.

Kanter, R. M. (1972). *Commitment and community: Communes and utopias in sociological perspective* (Vol. 36). Harvard University Press.

Karatepe, O. M. (2012). The Effects of Coworker and Perceived Organizational Support on Hotel Employee Outcomes: The Moderating Role of Job Embeddedness. *Journal of Hospitality & Tourism Research*, *36*(4), 495–516.

Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. Wiley.

Keef, S., & Harcourt, M. (2001). The pluralism of commitment: The New Zealand fire service. *Research and Practice in Human Resource Management*, *9*(2), 93-106.

Kelloway, E. K., & Barling, J. (2000, September). Knowledge work as organizational behavior. *International Journal of Management Reviews*, *2*(3), 287–304.

Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational behavior and human performance*, *22*(3), 375–403.

Kickul, J., Lester, S. W., & Finkl, J. (2002). Promise breaking during radical organizational change: do justice interventions make a difference? *Journal of Organizational Behavior*, *23*, 469–488.

King, A., Simboli, B., & Rom, K. (2012). Jstor's" data for research": A bibliometric analysis of mathematics in economics. *Issues in Science and Technology Librarianship*.

Kogalovsky, M. R. (2013). Metadata in computer systems. *Programming and Computer Software*, *39*(4), 182–193.

Kossek, E. E., Pichler, S., & Bodner, T. (2011). Workplace social support and work–family conflict: A metaâĂŘanalysis clarifying the influence of general and work–familyâĂŘspecific supervisor and organi-

zational support. *Personnel Psychology*, *64*, 289-313.

Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. (2001). Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Personnel Psychology*.

Kristensen, N., & Johansson, E. (2008). New evidence on cross-country differences in job satisfaction using anchoring vignettes. *Labour Economics*, *15*, 96–117.

Kunze, M., & Phillips, J. (2012). The Influence of Employee Affect on Leader-Member Exchange and Perceptions of Psychological Contract Violation.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2015, March). Perceived Organizational Support: A Meta-Analytic Evaluation of Organizational Support Theory. *Journal of Management*, 1-31.

Kutaula, S. (2014). *Antecedents and outcomes of psychological contract fulfillment: an empirical study conducted in india* (Unpublished doctoral dissertation). Cardiff University.

Landry, C. F. (2006). Work Roles , Tasks , and the Information Behavior of Dentists. *Journal of the American Society for Information Science*, *57*, 1896–1908.

Lapalme, M., & Simard, G. (2011). The influence of psychological contract breach on temporary workers' commitment and behaviors: A multiple agency perspective. *Journal of Business and . . . .*

Lavelle, J. J., Brockner, J., Konovsky, M. A., Price, K. H., & Henley, A. M. Y. B. (2009). Commitment , procedural fairness , and organizational citizenship behavior : a multifoci analysis y , z. *Journal of Organizational Behavior*, *357*, 337–357.

Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a Multifoci Approach to the Study of Justice, Social Exchange, and Citizenship Behavior: The Target Similarity Model. *Journal of Management*, *33*, 841–866.

Lawler, E. (1992). Affective attachments to nested groups: A choice-process theory. *American Sociological Review*, *57*(3), 327–339.

Lee, C., & Tinsley, C. (2000). Psychological and normative contracts of

work group members in the United States and Hong Kong. *Psychological contracts in . . . .*

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, *87*(1), 131-142.

Lepine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, *87*(1), 52–65.

Lester, S. W., Turnley, W. H., Bloodgood, J. M., & Bolino, M. C. (2002). Not seeing eye to eye: differences in supervisor and subordinate perceptions of and attributions for psychological contract breach. *Journal of Organizational Behavior*, *23*, 39–56.

Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., & Solley, C. M. (1962). *Men, management, and mental health.* Harvard University Press.

Lewin, K. (1943). Defining the 'field at a given time.'. *Psychological review*.

Li, Y., & Baron, J. (2012). Reading and transforming data format [Book Section]. In *Behavioral research data analysis with r* (p. 19-37). Springer.

Liao, H., Liu, D., & Loi, R. (2010, October). Looking at Both Sides of the Social Exchange Coin: A Social Cognitive Perspective on the Joint Effects of Relationship Quality and Differentiation on Creativity. *Academy of Management Journal*, *53*(5), 1090–1109.

Liaw, Y.-J., Chi, N.-W., & Chuang, A. (2009, November). Examining the Mechanisms Linking Transformational Leadership, Employee Customer Orientation, and Service Performance: The Mediating Roles of Perceived Supervisor and Coworker Support. *Journal of Business and Psychology*, *25*(3), 477–492.

"Linkedin". (2012). *"about us | linkedin".* Retrieved 2014-08-17, from `https://www.linkedin.com/about-us?trk=hb_ft_about`

Liu, J., Siu, O. L., & Shi, K. (2010). Transformational Leadership and Employee Well–Being: The Mediating Role of Trust in the Leader and Self–Efficacy. *Applied Psychology*.

Loi, R., Ao, O. K., & Xu, A. J. (2014). Perceived organizational support and coworker support as antecedents of foreign workers' voice and psychological stress. *International Journal of Hospitality Management*, *36*, 23–30.

Love, M. S., & Forret, M. (2008). Exchange Relationships at Work: An Examination of the Relationship Between Team-Member Exchange and Supervisor Reports of Organizational Citizenship Behavior. *Journal of Leadership & Organizational Studies*, *14*(4), 342–352.

Maertz, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, *28*(8), 1059–1075.

March, J. E., & Simon, H. A. (1958). *Organizations*. New York, NY: John Wiley & Sons, Inc.

Marks, A. (2001). Developing a multiple foci conceptualization of the psychological contract. *Employee Relations*, *23*, 454–469.

Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, *43*, 738–748.

McCormack, D., Casimir, G., & Djurkovic, N. (2006). The concurrent effects of workplace bullying, satisfaction with supervisor, and satisfaction with co-workers on affective commitment among schoolteachers in China. *International Journal of Conflict Management*.

McDermott, A. M., Conway, E., Rousseau, D. M., & Flood, P. C. (2013, March). Promoting Effective Psychological Contracts Through Leadership: The Missing Link Between HR Strategy and Performance. *Human Resource Management*, *52*(2), 289–310.

McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of applied psychology*, *79*(6), 836.

Meckler, M., Drake, B. H., & Levinson, H. (2003). Putting Psychology

Back into Psychological Contracts. *Journal of Management Inquiry*, *12*, 217–228.

Meier, K., Brudney, J., & Bohte, J. (2011). *Applied statistics for public and nonprofit administration*. Cengage Learning.

Menninger, K. (1958). *Theory of psychoanalytic technique.* [Book]. Basic Books.

Menninger, K. (1973). *Theory of psychoanalytic technique.* New York, NY: Basic Books.

Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, *76*(6), 845.

Morin, A. J. S., Vandenberghe, C., Boudrias, J. S., Madore, I., Morizot, J., & Tremblay, M. (2011). Affective commitment and citizenship behaviors across multiple foci. *Journal of Managerial Psychology*, *26*(8), 716–738.

Morrison, E., & Robinson, S. (1997). When employees feel betrayed: a model of how psychological contract violation develops. *Academy of management review*, *22*(1), 226–256.

Morrow, P. C. (1983). Concept redundancy in organizational research: The case of work commitment. *Academy of management Review*, *8*(3), 486–500.

Motowidlo, S. J. (2000). Some basic issues related to contextual performance and organizational citizenship behavior in human resource management. *Human Resource Management Review*, *10*(1), 115–126.

Mueller, C. W., & Lawler, E. J. (1999). Commitment to Nested Organizational Units: Some Basic Principles and Preliminary Findings. *Social Psychology Quarterly*.

Mulki, J. P., Jaramillo, J. F., & Locander, W. B. (2008). Critical Role of Leadership on Ethical Climate and Salesperson Behaviors. *Journal of Business Ethics*, *86*(2), 125–141.

Ndiwane, A. (1999). The effects of community, coworker and organizational support to job satisfaction of nurses in Cameroon. *The ABNF*

journal.

Ng, T. W. H., & Sorensen, K. L. (2008). Toward a Further Understanding of the Relationships Between Perceptions of Support and Work Attitudes: A Meta-Analysis. *Group & Organization Management*, *33*(3), 243–268.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/DC Heath and Com.

Pate, J., Martin, G., & McGoldrick, J. (2003). The impact of psychological contract violation on employee attitudes and behaviour. *Employee Relations*, *25*, 557–573.

Pavlou, P. A., & Gefen, D. (2005). Psychological contract violation in online marketplaces: Antecedents, consequences, and moderating role. *Information Systems Research*, *16*(4), 372-399.

Pond, S. B., III, & Geyer, P. D. (1991, October). Differences in the relation between job satisfaction and perceived work alternatives among older and younger blue-collar workers. *Journal of Vocational Behavior*, *39*(2), 251–262.

Porter, A., Kongthon, A., & Lu, J. C. (2002). Research profiling: Improving the literature review. *Scientometrics*, *53*(3), 351-370.

Quinn, R. P., & Staines, G. L. (1979). The 1977 quality of employment survey: Descriptive statistics, with comparison data from the 1969-70 and the 1972-73 surveys.

Raja, U., Johns, G., & Ntalianis, F. (2004). The Impact of Personality on Psychological Contracts. *The Academy of Management Journal*, *47*, 350.

Rayton, B. A., & Yalabik, Z. Y. (2014). Work engagement, psychological contract breach and job satisfaction. *International Journal of Human Resource Management*, *25*(17), 2382–2400.

Reichers, A. (1986). Conflict and organizational commitments. *Journal of Applied Psychology*, *71*(3), 508.

Restubog, S., Hornsey, M., Bordia, P., & Esposo, S. (2008). Effects of Psychological Contract Breach on Organizational Citizenship Behaviour: Insights from the Group Value Model. *Journal of Management Studies*, *45*(8), 1377–1400.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*.

Riketta, M. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behavior*.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *The Academy of Management Journal*, *37*, 137–152.

Robinson, S. L., & Morrison, E. W. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of Organizational Behavior*, *16*, 289–298.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the Psychological Contract: Not the Exception but the Norm. *Journal of Organizational Behavior*, *15*(3), 245–259.

Rosenberg, M. (1990). Reflexivity and emotions. *Social Psychology Quarterly*, *53*, 3–12.

Rost, K., Weibel, A. A., & Osterloh, M. (2007). *Good Organizational Design for Bad Motivational Dispositions?* SSRN.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, *2*, 121–139.

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, *11*, 389–400.

Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. SAGE Publications, Inc.

Rousseau, D. M. (1998). Why Workers Still Identify with Organizations. *Journal of Organizational Behavior*, *19*, 217–233.

Rousseau, D. M. (2000). *Psychological contract inventory technical report* (Tech. Rep.).

Rousseau, D. M. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*.

Rousseau, D. M. (2003). Extending the psychology of the psychological contract : A reply to " Putting Psychology Back into Psychological Contracts". *Journal of Management*.

Rousseau, D. M. (2005). Developing Psychological Contract Theory. In K. G. Smith & M. Hitt (Eds.), *Great minds in management* (pp. 190–214). New York: Oxford University Press.

Rousseau, D. M. (2011). The individual-organization relationship: The psychological contract. In S. Zedeck (Ed.), *Apa handbook of industrial and organizational psychology* (Vol. 3, pp. 191–220). Washington, DC: American Psychological Association.

Rousseau, D. M., & Anton, R. J. (1988). Fairness and implied contract obligations in job terminations: A policy-capturing study. *Human Performance*, *1*, 273–289.

Rousseau, D. M., & McLean Parker, J. (1993). The contracts of individuals and organizations. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 1–43). Greenwich, CT: JAI Press.

Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts : Issues , alternatives and measures. *Journal of Organizational Behavior*, *695*, 679–695.

Roznowski, M. (1989). Examination of the measurement properties of the job descriptive index with experimental items. *Journal of Applied Psychology*, *74*(5), 805.

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, *89*(1), 925–946.

Sanchez, J. I., Pastor, J. C., & Rodriguez, A. (2012). Supervisor and coworker support: a source congruence approach to buffering role conflict and physical stressors. *The International Journal of Human Resource Management*.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. Essex: Financial Times/Prentice Hall.

Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in

leadership research. *Academy of Management Journal*.

Schein, E. H. (1965). *Organizational psychology* [Book]. Engelwood Cliffs, NJ.

Schein, E. H. (1970). *Organizational Psychology*. Engelwood Cliffs, NJ: Prentice- Hall.

Schein, E. H. (1980). *Organizational Psychology*. Engelwood Cliffs, NJ: Prentice- Hall.

Schoenberg, N. E., & Ravdal, H. (2000). Using vignettes in awareness and attitudinal research. *International Journal of Social Research Methodology*, *3*(1), 63–74.

Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organizational behavior and human decision processes*, *43*(1), 118–135.

Senior, B. (1996, May). Team performance: using repertory grid technique to gain a view from the inside. *Journal of Managerial Psychology*, *11*(3), 26–32.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996a, June). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology*, *81*(3), 219.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996b, June). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology*, *81*(3), 219.

Shacklock, K., Brunetto, Y., Teo, S., & Farr-Wharton, R. (2014). The role of support antecedents in nurses' intentions to quit: the case of Australia. *Journal of advanced nursing*, *70*(4), 811–822.

Shamir, B. (1995). Social distance and charisma: Theoretical notes and an exploratory study. *The Leadership Quarterly*, *6*(1), 19–47.

Sherwood, D. E., & Lee, T. D. (2003). Schema theory: critical review and implications for the role of cognition in a new theory of motor learning. *Research quarterly for exercise and sport*, *74*, 376–382.

Shore, L. M., & Barksdale, K. (1998). Examining degree of balance and level of obligation in the employment relationship: A social ex-

change approach [Journal article]. *Journal of organizational behavior*, *19*(s 1), 731-744.

Shore, L. M., Tetrick, L. E., Taylor, M., Coyle-Shapiro, J., Liden, R. C., McLean, J., ... others (2004). The employee-organizational relationship: a timely concept in a period of transition. , *23*, 291–370.

Skarlicki, D. P., & Latham, G. P. (1996). Increasing citizenship behavior within a labor union: A test of organizational justice theory. *Journal of Applied Psychology*, *81*(2), 161–169.

Sloan, M. M. (2012, January). Unfair Treatment in the Workplace and Worker Well-Being: The Role of Coworker Support in a Service Work Environment. *Work and Occupations*, *39*(1), 3–34.

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*(653-663).

Snipes, R. L., Oswald, S. L., & LaTour, M. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: an employee-level analysis. *Journal of Business Research*.

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American journal of community psychology*, *13*(6), 693-713.

Sternberg, R. J. (1999). *Congnitive Psychology*. Harcourt Brace.

Stinglhamber, F., & Vandenberghe, C. (2003, May). Organizations and Supervisors as Sources of Support and Targets of Commitment: A Longitudinal Study. *Journal of Organizational Behavior*, *24*(3), 251–270.

Sverdrup, T. E., & Schei, V. (2013). The power of reciprocity: Horizontal psychological contracts and group functioning. In *Academy of management proceedings* (Vol. 2013, p. 13710).

Sverdrup, T. E., & Schei, V. (2015, October). "Cut Me Some Slack": The Psychological Contracts as a Foundation for Understanding Team Charters. *The Journal of Applied Behavioral Science*, *51*(4), 451–478.

Swift, M. L., & Virick, M. (2013, May). Perceived Support, Knowledge Tacitness, and Provider Knowledge Sharing. *Group & Organization*

Management, *38*(6), 717–742.

Tan, H. H., & Tan, C. (2000). Toward the differentiation of trust in supervisor and trust in organization. *Genetic*.

Taylor, M. S., & Tekleab, A. G. (2004). Taking stock of psychological contract research: Assessing progress, addressing troublesome issues, and setting research priorities. *The Employment relationship: Examining psychological and contextual perspectives*, 253–283.

Tekleab, A. G., Takeuchi, R., & Taylor, M. S. (2005, #feb#). EXTENDING THE CHAIN OF RELATIONSHIPS AMONG ORGANIZATIONAL JUSTICE, SOCIAL EXCHANGE, AND EMPLOYEE REACTIONS: THE ROLE OF CONTRACT VIOLATIONS. *Academy of Management Journal*, *48*(1), 146–157.

Tekleab, A. G., & Taylor, M. S. (2003). Aren't there two parties in an employment relationship? Antecedents and consequences of organization-employee agreement on obligations and violations. *Journal of Organizational Behavior*, *24*(585-608).

Thoits, P. A. (1985). Social support and psychological well-being: Theoretical possibilities. In *Social support: Theory, research and applications* (pp. 51–72). Springer.

Tjosvold, D., & Tjosvold, M. M. (1995). Cooperation theory, constructive controversy, and effectiveness: Learning from crises. *Team effectiveness and decision making in organizations*, 79–112.

Truss, K., Soane, E., Delbridge, R., Alfes, K., Shantz, A., & Petrov, G. (2011, January). Employee engagement, organisational performance and individual well-being: exploring the evidence, developing the theory. *The International Journal of Human Resource Management*, *22*(1), 232–233.

Tucker, S., Chmiel, N., Turner, N., Hershcovis, M. S., & Stride, C. B. (2008, October). Perceived organizational support for safety and employee safety voice: The mediating role of coworker support for safety. *Journal of Occupational Health Psychology*, *13*(4), 319.

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The Impact of Psychological Contract Fulfillment on the Performance of In-Role and Organizational Citizenship Behaviors. *Journal*

of . . . , 29(2), 187–206.

Turnley, W. H., & Feldman, D. C. (1999). A Discrepancy Model of Psychological Contract Violations. *Human Resource Management Review*, *9*, 367–386.

Van Selm, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality and Quantity*, *40*(3), 435–456.

Vonesh, E., & Chinchilli, V. M. (1996). *Linear and nonlinear models for the analysis of repeated measurements*. CRC press.

Wanous, J. (1982). *Organizational entry: Recruitment, selection, and socialization of newcomers*. Addison-Wesley Pub. Co.

Wasti, S. A., & Can, Ö. (2008, December). Affective and normative commitment to organization, supervisor, and coworkers: Do collectivist values matter? *Journal of Vocational Behavior*, *73*(3), 404–413.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997, February). PERCEIVED ORGANIZATIONAL SUPPORT AND LEADER-MEMBER EXCHANGE: A SOCIAL EXCHANGE PERSPECTIVE. *Academy of Management Journal*, *40*(1), 82–111.

Weiss, & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews.*

Weiss, Dawis, R. V., & England, G. W. (1967). Manual for the minnesota satisfaction questionnaire. *Minnesota studies in vocational rehabilitation*.

Werner, J. M., & DeSimone, R. L. (2006). *Human resource development*. South-Western Pub.

Wilks, T. (2004). The Use of Vignettes in Qualitative Research into Social Work Values. *Qualitative Social Work*, *3*, 78–87.

Willenbrock, N. L., & Grohmann, A. (2013). Promoting Multifoci Citizenship Behavior Time Lagged Effects of Procedural Justice, Trust, and Commitment. *Applied Psychology: An International Review*, *62*(3), 454–485.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organi-

zational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, *17*(3), 601–617.

Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). Structural equation modeling in management research: a guide for improved analysis. *The Academy of . . .*, *3*, 543–604.

Wilson, J., & While, A. E. (1998). Methodological issues surrounding the use of vignettes in qualitative research. *Journal of Interprofessional Care*, *12*, 79–86.

Wilson, R. E., Gosling, S. D., & Graham, L. T. (2012). A review of facebook research in the social sciences. *Perspectives on Psychological Science*, *7*(3), 203–220.

Wright, J. T. (1988). Conditions for effectiveness. *New Directions for Higher Education*, *1988*(61), 87–91.

Wright, T. A., Larwood, L., & Doherty, E. M. (1996). Use and Misuse of the Psychological Contract. *Journal of Management Inquiry*, *5*, 216.

Yagil, D. (1998). Charismatic leadership and organizational hierarchy: Attribution of charisma to close and distant leaders. *The Leadership Quarterly*, *9*(2), 161–176.

Yancey, A. K., Ortega, A. N., & Kumanyika, S. K. (2006). Effective recruitment and retention of minority research participants. *Annu. Rev. Public Health*, *27*, 1–28.

Yu, C. H. (2002). An overview of remedial tools for the violation of parametric test assumptions in the sas system. In *Proceedings of 2002 western users of sas software conference* (Vol. 172, p. 178).

Zhao, H., Wayne, S., Glibkowski, B., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, *60*(3), 647–680.