Developing and validating a scale of altruistic leadership

Ksenia Zheltoukhova

BA Psychology (Higher School of Economics, Moscow)
MA Economy, State and Society (University College London)
MA European Studies (Jagiellonian University, Krakow)

A thesis submitted in fulfilment of the requirements for the degree of PhD in Management

Lancaster University Management School

June 2016

I declare that this thesis is my own work and has not been submitted in any form to the award of a higher degree elsewhere.

Word count

Abstract: 293

Thesis: 65,423

Appendices: 12,696

Abstract

The focus of many disciplines on cooperation as a strategy for effective societal functioning stimulates continuing debate on altruism generally and altruistic leadership more specifically. Theoretical articulation of the concept of altruistic leadership is limited, with most leadership scholars focusing on self-sacrificial behaviours, rather than leaders' motivational state. This thesis draws on the social science literature to address the question of the nature of altruistic leadership and its effects, using a mixed-method approach.

A new measure of altruistic leadership was developed using an exploratory survey of 806 managers and 1,049 employees, and qualitative interviews with leader-follower pairs eliciting 35 critical incidents describing altruistic leadership. Validity and reliability of the scale were then tested in a survey of a matched sample of 184 managers and 532 employees working in four organisations in the UK financial services sector.

The contribution of this research to the field is twofold. First, two new dimensions of the altruistic leadership construct – expectation to bear costs of self-sacrifice and empathic concern – were revealed. Additionally, altruistic leadership predicted follower perceptions of leader effectiveness, organisational climate and support for creativity above the variance explained by transformational and servant leadership. Followers reported the least positive leadership outcomes if their leaders considerably overestimated how altruistic they were, compared to the ratings given to them by followers.

Theoretically, the thesis enhances our understanding of the nature and effects of altruistic leadership, raising important questions about its role in the work of

organisations. This insight could act as a foundation for further studies of altruistic motivation of leaders in experimental settings. The scale is also practically useful as a tool for leader recruitment, development, and self-reflection. Future studies should continue applying this scale across a range of organisational settings to examine how altruistic leadership is expressed.

Acknowledgements

Completing this PhD has been a profound professional and emotional experience beyond anything that I imagined at the start. It would not have been possible without the support that I received from many people.

First and foremost, I am indebted to my supervisor Professor Michael West for his wisdom that guided me on this journey. Not only has Mike offered deep academic expertise, but he also offered advice with such kindness that gave me the motivation and confidence to keep going during these four years.

I would also like to thank my second supervisor Professor John Burgoyne for his perspective and constructive suggestions that enabled me to complete this work.

Lancaster University provided excellent conditions and support for development of this research. I'd like to thank the members of the PhD review panel, Professors Stefanos Mouzas and Paul Sparrow, for their helpful suggestions and the fantastic debate we had in the meetings. Also, Matthew Watson and Sarah Patterson at the Management School, who patiently responded to all of my queries about enrolment, progression, and completion of the programme.

I am grateful to all those who offered time to contribute to the interviews and surveys. It is their reflections that allowed me to achieve a deeper understanding of the subject of my thesis.

Both my employers – first, The Work Foundation, and then CIPD – have provided funding for my training. I would like to acknowledge several individuals in particular: Dr Wilson Wong and Vanessa Robinson for championing my development and

growth, and Marion Craig for her enormous help with proofreading and formatting the thesis in its final stages.

A special thanks to my family, who believed in me from the start of this journey, and Ryan for his unconditional support and love, which encouraged me to come this far.

Table of contents

Chapter 1. Introduction	1
1.1 Relevance of the topic: why altruistic leadership?	2
1.2 Purpose of current research and its contribution to knowledge	5
1.3 Thesis organisation	8
Chapter 2. Where does altruism fit in the leadership theory?	11
2.1 What is effective leadership?	13
2.1.1 Mechanisms of leader influence	15
2.1.2 Focus of leadership	21
2.1.3 Morality of leaders	27
2.1.4 Summary	32
2.2 Is there evidence for altruism in leadership?	34
2.2.1 Self-sacrifice in transformational leadership theories	35
2.2.2 Servant leadership theory	37
2.2.3 Ethical leadership theory	40
2.2.4 Spiritual leadership theory	42
2.2.5 Summary	44
2.3 What is altruism?	46
2.3.1 Clarifying the construct of altruism	46
2.3.2 Normative approaches to altruistic motivation	50
2.3.3 Psychological theories of altruistic motivation	54

	2.3.4 Summary	57
	2.4 Integration of theory and research questions	57
C	Chapter 3. Methodology	61
	3.1 Research philosophy and approach	62
	3.2 Research strategy and methods	66
	3.3 Exploratory survey	70
	3.4 Critical incident technique	71
	3.5 Quantitative survey of leaders and followers	73
	3.6 Sampling	77
	3.7 Summary	80
C	Chapter 4. Study 1: Exploratory survey of the UK workforce	83
	4.1 Sampling, recruitment, and ethical considerations	83
	4.2 Questionnaire design	87
	4.3 Measures	88
	4.4 Distribution of the online survey and collation of the responses	91
	4.5 Data analysis	92
	4.6 Results	93
	4.7 Discussion	106
	4.8 Study limitations	114
	4 9 Summary	115

C	Chapter 5. Study 2: Interviews with leaders and followers	117
	5.1 Sampling, recruitment, and ethical considerations	117
	5.2 Question design	120
	5.3 Piloting of the questionnaire	121
	5.4 Data collection	122
	5.5 Data analysis	123
	5.6 Results	125
	5.7 Discussion	144
	5.8 Study limitations	146
	5.9 Summary	148
C	Chapter 6. Study 3: Survey of leaders and their followers	151
	6.1 Formulating hypotheses for testing	151
	6.2 Sample design, recruitment, and ethical considerations	156
	6.3 Questionnaire design	160
	6.4 Measures	164
	6.5 Distribution of the online survey and collation of the responses	167
	6.6 Data screening	169
	6.7 Data analysis	171
	6.8 Results	176
	6.9 Discussion	191
	6.10 Study limitations	10/

6.11 Summary	196
Chapter 7. Discussion and conclusions	197
7.1 Main findings	198
7.2 Theoretical contribution	203
7.3 Contribution to practice	208
7.4 Study limitations	211
7.5 Future research directions	213
7.6 Conclusions	215
References	217
Appendices	263
Appendix 1. Online information and consent form used in Study 1	265
Appendix 2. Questionnaire used in Study 1	266
Appendix 3. Study 1 detailed findings	274
Appendix 4. Advert inviting to participate in Study 2	300
Appendix 5. Information sheet used in Study 2	301
Appendix 6. Consent form used in Study 2	303
Appendix 7. Study 2 respondent profile	304
Appendix 8. Leader interview protocol used in Study 2	306
Appendix 9. Follower interview protocol used in Study 2	308
Appendix 10. E-mail invitation to Study 3 (leaders)	310
Appendix 11. E-mail invitation to Study 3 (followers)	312

Appendix 12. Information sheet and online consent used for Study 3	314
Appendix 13. Leader questionnaire used in Study 3	316
Appendix 14. Follower questionnaire used in Study 3	320
Appendix 15. Study 3 detailed findings	327

List of tables and figures

Table 1. Presence of elements of altruism in the leadership theories under review 45
Table 2. Comparison of research paradigms
Table 3. Research design69
Table 4. Summary of the research approach and methods
Table 5. Distribution of the sample by age and gender
Table 6. Distribution of the sample by industry sector and organisational size 86
Table 7. Coding frame for qualitative interviews
Table 8. Distribution of the sample by participating organisation157
Table 9. Distribution of the sample by age and gender
Table 10. Distribution of the matched sample, by participating organisation 158
Table 11. Distribution of the matched sample, by age and gender159
Table 12. Types of validity and reliability
Table 13. Pattern matrix of component loadings after direct oblimin rotation 177
Table 14. Correlations between altruistic leadership and leadership effectiveness
measures
Table 15. Summary of results of hierarchical regression analysis between altruistic
leadership and a range of leadership outcomes, when controlled for
transformational and servant leadership, entered independently185

Table 16. Summary of results of hierarchical regression analysis between altruistic
leadership and a range of leadership outcomes, when controlled for
transformational and servant leadership, entered simultaneously
Table 17. Differences in leadership outcomes between four groups of leaders
(summary of statistically significant differences)
Table A3.1. I can describe accurately the way others in the team are feeling. To what
extent do you agree or disagree with the statement? (% of leaders
agreeing/strongly agreeing vs disagreeing/strongly disagreeing)274
Table A3.2. I tend put the needs of my team members above my own. To what extent
do you agree or disagree with the following statements? (% of leaders
agreeing/strongly agreeing vs disagreeing/strongly disagreeing)275
Table A3.3. To what extent do you agree or disagree with the following statements?
(% of leaders agreeing/strongly agreeing), by number of years spent managing
people in the current organization
Table A3.4. You said that you tend to put the needs of your team above your own.
Why is this? Please select the top three reasons from the list below. (% of leaders
selecting the option), by organisation size and management level277
Table A3.5. You said that you tend to put the needs of your team above your own.
Why is this? Please select the top three reasons from the list below. (% of leaders
selecting the option), by gender and age
Table A3.6. You said that you tend to put the needs of your team above your own.
Why is this? Please select the top three reasons from the list below. (% of leaders
selecting the option), by industry sector

Table A3.7. You said that you tend to put the needs of your team above your own.
Why is this? Please select the top three reasons from the list below. (% of leaders
selecting the option), by number of years spent managing people in the current
organisation
Table A3.8. You said that you don't tend to put the needs of your team above your
own. Why is this? Please select the top three reasons from the list below. (% of
leaders selecting the option), by gender and industry sector281
Table A3.9. How often do you face situations where you have to put the interests of
the organisation (e.g. achieving an objective) above the interests and/or wellbeing
of your team members? (% of leaders selecting the option), by gender282
Table A3.10. How often do you face situations where you have to put the interests of
the organisation (e.g. achieving an objective) above the interests and/or wellbeing
of your team members? (% of leaders selecting the option), by organisation size
and industry sector
Table A3.11. How often do you face situations where you have to put the interests of
the organisation (e.g. achieving an objective) above the interests and/or wellbeing
of your team members? (% of leaders selecting the option), by management level
Table A3.12. How would you rate your line manager against the following
characteristics? (% of followers agreeing/strongly agreeing vs
disagreeing/strongly disagreeing), by industry sector

Table A3.13. How would you rate your line manager against the following
characteristics? (% of followers agreeing/strongly agreeing), by gender and
age286
Table A3.14. To what extent do you agree or disagree with the following statements
about your manager's behaviours? (% of FOLLOWERS agreeing/strongly
agreeing vs disagreeing/strongly disagreeing), by industry sector287
Table A3.15. To what extent do you agree or disagree with the following statements
about your manager's behaviours? (% of LEADERS agreeing/strongly agreeing
vs disagreeing/strongly disagreeing), by industry sector
Table A3.16. To what extent do you agree or disagree with the following statements
about your manager's behaviours? (% of followers agreeing/strongly agreeing),
by gender and age
Table A3.17. Imagine a situation where you have to make a team member work extra
Table A3.17. Imagine a situation where you have to make a team member work extra
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation.
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option),
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option), by gender and industry sector
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option), by gender and industry sector
Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option), by gender and industry sector

Table A3.19. Imagine a situation, where your manager is asking you work extra hour
to meet a deadline. Of the following, what are the top three reasons that would
make you more willing to stay? (% of followers selection the option), by gende
and industry sector29
Table A3.20. Motivation and job satisfaction scores, by leadership attributes and
behaviours (% agreeing/strongly agreeing, or satisfied/very satisfied)29
Table A3.21. Pearson r for correlations between follower-reported leaders' attribute
and behaviours and followers outcomes29
Table A3.22. Results of thematic analysis of examples of leaders putting the interest
of their teams above their own29
Table A3.23. Results of thematic analysis of examples of leaders putting their own
interests above those of the team29
Table A15.1. Number of missing data points
Table A15.2. Tests of sample homogeneity between the four banks
Table A15.3. Post-hoc tests (followers), by organisation
Table A15.4. Tests of normality
Table A15.5. Tests of normality (followers), by organisation
Table A15.6. Principal component analysis: eigenvalues
Table A15.7. Principal component analysis: communalities
Table A15.8 Principal component analysis: component matrix before rotation 33

Table A15.9. Principal component analysis: component matrix after Varimax rotation
Table A15.10. Principal component analysis: pattern matrix after Direct oblimin rotation
Table A15.11. Principal component analysis: structure matrix after Direct oblimin rotation
Table A15.12. Principal component analysis: component correlation matrix after Direct oblimin rotation
Table A15.13. Confirmatory factor analysis: goodness-of-fit indices
Table A15.14. Confirmatory factor analysis: goodness-of-fit indices, by group 342
Table A15.15. Confirmatory factor analysis: standardized coefficients
Table A15.16. Subscale means, standard deviations and Cronbach's alpha, ICC (1),
ICC (2), and interrater reliability index (rWG(J)) for the final two factors, and the
Altruistic leadership scale
Table A15.17. % of leaders with different levels of interrater reliability index (rWG(J))
Table A15.18. Mean ratings of leaders, by follower age group
Table A15.19. Post-hoc tests for differences in means on 'Empathic helping' and
Altruistic leadership, by follower age group
Table A15.20. Correlation between components of altruistic leadership and measures
of transformational and servant leadership (followers' sample)

Table A15.21. Leader groups, based on leader/follower agreement
Table A15.22. Post-hoc tests for Altruistic leadership means across the four groups of
leaders
Table A15.23. Kruskal-Wallis test results for leadership outcomes, across four groups
of leaders349
Table A15.24. Post-hoc tests for leadership outcomes means across the four groups of
leaders
Figure 1. Updated conceptual model of altruistic leadership149
Figure 2. Component structure entered in CFA
Figure 3. Groups of leaders, based on agreement in leader/follower scores
Figure A15.1. Histograms of data distribution



List of acronyms

AL – altruistic leadership

AVE – average variance extracted

CD – coefficient of determination

CFA – confirmatory factor analysis

CFI – comparative fit index

CIPD – Chartered Institute of Personnel and Development

CIT – critical incident technique

CSR – corporate social responsibility

HR – human resources

ICC – intra-class correlations

JS – job satisfaction

KMO – Kaiser-Mayer-Olkin index

LE – leader effectiveness

M-mean

OC – organisational climate

PCA – principal components analysis

RMSEA – root mean square error of approximation

RQ – research question

rWG(J) – within-group agreement index

SB – Satorra-Bentler technique

SC – support for creativity

SD – standard deviation

SL – servant leadership

SRMR – standardized root mean square residual

TL – transformational leadership

TLI – Tucker-Lewis index

Chapter 1. Introduction

In the last two decades a number of corporate leaders have been exposed for making expedient decisions guided by pursuit of short-term financial interest. These scandals have raised concerns over the true intentions of charismatic leaders, who are effective at rising into positions of power and influencing others into following their leadership, but who may be ultimately pursuing selfish goals. As a result, there is a growing interest in altruistic leaders, acting in the interests of others and the wider society (Bass & Steidlmeier 1999; Doh & Stumpf 2005; Hunter et al. 2013; Mallen et al. 2015).

In this context several leadership theories have described individuals influencing others through prosocial action – behaviours intended to benefit other members of the organisation or the wider society. These include servant leadership (Greenleaf 1977), authentic leadership (Avolio & Gardner 2005), ethical leadership (Trevino, Brown & Hartman 2003), spiritual leadership (Fry 2003) and others. Yet, while these approaches refer to altruism directly or indirectly (by including self-sacrificial behaviours that could describe altruism), very few studies examined this dimension in detail (Dinh et al. 2014). One particular weakness of these theories is the lack of attention to the motivational aspects of altruism in addition to its behavioural representation. As a result, the current conceptualisation of altruism in leadership literature does not link leaders' intentions to benefit others, their expectations of the outcomes of helping, and the act of self-sacrifice into a single construct.

This research applies the construct of altruism developed in social science literature to leaders' intentions and behaviours, arguing that altruistic leadership is distinct from other leadership styles, such as transformational and servant leadership. The thesis describes altruistic leadership from the perspectives of both leaders and followers,

with the purpose of clarifying the construct and assisting in identifying and measuring altruism as part of existing leadership styles or as a stand-alone instrument of leadership. It also addresses the current lack of research on the effects of altruistic leadership (Mallen et al. 2015) by linking it with a number of follower outcomes, including perceived leader effectiveness, job satisfaction, perceived organisational climate and support for creativity. The research aims to answer the following research questions:

- What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?
- Do congruent leader/follower ratings of altruistic leadership have better explanatory power of leader effectiveness than incongruent leader/follower ratings?

The following sections detail the relevance of the study subject in the context of current academic and practitioner focus, as well as the purpose of the research and its contribution to knowledge. The chapter concludes with an overview of the thesis structure.

1.1 Relevance of the topic: why altruistic leadership?

Effective leadership is of interest to both academic research and organisational practice as an instrument of bringing about follower and organisational outcomes.

Leadership behaviours and perceived quality of leadership have been linked to

followers' wellbeing, satisfaction, effort, as well as individual, team and unit performance (Lowe, Kroeck & Sivasubramaniam 1996; Bass et al. 2003). Specifying attributes and behaviours of effective leaders and understanding the mechanisms of leaders' impact on followers are, therefore, crucial to informing the development of leaders in practice.

But, while achievement of business objectives remains an important indicator of leader effectiveness, both scholars and practitioners are also concerned with how these objectives are delivered, paying attention to the outcomes that leaders deliver for other stakeholders, including followers and the wider society. There is now a recognition that some attributes of leaders that help them become influential – such as charisma and inspiration – can be also masking destructive values, traits and behaviours, leading to negative outcomes for followers, organisations, and the wider society (House & Howell 1992; Conger 1998a). Avolio, Walumbwa and Weber (2009) explain that the scope of academic literature on mechanisms of leadership in organisations has expanded significantly to appreciate a range of effects that leadership has on followers and other stakeholders. While the original models adopted a transactional, behaviouristic view on the exchange of rewards and performance between the leader and the follower, studies of leadership today focus much more on the intentions and character of leaders, defining and measuring their values and morality.

Destructive leadership has been linked *inter alia* with selfishness (Hogan, Curphy & Hogan 1994; Padilla, Hogan & Kaiser 2007). Selfish leaders promote themselves, and focus on their own objectives and goals, often at the expense of others and the organisation (McClelland 1970; House & Howell 1992; Bass & Steidlmeier 1999; Rosenthal & Pittinsky 2006). In a series of experiments Maner and Mead (2010)

documented the complex relationship between leadership and power, showing that individuals with high dominance motivation and those concerned about protecting their power were more likely to act selfishly, reducing the likelihood of optimal group performance. Furthermore, some have argued that the individualistic and competitive nature of Western business is at odds with altruism, calling on firms to evolve organisational processes and structures to bring about more effective ways of working (Kanungo & Conger 1993; Joseph 2015).

In turn, a range of theories attempted to describe attributes of altruistic, or selfless, leaders. These models paint an 'image of ...a serving rather than a dominant, ruling leader, and all these new leadership concepts share the common dimension of selfsacrifice rather than self-interest' (Choi & Mai-Dalton 1998: 477). While at first scholars and practitioners considered these leaders as 'extraordinary and unconventional' (van Knippenberg & van Knippenberg 2005), or 'rarely associated with the world of business' (Kanungo & Conger 1993), there is a growing body of academic and practitioner evidence regarding the prevalence of selfless leaders and the effect they can have on followers (Choi & Mai-Dalton 1999; Yorges, Weiss & Strickland 1999; De Cremer & Van Knippenberg 2004; Sandhurst 2012; Prime & Salib 2014). These studies have linked selfless leadership behaviours, for example, to organisational commitment, job satisfaction, individual and team citizenship behaviour (Liden et al. 2008; Neubert et al. 2009; Hu and Liden 2011; Mayer et al. 2012), which, in turn, can have a positive effect on organisational performance (Meyer et al. 1989; McAllister 1995; Podsakoff, Ahearne & MacKenzie 1997; Judge et al. 2001). Studying the nature of altruistic leadership therefore represents a promising direction for identifying and developing leaders that become effective by putting the interests of others before their own, improving employee and organisational outcomes.

1.2 Purpose of current research and its contribution to knowledge

Within the current focus of the literature on altruistic leadership, this thesis argues that the current conceptualisation of the construct is limited. In the leadership literature altruism has been operationalised primarily through behaviours describing leaders' sacrifice of personal interests to benefit other followers or the wider society (Choi & Mai-Dalton 1999; Barbuto & Wheeler 2006). Yet, in the social science literature altruism is a wider construct described as a motivational state, including self-sacrificial behaviours, but also an intention to bear personal costs without an expectation of a reward, as opposed to seeking benefits for self (Batson 2011). Although House and Howell (1992) conceptually described a similar distinction between personalised and socialised motivation of leaders, this difference has not been tested empirically, particularly in connection with leaders' self-sacrifice. Therefore, enhancing our current understanding of the effects of leaders' sacrifice on follower and organisational outcomes (De Cremer & Van Knippenberg 2004; Walumbwa, Hartnell & Oke 2010) by distinguishing between the different types of intentions of self-sacrificing leaders appears to be a worthwhile area of research.

This thesis aims to make a contribution to the current understanding of altruistic leadership in two ways. First, it examines the current conceptualisation of altruistic leadership and draws on the social science literature to explicate the construct. The rationale for this contribution is twofold. On the one hand, the way the current leadership literature presents and discusses 'altruism' varies across leadership models, including concepts of 'sacrifice', 'altruistic calling', 'helping' or 'serving' behaviours (see, for example, Fry 2003; van Knippenberg & van Knippenberg 2005; Barbuto & Wheeler 2006). Even models of the same leadership style do not always include

altruism, or use different indicators to describe altruistic behaviour when operationalised by different scholars (van Dierendonck 2011). One such example is servant leadership: based on Greenleaf's (1977) writings, Spears (1995) identifies ten characteristics of servant leadership, including 'stewardship' (holding something in trust and serving the needs of others) as just one of the characteristics, while Patterson (2003), exploring the same concept, finds eight behaviours of servant leaders, five of which may describe one or another aspect of altruism (demonstrating *agapao* love, humility, being altruistic, empowering and serving). Thus, a comparison of these potentially related ideas is required to clarify what is described by 'altruism' and other constructs and to establish the degree of conceptual overlap between leadership theories describing different types of self-sacrificial behaviours of leaders.

On the other hand, existing studies of self-sacrificial leadership make an implicit assumption that self-sacrifice is synonymous with altruism. Yet, social science literature is clear in distinguishing different types of reasons for individuals to self-sacrifice. One type of helping is 'prosocial' behaviour that aims to benefit others but does not involve personal sacrifice. Another type is reciprocal sacrifice, which involves forgoing of personal interest but with an expectation that the favour will be returned. Finally, there is 'selfless' concern for others, where the benefactor forgoes own interest without an expectation of any reward in return (Batson et al. 1981; Cialdini et al. 1987; Batson 2011). Only the last behaviour would be considered to describe 'true' altruism. One empirical study of leadership identified by the current research distinguished between altruism and self-sacrifice, in a survey of 127 managers in India (Singh & Krishnan 2008), however, it did not make clear how the new constructs related to established leadership styles, nor was a relationship between altruism and performance outcomes explored in organisational settings.

As its first objective, the current research therefore aims to clarify the construct of altruistic leadership relative to existing leadership theories, as well as to understand whether the distinction between altruistic and non-altruistic leadership is useful for predicting follower outcomes. Drawing on samples of leaders and followers from UK organisations, the thesis will answer the following research questions (RQ):

- RQ1a. What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- RQ1b. How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?

The second contribution of the thesis concerns the types of data collected to describe the nature of altruistic leadership and its effects in the current study. Existing empirical studies of leadership styles based on the concepts of altruism and self-sacrifice mainly considered the followers' perspective on leadership, explaining that leader effectiveness was associated with followers' favourable perceptions of leaders' behaviours, regardless of leaders' true intentions. For instance, while the possibility of both personalised and socialised leader motivations was acknowledged in the description of self-sacrificial behaviours of charismatic leaders (Choi & Mai-Dalton 1998; 1999), measures of the construct were based on the act of self-sacrifice, rather than the distinction between selfless and calculated types of helping others.

However, if altruism is conceptualised as a complex motivational state, measurement of altruistic leadership should incorporate assessment of leaders' intentions alongside their behaviours. Leaders' self-ratings can be used to collect data on their ideology and emotions, as well as inclination to act on those, and compared with followers'

perceptions of leadership (Harms & Crede 2010; Barbuto, Gottfredson & Searle 2014). A developing body of research on self-other agreement in leadership ratings indicates that both self-reported and follower-reported attributes of leadership are related to follower and organisational outcomes (Atwater et al. 1998; Cogliser et al. 2009). Inclusion and analysis of multiple perspectives on altruistic leaders therefore becomes important to understanding whether the difference in outcomes achieved by altruistic and non-altruistic leaders is linked to followers' perceptions of these individuals, and leaders' own assessment of their intentions.

As its second objective the research will compare leader and follower perspectives on altruistic leadership, aiming to establish whether there is a difference in leadership outcomes reported by followers whose scores of their leaders are similar to or different from the leaders' self-ratings. The second research question is:

RQ2. Do congruent leader/follower ratings of altruistic leadership have better explanatory power of leader effectiveness than incongruent leader/follower ratings?

1.3 Thesis organisation

The following chapters present a review of the current literature on leadership and altruism, the methodological approach chosen for the current study, and the findings of the empirical research.

Chapter 2 discusses the existing literature on the subjects of leadership and altruism. It is not a comprehensive literature review of the two literatures, but an overview aimed at setting out the existing evidence on motivation underpinning self-sacrificial leadership behaviours. For this reason the thesis begins with a review of evidence on

leadership, focusing on leadership theories that draw on the concepts of altruism and self-sacrifice, identifying gaps for further investigation. Following that, the review draws on the social science literature on altruism, arguing that distinguishing between altruistic and non-altruistic intentions of self-sacrificing leaders enhances our understanding of their effectiveness. This chapter sets the foundation for examining the construct of altruistic leadership and identifies research gaps that can be filled by answering the research questions posed in this thesis.

Chapter 3 outlines the methodological approach for the empirical part of the research. First, it explains the research philosophy and strategy, outlining a two-phase approach to developing and testing a measure of altruistic leadership. It then details the methods used in the exploratory and main stages of the research, discussing specifically the advantages of the critical incident technique and the survey method for answering the research questions.

Chapters 4, 5 and 6 focus on the research data, presenting the findings and the discussion of each of the three studies constituting the empirical part of the research in relation to the research questions:

- Study 1: exploratory survey of the UK workforce;
- Study 2: interviews with pairs of leaders and followers;
- Study 3: survey of leaders and their followers in four private sector organisations in the financial sector in the UK.

Chapter 7 concludes the thesis with an integration and discussion of the findings for each of the research questions, as well as a summary of the contribution made by the current research and its limitations.

Chapter 2. Where does altruism fit in the leadership theory?

This chapter aims to describe the theoretical framework that underpins this study. The framework builds upon two key literatures: leadership and altruism.

The first two research questions (RQ1a and RQ1b), concerned with defining the construct of altruistic leadership and establishing the differences between altruistic leadership and other leadership styles, necessitate a review of the existing literature describing altruism and related concepts in leadership. Section 2.1 opens with an overview of the development of leadership theory to date, exploring why the topic of sacrifice might have emerged in leadership theory. Due to the lack of consensus in the extant literature on the definition of 'leadership', the section does not attempt to provide a comprehensive review of leadership studies, but focuses on three key themes relevant to building a framework of altruistic leadership. These are: a) mechanisms of a leader's influence on followers; b) focus of leadership (task, relations, or change); and c) leaders' motivation to influence others. The section concludes with an explanation of how the development of leadership theory contributed to a great degree of interest in selfless motivation and behaviours in leaders.

The next section (2.2) continues to examine the existing literature on sacrificial leadership specifically. It compares and contrasts the limited empirical evidence on 'sacrifice' and related constructs (such as 'helping' and 'altruism') in leadership styles, identifying common themes and gaps. This thesis argues that the existing understanding of sacrificial behaviours of leaders is incomplete and could be enhanced by drawing on the social science literature on altruistic motivation, building towards a framework of altruistic leadership.

As this review will argue, there are considerable gaps in the current definitions of altruism in leadership literature. In order to enhance the construct of "altruistic leadership", section 2.3 explores the relevant social science literature on altruism, which is defined as 'selfless concern for the wellbeing of others'. In appreciation of the limitations of empirical research in defining the construct of altruism, it also considers a range of related constructs in the review, including 'sacrifice', 'helping behaviour', and 'concern for others'. The section opens with a brief introduction into the debate on the existence of altruistic motivation and goes on to compare two main approaches to describing its nature. For both of these – normative and psychological theories of altruistic motivation – three aspects of altruism are analysed: 1) motivation to sacrifice, 2) participants in the act of sacrifice and 3) the outcomes of the act for each of the participants. These components of altruism, drawn from the social science literature, are used to complement the existing theory of sacrificial leadership, presenting a conceptual framework of altruistic leadership.

Finally, section 2.4 integrates the reviews of the two literatures, explaining the rationale for selection of the research questions posed by this thesis. Specifically, it considers the possible aspects of altruistic leadership that are missing from the current leadership literature, but are defined by the social science literature on altruism, and outlines the gaps that will be addressed in the current research.

2.1 What is effective leadership?

Leadership is a well-developed subject area in management research (Yukl 2006). However, the majority of this literature understands leadership through the ways in which leadership becomes effective, with only some theoretical work inspecting the nature of leadership phenomenon through the lens of process philosophy (Wood 2005; Ladkin 2010). Depending on the focus of investigation (for example, individual leader or the relationship between the leader and the follower) and the level of analysis in approaching leadership effectiveness (traits, behaviours), the academic and practitioner literature associated leadership with leaders' attributes and/or followers' perceptions, and described a range of mechanisms of leaders' impact on followers' (Hernandez et al. 2011). As a result, multiple perspectives on what constitutes leadership have developed. This section considers the necessary aspects of 'effective leadership' more generally, laying the foundation for applying this theoretical framework in developing the construct of altruistic leadership.

The challenges of defining leadership originate from several substantive issues associated with identifying leaders and measuring how effective they are. The main challenge is the selection of the subjects for studies of leadership. Early studies frequently conflated leadership with leader role occupancy, which refers to simply being in a job role that requires managing subordinates (Arvey et al. 2006). Many later studies continued to examine leadership on samples of senior managers and supervisors (rather than individuals with a specific capability), perpetuating this methodological concern (Bass & Stogdill 1990; Zaccaro 2007). The second criticism is associated with the choice of indicators of leadership effectiveness, such as peer and subordinate rankings, where followers' likes and dislikes of the leader at a personal

level may impact the way they score the leader's effectiveness. Morgeson et al. (2007: 1044) pointed out that 'perceived influence is not equivalent to effectiveness, and showing that there is a correlation of a personality dimension with perceived influence does not provide a strong basis for use of this measure to select managers who will be effective'. Judge, Piccolo and Kosalka (2009) drew a further distinction, explaining that those individuals who are perceived to be leader-like are not necessarily the ones who will be selected for leadership positions, as an individual's ability to be successful in securing a formal job role is different from their ability to emerge as a leader in a group. In sum, there is a great variation of quality within the breadth of leadership literature, which impacts the scholars' ability to define and study it.

Despite the disparate ways in which the construct of leadership is operationalised, the concept of 'influence' remains central to the majority of theories. For example, acknowledging the diversity of definitions, Yukl (2006: 8) summarised leadership as 'the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives'. Most leadership approaches have built on this central theme, expressing the roles of the leader and the follower in the process of influence, and the types of influencing mechanisms in ways that are far from being linear or convergent. For the purposes of this study the construct of leadership as a process of influencing is reviewed from three important perspectives, tracing how the understanding of it evolved with the development of leadership theory, and where the origins of altruistic leadership could be found: mechanisms of leader influence, focus of leadership, and morality of leaders. The following sub-sections describe the evolution of the debate in these three areas in more detail.

2.1.1 Mechanisms of leader influence

The first significant development concerns the understanding of the mechanisms explaining the process of how leaders influence followers. Mechanisms of leader influence are processes that connect leaders' characteristics with followers' perceptions and behaviours and result in achievement of leadership goals (Hernandez et al. 2011).

The nature of leader influence remains an ongoing focus of research in the leadership literature (Avolio, Walumbwa & Weber 2009b), particularly as the variation in the levels of analysis covered by each leadership approach (leaders, followers, groups) makes it difficult to compare the mechanisms of leadership in a consistent manner. Early leadership theories attributed leaders' ability to influence others purely to their individual traits and/or behaviours, and are sometimes referred to as leader-centric theories (Mann 1959; Jennings 1960). However, with the increased focus of leadership studies on followers, a different group of follower-centric theories proposed that leaders' ability to influence instead resulted from subordinates' perceptions of an individual as an effective leader. Other subordinates may not perceive the same individual to be leader-like, and will not respond appropriately to achieve leadership goals (Meindl 1995). This inclusion of followers in the leadership effectiveness debate has largely led to the appreciation of cognitive and emotional reactions that followers demonstrate in response to the traits and behaviours of leaders (Lord, Foti & De Vader 1984; Smollan 2006; Hernandez et al. 2011). Modern leadership approaches tend to consider the whole range of influence mechanisms to describe leadership effectiveness, therefore, understanding those is relevant for defining altruistic leadership and the ways in which it becomes effective (RQ1a and RQ1b).

Trait-based mechanisms

Associating leadership effectiveness with individual traits of leaders was one of the earliest so-called "great man" theories in the study of leadership. This approach argued that effectiveness of leaders is associated with distinct characteristics of their personality (Carlyle 1840; Galton 1869; Stogdill 1948; Judge et al. 2002). As initial research in the area aimed to find a reliable way of distinguishing a leader from a non-leader, it assumed this leader-centric position, examining three broad categories of leader characteristics: 1) demographics (e.g. gender, age, physical characteristics); 2) traits associated with effective task performance (e.g. intelligence); and 3) interpersonal traits (e.g. extraversion) (Zaccaro 2007; Derue et al. 2011).

Trait leadership theories, however, suffered from the aforementioned variation in the levels of analysis used by the researchers and the range of measures used to describe leader effectiveness. Luthans (1988), for example, found differences in personality characteristics of managers with higher promotion rates and managers of units with greater performance and subordinate motivation, while both of these outcomes have been used to describe effective leadership. Similarly, the impact of context on the relationship between leader personalities and effectiveness has been explored, linking specific leader traits with achieving the common objectives of the group in a particular situation (Stogdill 1948). There is, however, limited evidence that the same personality traits can predict leader effectiveness consistently across contexts (Kenny & Zaccaro 1983; Zaccaro, Foti & Kenny 1991). Similarly, assessment of followers' descriptions of leaders found that subordinates use different personality characteristics as criteria for identifying leader-like individuals, depending on the nature of the task and the organisational context (Eden & Leviatan 1975; Rush, Thomas & Lord 1977; Weiss & Adler 1981; Lord, Foti & De Vader 1984).

Although the evidence linking personality traits to leadership outcomes is inconsistent, it is possible that certain personality characteristics act as a precondition for various leadership styles (Kirkpatrick & Locke 1996). For example, Judge and Bono (2000) and Judge et al. (2002) showed that several of the Big Five personality traits have positive correlations with leader emergence and effectiveness. Peterson et al. (2003) found a relationship between the personality characteristics of CEOs and the dynamics of the top management team, which in turn has a relationship with the measures of organisational financial performance. Benson and Campbell (2007) also reflected a non-linear relationship between personality and leadership performance, where leaders with medium high scores on certain "dark" personality traits (egocentrism, micro-management and others) received better ratings than those with extremely low or high scores on the same traits. These studies on the relationship between leader personality and leadership effectiveness led to the conclusion that traits may produce either particular leader behaviours or followers' cognitive and emotional reactions, which in turn explain leadership effectiveness (Zaccaro 2007; Derue et al. 2011).

Behaviour-based mechanisms

Approaches attempting to find universal behaviours that predicted leadership effectiveness emerged as a critique to trait models of leadership, and initially adopted a similar leader-centric perspective. The behaviours explored by these theories have been broadly placed into the two categories of task-oriented, associated with initiating structure and reaching objectives, and employee-oriented, involving consideration for others (Katz 1950; Fleishman 1953; Stogdill & Coons 1957). Only the later emergence of transformational and charismatic leadership theories highlighted a third type of leader behaviour, grouped under the broad category of change-oriented leadership (House 1977; Bass 1985; Shamir, House & Arthur 1993; Conger & Kanungo 1998),

describing ways in which leaders alter followers' motivation to connect them with collective goals. The distinction between these types of behaviours is explored in more detail in section 2.1.2.

There is no shortage of studies linking specific leader behaviours to leadership effectiveness (Judge & Piccolo 2004; Judge, Piccolo & Ilies 2004). For example, task-oriented behaviours were shown to impact clarity of team roles and relationships, team coordination and standard of performance. Employee-oriented behaviours, on the other hand, were linked to empowerment (Conger 1989; Srivastava, Bartol & Locke 2006) and participation of followers in decision-making (Kahai, Sosik & Avolio 1997). Change-oriented behaviours have been explored extensively in the past two decades, and were shown, for example, to increase followers' satisfaction, performance, and perceived levels of voice (Bass 1990; Bass & Avolio 1994; Yukl, Gordon & Taber 2002; Gil et al. 2005; Detert & Burris 2007).

Behavioural theories of leadership are, nevertheless, criticised on two important bases, similar to the criticisms of traits-based mechanisms of leadership. The first is the lack of consistency in describing and measuring distinct leader behaviours, resulting in conceptual similarity of some of the constructs, for example 'consideration' and 'transformational' actions of a leader (Derue et al. 2011). In recognition of this conceptual confusion Yukl, Gordon and Taber (2002) identified 12 specific leadership behaviours that are "relevant and meaningful" for effective leadership, associated with the leader's focus on task, people, or motivational change. However, most leadership theories do not rely on this taxonomy and continue to use their own descriptions of leadership, making it difficult to critically compare evidence on their effectiveness. Secondly, just like trait theories, leader-centric behavioural theories were found to overlook the possible mediators of the impact of these behaviours on followers,

exploring only the direct impact of leader behaviours on leadership outcomes (such as through role-modelling and task monitoring) (Hernandez et al. 2011). At the same time, emergence of change-oriented (transformational and charismatic) leadership theories highlighted that leaders may also have an impact on followers' cognition and emotions through intellectual stimulation, inspiration and charisma (Burns 1978; Bass 1990). In turn, these followers' experiences may result in follower and group outcomes that describe leadership effectiveness (House & Shamir 1993).

Cognition- and affect-based mechanisms

Cognition- and affect-based approaches to leadership effectiveness appeared in the context of increased sophistication in the fields of sociology and psychology, which offered new perspectives on the ways in which individuals interact and influence each other as part of the group. These approaches to leadership proposed that followers' reactions and perceptions mediate the link between leader traits or behaviours and leadership effectiveness (Bass 1985; Conger & Kanungo 1987; House & Shamir 1993; Choi & Mai-Dalton 1999; Jacobsen & House 2001). For example, while Extraversion (one of the Big Five personality traits) was linked with increased ability of leaders to achieve their goals (Judge et al. 2002), its impact could alternatively be explained by the followers' perception of extraverted individuals as inspirational, resulting in their increased motivation to contribute to leadership goals (Peterson et al. 2003; Bono & Judge 2004).

The interest in followers' *cognitive* reactions to leaders' traits and behaviours was associated with the emergence of insight on the dyadic relationship between leaders and followers, and social and personal identification in the leadership process (Graen & Uhl-Bien 1995; Dansereau 1996). Drawing on social exchange theories (Gouldner

1960; Greenberg & Folger 1983) these new models proposed that the relationship between leaders' characteristics and followers' outcomes was explained by the norm of reciprocity. At the leader-follower dyad level, favourable experience of treatment by the leader encouraged followers to return the benefits by showing motivation, extra-role (citizenship) behaviours, and organisational commitment (Scholl 1981; Settoon, Bennett & Liden 1996). Furthermore, at the group level developments in social identity theory highlighted the ability of transformational and charismatic leaders to create a sense of common identity and mission among followers, reiterating the collective norms and leading to higher leader effectiveness, greater levels of commitment and motivation, willingness to make personal sacrifices and, therefore, heightened performance (Shamir, House & Arthur 1993; Bass & Avolio 1994; Lowe, Kroeck & Sivasubramaniam 1996). Finally, social learning theory (Bandura 1977) emphasised the collective nature of learning, where individuals learned by identifying and copying the attitudes, values and behaviours of attractive and credible models. As a cognitive mechanism of leadership influence, social learning was linked to leader's ability to transfer knowledge and skills and create a shared understanding of goals within the team (Shamir, House & Arthur 1993; Brown, Treviño & Harrison 2005; Brown & Trevino 2006).

A follower's reaction to a leader may also be *affect*-based (Lord & Brown 2003), as highlighted by both transformational and charismatic theories. For example, Bass (1985) wrote about emotional arousal of followers associated with leader's inspirational motivation behaviours, like instilling enthusiasm. Similarly, leaders' positive emotions have been associated with positive emotions in followers, in a process of 'emotional contagion' (Hatfield, Cacioppo & Rapson 1994; Bono & Ilies 2006; Kark & Van Dijk 2007). Recent theories of spiritual leadership (Fry 2003)

considered the environment that leaders create in organisations, allowing followers to express and experience emotions of meaningfulness at work, which are then linked to improved group outcomes.

Some theories that challenged leader-centric approaches to leadership effectiveness focused exclusively on cognitive reaction of followers. For example, implicit and romance theories of leadership ground the mechanism of leadership firmly in the followers' perceptions of the leader (Rush, Thomas & Lord 1977; Meindl 1995). Other theories, like spiritual leadership are based specifically on affect, focusing feelings of transcendence and connectedness to others in particular (Pawar 2008). The majority of contemporary studies of leadership effectiveness, however, explore a range of mechanisms at once. For example, authentic leadership theory describes the link between leaders' awareness of their own values, acting on those values, and the followers' identification with the leader, resulting in positive followers' emotions, trust, hope and optimism (Avolio et al. 2004). This leadership style has been associated with a range of mechanisms of influence, although some at the conceptual level only (Gardner et al. 2011). Leader influence included modelling positive behaviours, influencing through personality traits, such as confidence, hope, optimism and resilience, as well as social identification and emotional mechanisms (Luthans & Avolio 2003; Gardner, Avolio & Walumbwa 2005; Ilies, Morgeson & Nahrgang 2005).

2.1.2 Focus of leadership

The second important area of development is the dual focus of leadership on completion of tasks as well as consideration of the needs of followers. At the outset of leadership theory, studies distinguished between task-oriented and employee-oriented leadership, acknowledging that behaviours supporting these two leadership styles may

be incompatible (Katz 1950; Fleishman & Peters 1962). Later, transformational and charismatic leadership theories introduced a third type – change-oriented behaviours, arguing that leadership is more effective if it focuses on transforming the followers' understanding of and attitude towards shared objectives (Hater & Bass 1988; Waldman, Bass & Yammarino 1990; House & Howell 1992). A number of change-oriented leadership approaches have evolved from transformational leadership theory and dominate the leadership literature today. The focus of leadership as a task-oriented or employee-oriented influence is another lens important to the study of altruistic leadership, as it allows comparisons of the need for and effectiveness of the different types of leadership in achievement of group goals (RQ1a and RQ1b).

Distinguishing between task-oriented and employee-oriented leader behaviours

Already early behavioural studies of leadership acknowledged the dual nature of leadership. On the one hand, a leader has to achieve the goal, being ultimately responsible for the outcomes, such as levels of team or organisational performance. On the other hand, leaders are dependent on followers' contributions, as alone they cannot achieve the group's goal and have to focus their attention on people and their needs, so that subordinates continue working towards the objective. Behavioural theories were the first to define leadership according to these two dimensions: task-oriented and employee-oriented behaviours (Katz 1950; Fleishman & Peters 1962). In the production context, where these behaviours were studied, task-oriented behaviours ('initiating structure') dealt with achievement of the goal, management of the process and costs. Employee-oriented behaviours ('consideration') described managing the welfare of the employees, support and encouragement. The 'concern for goals' and 'concern for people' dichotomy dominated leadership debate for decades, meaning that development of consequent theories of leadership styles continued to treat leaders'

behaviours in a similarly polarised manner. In creating a taxonomy of leader behaviours across a number of leadership theories Yukl, Gordon and Taber (2002) found a consistent distinction between the two types, identifying three types of task behaviours (clarifying, monitoring and short-term planning) and five types of relations (or employee-centred) behaviours (developing, supporting, consulting, recognising and empowering).

Different schools of thought considered task-oriented and employee-oriented behaviours to be either present independently of one another, or co-existing in the same individual but expressed to a different degree. For example, the Managerial Grid, developed by Blake and Mouton (1964), presented five leadership styles, based on the various combinations of high and low emphasis placed on the task and the employee dimension by an individual supervisor. Later, the authors proposed that "Team Management" – a high concern for both employees and production - is the most effective type of leadership behaviour, as it correlated positively with bottom-line productivity (Blake & Mouton 1964). On the other hand, some trait-based theories of leadership and much of the practitioner literature on leadership assumed task-oriented and employee-oriented leadership to be opposite extremes of a continuum. One example is the distinction made by Lewin, Lippitt and White (1939) describing autocratic (leader taking decisions on their own) and participative (leader consulting followers on decisions) leadership styles within management theory, which remains popular among organisational practitioners today. A variety of surveys of followers aimed to demonstrate the 'aggressiveness' and 'autocracy' in task-oriented leadership behaviours, and 'participation' and 'consideration' in people-oriented leaders (Cotton et al. 1988; Leana, Locke & Schweiger 1990), finding little evidence for this distinction (Yukl 1999).

A number of studies have attempted to compare the effectiveness of task-oriented and employee-oriented behaviours. At the individual follower level examination of their relative impact on leadership outcomes found similar associations between the two groups of behaviours and organisational commitment, for example (Brown 2003). However, employee-oriented behaviours have been shown to have a more significant contribution to the quality of leader–follower relationship, or leader–member exchange, which, in turn, can be linked to leadership effectiveness (Yukl, O'Donnell & Taber 2009). At the team performance level a meta-analysis by Burke et al. (2006) found that task-oriented leadership and employee-oriented behaviours resulted in similar perceived team effectiveness and team productivity. Employee-oriented behaviours were also associated with increased team learning.

Additionally, contingency theories reported that effectiveness of task-oriented and employee-oriented behaviours could depend on the context. Fiedler explained that in high and low control situations task-oriented leadership may be more effective in achieving group goals, whilst in moderate control situations employee-oriented leadership may be optimal (Fiedler 1978). In a similar vein, path—goal theory (House 1971) and situational leadership theory (Hersey & Blanchard 1969) proposed that subordinates' characteristics and the workplace environment, determined which leader behaviours would be more effective. For example, a high degree of structure and clarity of action may reduce the need for a directive, task-oriented leadership style (Avolio, Kahai & Dodge 2001). Similarly, followers with greater ability to accept responsibility for their task-related behaviour may require less directive leadership (Hersey & Blanchard 1969; 1982).

The initial distinction between task-oriented and employee-oriented behaviours did not include some types of leadership behaviour that have later been shown to contribute to leadership effectiveness, including visioning, intellectual stimulation, risk-taking and external monitoring. These types of behaviours have been defined as a distinct set of change-oriented leadership behaviours (Yukl, Gordon & Taber 2002).

Transactional and transformational leadership theories

Change-oriented behaviours were first described by transformational and charismatic theories of leadership (House 1977; Bass 1985; Shamir, House & Arthur 1993; Conger & Kanungo 1998). These leader behaviours are thought to influence and change the intrinsic motivation of followers to connect them to group goals.

The nature of change-oriented behaviours can be illustrated through the distinction between a transactional and a transformational leader. Transactional leadership focuses on role and task requirements and utilises rewards contingent on performance to motivate followers to achieve goals. Transactional leaders appeal to followers' self-interest to encourage completion of tasks. In contrast, transformational leadership focuses on followers' cognitive, emotional and spiritual needs, developing those into long-term shared objectives. For example, a transformational leader may inspire followers to help them understand the value of achieving the leadership goal, which followers then accept as their own. A transformational leader is characterised by idealised influence (engendering trust, admiration, loyalty and respect), inspirational motivation (communicating vision and enthusiasm), intellectual stimulation (encouraging knowledge sharing and innovation) and individualised consideration (treating followers as individuals rather than as employees).

A related leadership approach, charismatic leadership theory (Weber 1947) is more follower-centric in that it describes leaders who are seen as extraordinary by followers.

The concept of a leader's 'charisma' is similar to the 'idealised influence'

characteristic of transformational leaders. Behaviours of charismatic leaders include articulating an innovative strategic vision, showing sensitivity to member needs, displaying unconventional behaviour, taking personal risks, showing sensitivity to the environment, emphasising ideological aspects of work, communicating high performance expectations, expressing confidence that subordinates can attain them, showing self-confidence, modelling exemplary behaviour and emphasising collective identity (House 1977; Conger & Kanungo 1988; Shamir, House & Arthur 1993; Kirkpatrick & Locke 1996; Lowe, Kroeck & Sivasubramaniam 1996; Conger & Kanungo 1998).

Transformational and charismatic leadership theories have firmly planted the focus of the leadership process on the leader–follower relationship, providing an additional dimension to the traditional distinction between task-oriented and employee-oriented leadership styles. By describing the process of change that leaders initiate in followers' motivation, transformational and charismatic approaches also confirmed the significance of cognitive and affective mechanisms of leadership influence (Shamir, House & Arthur 1993; Judge & Bono 2000; Wang & Howell 2012; Boehm & Baumgaertner 2014), demonstrating the effectiveness of these leadership styles for follower and team performance (Podsakoff et al. 1990; Shamir, House & Arthur 1993; Lowe, Kroeck & Sivasubramaniam 1996; Shamir et al. 1998).

At the same time, existing empirical studies of the effectiveness of these leadership approaches have been criticised for their weakness in distinguishing between transformational and charismatic leader behaviours, associated with the overlap of dimensions within the conceptual models themselves, as well as similarity of constructs with those of other leadership theories. Lack of clear constructs is likely to underpin the similarity between transformational and charismatic leadership theories

(Yukl 1999) and the low reliability of findings regarding the effectiveness of transformational and charismatic leadership, especially in comparison with transactional leadership (Judge & Piccolo 2004). A number of further leadership theories evolved from the transformational and charismatic leadership approaches, in an attempt to describe specific leader characteristics or behaviours that would be associated with effective transformational leadership (Patterson 2003; Gardner, Avolio & Walumbwa 2005; Brown & Trevino 2006; Walumbwa et al. 2008).

2.1.3 Morality of leaders

Finally, the position of a leader as a powerful influencer of the attitudes and behaviours of followers and, eventually, their performance and wellbeing, has contributed to the debate on the morality of leaders' motivation. Recent leadership theories, in particular theories of ethical leadership, focused on the values of a leader, the role of these values in the relationships between leaders and followers, and the effectiveness of value-driven leaders (Bass & Steidlmeier 1999; Trevino, Hartman & Brown 2000; Ciulla 2007; Fry et al. 2011). In particular, these approaches explored the moral attitudes of the leader, comparing the behaviours and the effectiveness of leaders who pursue their own goals, sometimes at the expense of others, with the effectiveness of leaders who are driven to create and achieve collective goals. This theoretical debate is critical for understanding the potential effects of altruistic leadership (RQ1b), as well as determining whether leaders' own intentions and behaviours or followers' perceptions of leadership is more important for altruistic leadership to become effective (RQ2).

Both transformational and charismatic leadership theories are associated with leader characteristics and behaviours that can influence followers to make significant personal sacrifices in the interest of the leader's and organisational mission. There is,

therefore, a potential for leaders with a 'dark side' – but also high charisma – to manipulate or exploit followers towards the leader's selfish goals (Rogers & Farsons 1955; Conger & Kanungo 1988). In contrast, leaders' ability to resist selfish motives and pursue collective goals represents a particular moral character of leaders, and is of interest to the current study of altruistic leadership, associated with selfless motivation and behaviours of leaders.

Several studies reviewed the 'dark side' of charismatic leaders, highlighting that individuals possessing some of the associated traits are also likely to emerge as leaders due to their motivation to demonstrate competence and a resulting increased perceived effectiveness (Nevicka et al. 2011). For example, Rosenthal and Pittinsky (2006) identified a link between charisma and narcissism (preoccupation with own power and prestige), while Deluga (2001) pointed out the positive association between Machiavellianism (acceptance of expediency to retain authority), charisma and rated performance among American political leaders. At the same time, these leaders were also shown to have a potential negative effect on the follower and organisational performance through flawed vision, promotion of dependency among followers and personal identification (O'Connor et al. 1996; Conger & Kanungo 1998). In response to these findings, recent leadership literature explored the moral character of leaders (Ciulla 2004; Brown & Trevino 2006; Ciulla 2007), aiming to describe the intentions and behaviours of leaders that are effective for achievement of leadership goals, but also pursue and achieve positive outcomes on followers, organisations and society.

Both the transformational and the charismatic leadership debates distinguished between self-interested leaders and leaders oriented towards the organisation and/or their followers. House and Howell (1992) conceptually explored the personalities of charismatic leaders in depth, distinguishing 'personalised' and 'socialised' leaders

(following McClelland's (1970) work on power). The goals of personalised charismatic leaders are linked to their own interests, while the followers and organisations are seen as means that can be manipulated to achieve the outcome desired by the leader. Personalised leaders are likely to have a high need for power, coupled with low restraint for their motivational impulses, be narcissistic or Machiavellian, and behave in an authoritarian and self-aggrandising manner (House & Howell 1992; Choi 2006). For example, they motivate followers to identify with them personally (rather than with the organisation) to support the leader's feeling of own self-worth. They are also more likely to demonstrate dominance and retain power for themselves, making followers dependent on their authority. In contrast, socialised charismatic leaders motivate followers to identify with the vision of organisational goals that serve the interests of the group. Socialised leaders have a high need for power, like personalised leaders, but also high restraint for motivational impulses, which makes them likely to be empowering to their followers (House & Howell 1992). They demonstrate regard for and use established channels of authority to accomplish their goals (House & Shamir 1993; Choi 2006). Notably, these descriptions of personalised and socialised leaders conflated leaders' motivation (pursuit of own or collective needs) and behaviours (dominance and empowerment), while in theory both types of motivation can be associated with either type of behaviour (Avolio & Locke 2002; Price 2003).

Leader personality is not the only predictor of the differentiating moral intentions of a leader. Dasborough and Ashkanasy (2002), for example, stressed the role of follower perceptions of the intentions of the leader, which have been shown to impact the quality of the leader–follower relationship (Dienesch & Liden 1986). Followers can attribute sincere or manipulative intentions to a transformational leader, depending on

the leader's and the follower's mood, the leader's emotional intelligence and control over expression of their emotions, the length of the leader–follower relationship, the consistency in leader behaviours, and even whether the follower is the target of the behaviour or a bystander observing the leader's behaviours towards others (Dasborough & Ashkanasy 2002).

In a different approach Turner et al. (2002) explored the moral reasoning capability of leaders, comparing individuals at different stages of cognitive development (Kohlberg 1984). They proposed that the lowest stage of cognitive development is associated with orientation to punishment and obedience, as well as satisfaction of personal needs. On the other hand, in the highest stage behaviour is based on individually selected ethical principles that are logical, comprehensive, universal and consistent, such as justice, reciprocity, equality of human rights and respect for people as individual entities. Turner et al. (2002) drew similarities between these stages of cognitive moral development and the personalised and socialised leadership types, arguing that transformational leaders use the most mature type of moral judgement, making decisions based on universal principles and the collective good.

Finally, there is a sociocultural dimension to moral values. Schwartz (1994) identified one of the two dimensions of cultural values as a continuum between 'self-enhancement' (associated with the values of hedonism, achievement, and power) and 'self-transcendence' (associated with universalism and benevolence). Triandis (1993), on the basis of years of cross-cultural research, claimed that individualism/collectivism was one of the most important dimensions of cultural variation with regard to leadership. In collectivist cultures, a successful leader is expected to be supportive and oriented towards group goals. In individualist cultures, an ideal leader is achievement-oriented and pursuing individual goals.

Conceptually, both self-interested (personalised) and group-oriented (socialised) leaders can be effective in influencing others. However, there may be differences in exactly how these leaders become effective, depending on whether they are characterised by personalised, socialised, or both types of motivation, and the sustainability of the follower and organisational outcomes that they achieve. Howell (1988) wrote that 'by virtue of their overwhelming presence and dominance, [personalised] leaders can harness the energies of followers to single-mindedly devote themselves to the cause and to the leader... [speeding up] organisational revitalisation'. At the same time, because of the nature of the mechanisms that these leaders use to motivate followers, the positive outcomes achieved by personalised leaders are unsustainable. Strong personalised identification of followers with the leader, rather than a shared objective jeopardises the longevity of followers' positive performance if the leader leaves or changes direction to pursue own goals, or if the relationship between the leader and the follower deteriorates (Howell & Shamir 2005). The high dependency of the followers on the leader can also hamper the development of these individuals. In contrast, where followers strongly identify with the collective values communicated by a socialised leader, they are likely to internalise their values as meaningful and relevant beyond the leader's influence on them. The impact of socialised leaders who empower followers to independently pursue such internalised goals may, therefore, be beneficial both for the long-term interests of the organisations and for the followers' moral and professional development (Howell 1988). No empirical studies were found to support these propositions, although some scholars have considered contextual factors driving leaders to prioritise their own interests or the interests of the group (Maner & Mead 2010).

2.1.4 *Summary*

Through the evolution of leadership theory, understanding of the leadership process has become more detailed and sophisticated. First, the shift of the theoretical and empirical focus from the leader's own characteristics to followers' perceptions of those attributes and behaviours signalled an important additional dimension to leadership effectiveness. Although some leadership theories continue to explain leader effectiveness solely through presence of specific personality trait or leadership behaviours, most contemporary approaches recognise at least the possibility of multiple mechanisms of leadership influence. This perspective has the potential to provide a more complete understanding of the way leadership becomes effective, including both leaders and followers in the picture, linking leader attributes with followers' experiences of leadership and their responses to leader influence.

Secondly, the crucial introduction of transformational and charismatic leadership theories has allowed for a deeper understanding of the type of impact that leaders have on followers – not simply exchanging stimuli and reactions, but having a transforming effect on the followers' understanding of a shared goal and motivation to achieve it. Transformational leadership is now firmly identified as a desirable leadership style, in comparison with transactional leadership, as has been shown to contribute to more sustainable follower and organisational outcomes. However, some critics argued that descriptions of transformational leader characteristics confuse leader-centric and follower-centric approaches, describing both follower effects (for example, inspiration and commitment) and leader attributes or behaviours (for example, intellectual stimulation) in the same model (van Knippenberg & Sitkin 2013). Therefore, transformational leadership theory lays the foundation for future studies of possible precursors of the effect these leaders have on followers, exploring characteristics of

leaders that enable them to display transformational leadership, distinguishing those from followers' experiences of transformational leadership.

Finally, the focus of leadership theory on comparing leaders' personalised and socialised need for power has critical relevance to the focus of the current study. The distinction between personalised and socialised leader motivation, which may lead to a varying degree of leadership effectiveness, has given rise to a number of leadership theories focused on studying motivations and behaviours of leaders who pursue collective, rather than personal goals. The next section reviews and compares these leadership approaches.

2.2 Is there evidence for altruism in leadership?

As described above, change-oriented leadership theories conceptually introduced the idea of a socialised, or other-oriented, leadership motivation as an attribute of an effective transformational or charismatic leader. Within that group of theories a number of leadership approaches – reviewed in the current section – have focused on studying leaders who pursue collective, rather than personal goals, drawing on the concepts of 'altruism' or 'sacrifice'. These include servant leadership, self-sacrificial leadership, ethical and spiritual leadership (Conger & Kanungo 1987; Shamir, House & Arthur 1993; Kanungo & Mendonca 1996; Aronson 2001; Kanungo 2001). The theories vary greatly in the level of focus (followers, organisation, or society) and the way they describe leaders' attributes, with overlaps in constructs between the approaches (van Dierendonck & Nuijten 2011).

This section argues that the current conceptualisation of altruism in leadership literature is limited. At the individual level, altruism describes a motivational state that leads individuals to benefit others despite the personal cost to selves and without an expectation to be rewarded in return (Batson et al. 1981; Batson 2010; Batson, Ahmad & Lishner 2011). However, current leadership theories contain little detail on the motivation and intentions of altruistic leaders. Instead, operationalisations of relevant leadership constructs mainly describe leaders' behaviours, reported by followers. The purpose of this section is to review the descriptions of selfless motivation, sacrificial behaviours and altruism in current leadership theories, drawing comparisons and identifying gaps in the existing theory.

2.2.1 Self-sacrifice in transformational leadership theories

Conger and Kanungo (1987) were among the first to suggest that to become effective leaders could abandon their own interests (or demonstrate altruism) and pursue collective goals instead. They wrote that charismatic leaders 'transform their concern for followers' needs into total dedication and commitment to the common cause they share with followers in a disinterested and selfless manner' (p.642). On that basis, they hypothesised that in order to engender trustworthiness, which underpins charisma, these individuals display behaviours that are perceived by followers to involve personal risk, cost, or sacrifice of personal energy in achievement of a shared vision (House 1977; House & Shamir 1993).

Self-sacrificial leadership has been defined by Choi and Mai-Dalton (1998) as 'the total/partial abandonment and/or permanent postponement of personal interests, privileges, or welfare in the division of labour, distribution of rewards and exercise of power'. Similarly, Yorges, Weiss and Strickland (1999: 428) wrote about self-sacrifice as 'giving up or loss of something important to an individual'. A number of studies suggested that leaders' self-sacrifice can be used as a way of influencing followers and bringing about positive leadership outcomes. Choi and Mai-Dalton (1999) showed that followers attributed charisma and legitimacy to leaders exhibiting self-sacrificial behaviours. Shamir, House and Arthur (1993) also proposed that charismatic leaders could demonstrate self-sacrificial behaviours to role model similar behaviours among their followers. Self-sacrifice was found to increase co-operation (De Cremer & van Knippenberg 2002) and task performance (van Knippenberg & Hogg 2003) in experimental settings.

Notably, self-sacrificial leadership, like the theory of charismatic leadership, is based solely on followers' perceptions of leaders' self-sacrificing behaviours. Although

theoretically it discussed leaders' values and intentions (such as commitment to the cause and selflessness), the construct of self-sacrificial leadership only included leaders' behaviours. Empirical studies of selfless charismatic leaders focused on the act of giving up self-interest, not on the motivation of the leader to do so, nor the expectations of a self-sacrificing leader (Choi & Mai-Dalton 1998; Avolio & Locke 2002). Theoretical discussion of self-sacrificial leadership further clarified that when the beneficiary appears in the picture, the behaviour that prioritises the needs of the other at the personal cost of a sacrificing leader should be construed as altruistic and not self-sacrificial, and the theory does not address that type of leadership (Choi & Mai-Dalton 1998, 1999).

At the same time, self-sacrifice is not necessarily associated with altruism. Bass (1985) acknowledged that transformational leaders 'can wear white hats or black hats', making a general theoretical distinction between authentic transformational leaders, who are genuinely concerned with changing the status quo of the organisation for the common good, and pseudo-transformational leaders, who are concerned with their own interests but may be demonstrating transformational behaviours to manipulate followers into achieving their individual goals (Howell & Avolio 1992). Building on this distinction between the intentions and behaviours of transformational leaders, Price (2003) conceptually argued that combinations of self-serving/group-serving motivations and self-serving/group-serving behaviours could lead to four types of transformational leaders. Two types of leaders represent congruent combinations of motivation and actions. Authentic transformational leaders are congruent in their group-serving motivation and group-serving behaviours. Similarly, 'base' pseudo-transformational leaders hold egoistic values, and their self-oriented behaviours are consistent with their ethical principles. The latter type most closely corresponds to

personalised leaders, described by House and Howell (1992). Interestingly, the other two types of leaders demonstrate behaviours that are inconsistent with their motivation. 'Incontinent' pseudo-transformational leaders are described to be motivated by shared goals, but may find that these values can be insufficient to help them overcome a desire to act egoistically. Finally, 'opportunistic' pseudo-transformational leaders are driven by self-interest but might be demonstrating concern for the collective good instrumentally to achieve their own goals (Price 2003: 72). These leadership types have been outlined at the conceptual level and only one empirical study has been found to attempt a distinction between the constructs of 'altruism' and 'sacrifice' in leaders (Singh & Krishnan 2008).

2.2.2 Servant leadership theory

Servant leadership theory similarly draws on the distinction between selfish and selfless leaders. It developed the idea of leadership that 'begins with the natural feeling one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first' (Greenleaf 1973). However, this descriptive conceptualisation of leadership as a need to serve others is different from the idea of serving the group goal, which (at least conceptually) might underlie the intentions of self-sacrificing charismatic leaders. Servant leaders are concerned with the wellbeing of others in its broadest sense, rather than with organisational outcomes. For example, describing leaders in society, Greenleaf (1973) proposed that servant leaders consider at all times the effects of their decisions on 'the least privileged', improving outcomes or at least protecting them. Despite these early theoretical writings, theory of servant leadership in organisational settings has only recently gained momentum. For example, Spears (2004) described a servant leader in an organisation as an individual who considers creating value for others to be the

primary goal of management, and who adopts a holistic approach to work that includes promoting a sense of community and sharing in decision-making.

Servant leadership theory is the most developed among the approaches that can be linked to leaders' altruism and self-sacrifice. Various theoretical discussions have attempted to define the values, motivation and behaviours of servant leaders, and a growing number of empirical studies seeks to validate those conceptual propositions (Spears 1995; Laub 1999; Russell & Gregory Stone 2002; Patterson et al. 2005; Barbuto & Wheeler 2006). In a systematic review Parris and Peachey (2013) identified 14 different instruments for measuring servant leadership, arguing that the main challenge for scholars has been the need to connect behaviours, character and moral intentions of a servant leader in a single model. There are significant overlaps, but also differences between the existing approaches, highlighting several aspects of servant leadership that are relevant to understanding altruism.

One of these aspects is the behaviours of servant leaders that aim to benefit another at the expense of their own interest. Laub (1999: 83), for example, explained that the essence of servant leadership was in 'an understanding and practice of leadership that places the good of those led over the self-interest of the leader', and included 'serving others' needs before his or her own' as one of the values of a servant leader. Patterson (2003) and Patterson et al. (2005) similarly described sacrifice of resources and status by the servant leader to meet the needs of followers. Barbuto and Wheeler (2006) pointed to 'altruistic calling' with several items describing sacrificial behaviours (meeting followers' needs at the expense of one's own). Finally, Liden et al. (2008) included 'putting subordinates first' as one of the dimensions of servant leadership. The four descriptive items associated with this construct included sacrifice of interests to meet followers' needs, but also making followers' jobs easier. Similar to self-

sacrificial leadership theory, servant leadership constructs are limited to describing leaders' behaviours, and are not explicit whether the sacrifice is truly selfless, or whether servant leaders may receive direct or indirect benefits from the act of self-sacrifice.

Another relevant aspect of servant leadership is the source of the leader's selflessness, which may originate from the sense of duty experienced by the leader, or from the leader's empathic concern for others. For example, Spears (1998), Patterson (2003), and (Barbuto & Wheeler 2006) discussed the character of the servant leader, although they did not clearly attribute it to either a moral or a psychological source. In a 10item description of servant leadership Spears (1995) suggested the importance of empathy: striving to accept and understand others, never rejecting them, but sometimes refusing to recognise their performance as good enough. Patterson (2003) wrote that servant leadership begins with agapao love, which encourages humility and altruism, involves doing the right thing at the right time and for the right reason, acting on a sense of duty. However, she also included concern for the wellbeing of followers, which may describe a type of empathic concern. Barbuto and Wheeler (2006) referred to altruistic calling as 'a leader's deep-rooted desire to make a positive difference in others' lives'. In the most recent operationalisation, Liden et al. (2008) named emotional healing (the act of showing sensitivity to others' personal concerns), once again potentially linked to empathy. Other descriptions of servant leadership (not explicitly related to altruism) specified additional leaders' beliefs and moral values, for example, about the role of organisations in society.

There are few studies of the effectiveness of servant leadership and the mechanisms of influence of servant leaders on followers, but comparing the evidence is further complicated by differences in the instruments used to measure servant leadership.

Unlike the focus of transformational leaders on organisational objectives, the purpose of servant leaders has been primarily described as service to followers. The followers are then trusted to contribute to organisational objectives (Stone, Russell & Patterson 2004). The mechanisms of servant leader influence include satisfaction of followers' needs, as well as development of 'a trusting, fair, collaborative and helping culture that can result in greater individual and organisational effectiveness' by servant leaders (Parris & Peachey 2013: 387). Identifying specific outcomes of servant leadership, Liden et al. (2008) found correlations between 'helping followers grow and succeed' (described as demonstrating genuine concern) and community citizenship behaviour and organisational commitment. In addition, studies of teams linked servant leadership with team potency and subsequent team organisational citizenship behaviour (Hu & Liden 2011).

While servant leadership theory occasionally connects motivation to serve with sacrificial behaviours, only some of the instruments specifically refer to a leader giving up own interests for the benefit of followers (Barbuto & Wheeler 2006). In turn, those measures do not simultaneously include descriptions of a leader's reason to sacrifice. More recent studies have started to examine antecedents of servant leadership, expressed in leaders' intentions and measured through leaders' self-ratings, into models of servant leadership effectiveness, although finding discrepancies between leaders' own accounts of their servant leadership ideology and followers' perceptions of their leaders' style (Barbuto, Gottfredson & Searle 2014).

2.2.3 Ethical leadership theory

Ethical leadership theory describes leaders who make decisions that meet the societal ethical norms and promote similar ethical behaviours in their followers, and highlights what such leaders should do (Trevino, Hartman & Brown 2000; Trevino, Brown &

Hartman 2003; Brown, Treviño & Harrison 2005; Brown & Trevino 2006). Scholars acknowledged the virtuous character of ethical leaders, recognising them as fair and principled, caring about people and the broader society, and behaving ethically both in their personal and professional lives. In contrast to transformational/charismatic leadership theories that focus on organisational objectives, and servant leadership that focuses on the needs of followers, ethical leadership theory is based on the disposition of a leader to 'do the right thing' for all of the stakeholders.

Kanungo and Mendonca (1996) pointed to altruistic intent as a core motive of ethical leaders. Ethical leaders pursue goals and objectives that benefit the organisation, its members, other stakeholders and society at large. In order to behave in a just manner, the leader must take into consideration the demands of the various stakeholders, the social context or situation and the moral consequences or outcomes of a decision. Some stakeholders (including the leader) may have to sacrifice their interests, if an ethical decision requires them to do so. However, in contrast to the previous theories describing leaders acting in the interest of others, ethical leaders self-sacrifice because their moral motives, rather than emotional concern with the needs of followers (Trevino, Hartman & Brown 2000). A measure of ethical leadership has been operationalised by Brown, Treviño and Harrison (2005) with only one of the ten items relevant to understanding altruistic motivation, describing a leader that 'has the best interests of employees in mind', with the rest of the items describing leaders' behaviours.

Looking at the mechanisms of leadership effectiveness, ethical leaders influence followers through role-modelling behaviours, as well as through contributing to and developing followers' beliefs about morality. Ethical leadership is defined as 'the demonstration of normatively appropriate conduct through personal actions and

interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making' (Brown, Treviño & Harrison 2005: 120). Very few empirical studies of ethical leadership exist, pointing at the links between senior-level ethical leadership and group organisational citizenship and deviant behaviours, followers' voice behaviours, job satisfaction and affective commitment to the organisation, affective and cognitive trust (Mayer et al. 2009; Neubert et al. 2009; Walumbwa & Schaubroeck 2009; Newman et al. 2014). Focusing particularly on the antecedents and consequences of ethical leadership Mayer et al. (2012) found support both for role-modelling the impact of ethical leaders on followers' own ethical conduct, and for the leader's ability to impact followers' self-concept, similar to change-oriented leadership theories.

Ethical leadership is not a particularly well-developed leadership theory, with the distinctiveness of this leadership style not yet fully established (Lawton & Páez 2014). The theory is helpful for clearly positioning the role of the moral intent and character of a leader, but the conceptual propositions of such motivations have not yet been fully operationalised by the approach. References to altruism within the ethical leadership literature, nevertheless, suggest that at least conceptually it is being considered as part of the ethical leadership construct.

2.2.4 Spiritual leadership theory

Fry's theory of spiritual leadership links leaders' values, attitudes and beliefs with the fulfilment of followers' need for 'spiritual survival', which involves the need to make a difference and the need for belongingness (Fry 2003). A spiritual leader provides followers with paths to find ways in which they can connect to others and contribute to the group goals in a meaningful way that, in turn, leads to the achievement of organisational outcomes. This represents an additional dimension to other theories

described above through a focus on organisational environment as a whole, rather than on individuals within organisations.

Spiritual leadership theory refers to 'altruistic love' between the leader and the followers, expressed as a 'genuine care, concern, and appreciation for both self and others', which gives followers a sense of membership (Fry 2003). As with servant leadership theory, it appears that the motivation of a spiritual leader is an internalised sense of mission that translates into morally conditioned behaviours towards others (Sendjaya, Sarros & Santora 2008). The mechanisms of effectiveness of spiritual leadership are associated with both individual qualities (honesty, integrity) and behaviours (showing respect and concern). However, in contrast to ethical leadership that builds on followers' cognitive appreciation of the leader's values, spiritual leadership appeals to followers' emotional needs. Spiritual leaders emphasise a sense of meaning at work and focus on organisational values that allow for a feeling of transcendence and a feeling of connectedness to others (Pawar 2008). According to Fry and Slocum (2008), the vision created by spiritual leaders contributes to followers' experiences of a sense of calling and a culture that helps to intrinsically motivate both the leader and the followers. Operationalising the construct of spiritual leadership, Sendjaya (2007) described leaders driven by a sense of a higher calling (an indicator of values or motivation), who promote values that transcend self-interest and material success (a behavioural indicator).

Spiritual leadership theory is another approach that is not well enough developed to contribute significantly to the understanding of altruism and sacrifice in this study. Empirical exploration of the nature of spiritual leadership is limited, although gaining traction in Asia (Ali & Ali 2011; Chen & Yang 2012; Jeon et al. 2013). However, the focus of the theory on the attributes of leaders necessary to deploy emotional

mechanisms of followers' response and motivate followers intrinsically, is relevant for understanding the effectiveness of altruistic and sacrificial leaders. In addition, the introduction of organisational culture as a medium for 'altruistic love' provides another dimension for exploring altruism at a group, rather than individual level.

2.2.5 *Summary*

This section presented an analysis of the existing conceptual and empirical evidence for altruism in the current leadership literature, highlighting discrepancies and lack of detail in how the construct of altruistic leadership is described.

Table 1 below summarises the evidence presented by the leadership theories against several components of altruism (expectation to benefit others; motivation to help another despite the cost to self; and acts of self-sacrifice), drawing on the review of the leadership theories in this section. The evidence points to the differences in how the leader's expectation to benefit others is conceptualised, as well as to the lack of empirical links made between leaders' self-sacrificial behaviours and their reasons to sacrifice. To enhance understanding of altruistic leadership, the next section draws on social science literature on altruism in order to introduce the clarity of definition around this construct into the leadership literature.

Table 1. Presence of elements of altruism in the leadership theories under review

	Expectation to benefit others	Leader motivation to self-sacrifice	Expectation of costs and benefits to self	Acts of sacrifice	Mechanisms of leaders' impact on followers	Measurement
Transformati onal and charismatic leadership	Leaders commit to a shared (organisational) purpose.	Not examined.	Charismatic leaders sacrifice with the purpose of enhancing their charisma.	Self-sacrificial behaviours described as abandonment or postponement of personal interests, privileges, or welfare.	Followers perceive a sacrificing leader as legitimate and charismatic, and reciprocate.	Leaders' self-sacrificial behaviours, reported by followers.
Servant leadership	Leaders' primary purpose is to benefit followers.	Approaches describe either moral duty (doing the right thing) or empathy as leader attributes, although not directly linking those to acts of sacrifice.	Not examined	Describes leaders who meet followers' needs at the expense of their own. Only some instruments include descriptors of sacrificial behaviours.	Followers recognise the leader's service and reciprocate by contributing to organisational objectives.	Leaders' behaviours and beliefs, reported by followers.
Ethical leadership	Leaders care about the organisation, as well as its members and society, making situational choices based on ethical principles.	Moral duty	Not examined	Not examined as part of the model. Leaders may have to sacrifice if that is required by their assessment of the possible courses of action.	Followers develop a sense of identity with the leader modelling ethical behaviours.	Leaders' behaviours and intentions, reported by followers.
Spiritual leadership	Describes leaders whose primary purpose is to create an environment that benefits followers.	Not examined.	Not examined.	Not examined.	Followers reciprocate leaders' commitment to them and the organisation.	Leaders' behaviours and values/motivation reported by followers.

2.3 What is altruism?

The previous sections argued that a clearer definition of altruism and its components could build a foundation for a better understanding of altruistic leadership and acts of sacrifice by leaders. Several issues with the current conceptualisation of leader altruism have been identified, and this section aims to bring clarity to the concept by introducing the construct of altruism as described by the social science literature. First, this section examines the components of altruism, demonstrating that it does not simply equate to unselfishness, as assumed by leadership theories. Secondly, the review considers the motivation for altruism, reviewing both moral and psychological approaches to altruism with the purpose of evidencing a model of altruistic motivation, which can then be used in developing a construct of altruistic leadership.

2.3.1 Clarifying the construct of altruism

Social science literature describes altruism as a motivational state that leads individuals to benefit others, despite the personal cost to selves and without an expectation to be rewarded in return. It is distinct from another form of helping others – prosocial behaviour – which equally involves an act of benefiting another, but does not explore the associated motivational states, nor necessarily involve personal costs to the benefactor. In contrast to altruism, prosocial behaviour can be associated with such acts of helping that are committed with an expectation of a reciprocated benefit (Batson et al. 1986; Eisenberg 1986; Batson & Powell 2003; Batson 2011).

Altruism was first empirically studied by the 'biological altruism' literature (within evolutionary psychology theory), which examined acts of self-sacrifice for the benefit of another within the same species and between species. While self-interest is essential for survival (Midgley 2010), evolutionary approaches to altruism point out that the

purpose of the survival of the species takes precedence over the survival of an individual organism, which may explain individuals' desire to enhance the fitness of relatives (kin), particularly offspring (Hamilton 1964; Wilson & Sober 1994). In addition, Trivers (1971) suggested that natural selection favours self-sacrifice even between non-related individuals, because of the long-term benefit to the species. For example, animals were shown to give away personal resources if they had an abundant supply of the resource needed by the recipient, or if the beneficiary was efficient at using the aid, therefore favouring the traits necessary for the survival of the species. However, although these evolutionary approaches to altruism made a contribution towards describing sacrificial behaviours, they focused primarily on reproductive fitness and assumed fairly extreme forms of sacrifice (such as sacrifice of life), which is not relevant for the purpose of the current study. Moreover, evolutionary theories of altruism did not focus on the motivation to sacrifice, but only on the costs and benefits within the sacrificial act.

Crucially, other streams within the altruism literature have for some time been concerned with exploring the reasons why individuals bear costs to self in order to help others. Normative and psychological theories of altruism emerged in response to the claims that egoism is the sole motive underlying human behaviour, where egoistic individuals have been described as pursuing satisfaction of their own interests through engaging only in such actions that maximise utility to their own welfare (Porter 1981; Williamson 1989; Jensen 1994). Although it is empirically impossible to provide evidence for *all* human motivation to be egoistic (Batson & Shaw 1991), social exchange theory in particular argued for the rational motivation underpinning acts of self-sacrifice (Homans 1958; Gouldner 1960; Blau 1964), modelling exchanges of costs and benefits in laboratory experiments. For example, Milinski, Semmann and

Krambeck (2002) showed that individual decisions about investment in public goods depend on whether the decision-maker expects their decision to be known or unknown. In their experiment, expectation of being recognised motivated players to uphold their reputation and make investment in public goods, whilst anonymous decisions resulted in the absence of contributions. Another classic example is Prisoner's Dilemma game theory, which described an interaction of two actors making individual decisions to cooperate or not to cooperate with another (Poundstone 1992). If only one decided to collaborate, such decision maximised the outcomes for the second individual, thus incentivising both to opt out of collaborating and suffer negative consequences. Over time, however, these actors learned that mutual collaboration could bring both of them considerable benefits. Friedland (1990) drew on the example of *n*-player Prisoner's Dilemma to establish that in games with an infinite number of players, or those with an infinite number of games, a 'tit-for-tat' strategy emerged as a result of players learning from each other's behaviours. Following systematic reciprocation of competitive and cooperative behaviours, the players established that although they may not win outright, cooperative behaviour would substantially reduce the chance of their personal loss in the long run (Fletcher & Zwick 2007).

Other approaches to altruism challenged egoistic theory of human motivation, arguing that 'people *sometimes* care about the welfare of others as an end in itself' Sober and Wilson (1999: 228, own emphasis). Although this claim did not deny that humans could be egoistic, examination of individual moral and emotional needs suggested that some helping behaviours occurred without an expectation of a return favour to the benefactors (Charness & Haruvy 2002; Arrondel & Masson 2006). By introducing the question of motivation into the debate on acts of self-sacrifice, normative and psychological theories of altruism succeeded in identifying such individual desires to

benefit another, which did not simultaneously pursue self-interest. Batson additionally provided that altruism is specifically oriented towards others, and not towards a group that includes the benefactor, as in pursuing collective goals the benefactor may be led by the desire to achieve own goals as part of the group's success (Batson et al. 1981; Batson 2010; 2011; Batson, Ahmad & Lishner 2011). 'True' altruism represents only such sacrificial behaviours that are underpinned by both an expectation to benefit another *and* an expectation of cost to self that is not reciprocated. Although egoistic individuals can similarly engage in actions that benefit others, they do so with an underlying expectation of an ultimate reward to self, like in the Prisoner's Dilemma game (Maner & Mead 2010).

Two groups of theories on altruistic motivation are available, viewing altruism either as a morally conditioned act or as a psychological state (Batson 2010). The first group of theories, grounded in ethics, evaluated the societal reasons for an individual to behave selflessly. Some of these theories viewed altruistic behaviour as a result of rational moral reasoning, arguing, for example, that sacrificing individuals may act from the position of justice or a sense of duty to others (Folger et al. 2001; Peterson et al. 2003; Rocha & Ghoshal 2006). The second group of theories placed the source of altruism at the level of individual affective state. Most notably, Batson (2010) proposed that 'genuine' altruism requires the benefactor to act without an expectation of a return benefit, and such behaviour is based on the empathic concern experienced as a result of witnessing the suffering of others. The following sub-sections review the construct of altruism from these two viewpoints in more detail.

2.3.2 Normative approaches to altruistic motivation

Normative theories critiqued the assumption of universality of egoism as a human motive, arguing that all decisions made by individuals about their course of action exist in a societal context. Therefore, the norms and values of the society in which individuals live may regulate conduct and require people to sometimes abandon self-interest. Normative ethical systems can generally be broken down into three categories: deontological, utilitarian and virtue ethics. The first two focus on the morality of actions that a person performs, while virtue ethics consider the character of the person performing the actions.

Aristotelian ethical theory placed less emphasis on the rules that people should follow, and instead describes a set of virtues – positive characteristics of one's character – that individuals should look to develop and demonstrate in order to live meaningful lives. Moral decisions are made by considering what a 'decent', or the best kind of person would do in a particular situation (Rocha & Ghoshal 2006). Plato and Aristotle were the first to emphasise a particular virtue of justice, which involved a disposition of individuals to respect the interests of others (their fellow citizens). While an implication might be drawn that a just person behaves altruistically, the Aristotelian virtue of justice did not actually distinguish between self-interest and the interests of others, as in his view self-interest was for the most part identical to the larger interests of the group and was expressed in pursuit of happiness. Collective happiness meant happiness of each particular individual, and vice versa (Ross & Brown 2009). In this conceptualisation altruism did not require self-sacrifice in the same sense as we understand today, but instead represented a different view of oneself, where individuals' own interests do not exist separately from the interests of others and/or community.

Contrary to the virtue-based theory of altruism, utilitarian theories are concerned with the outcomes of actions, judging right and wrong behaviours depending on the types of outcomes to which the behaviour leads (Collard 1975; Jones-Lee 1991; Kanungo 2001). One example of this perspective is the rule 'treat others in the way you would like to be treated yourself'. From this point of view, altruistic individuals might choose to take self-sacrificial actions only because they would want to be treated in the same way in return. Clearly, this approach is inconsistent with the definition of 'altruism', where selfless acts must not bear an expectation of reciprocated benefits.

Finally, deontological theories do distinguish between self-interested and altruistic behaviours. These theories are concerned with describing actions that are 'right' and 'wrong' based on fulfilling promises and contracts, or rectifying past wrongdoings. While early social contract theories argued for the primacy of self-interest of individuals entering the contract, which prevented the expression of self-interest and imposed responsibilities, David Hume proposed that people are universally benevolent, experiencing compassion for others in need and demonstrating selfless acts of generosity or kindness (Monroe 1996; Batson 2014). Agreeing that benevolence of individuals is limited, Hume viewed justice as a social mechanism, ensuring that members of a society collectively share the values of benevolence, compassion and generosity as *duties* to one another. The term 'altruism' itself was coined by Auguste Comte to describe a moral obligation to renounce self-interest and live for others. Comte (1883) said, in *The Catechism of Positive Religion*, that:

'[The] social point of view cannot tolerate the notion of rights, for such notion rests on individualism. We are born under a load of obligations of every kind, to our predecessors, to our successors, to our contemporaries. After our birth these obligations increase or accumulate, for it is some time before we can

return any service.... This ['to live for others'], the definitive formula of human morality, gives a direct sanction exclusively to our instincts of benevolence, the common source of happiness and duty. [Man must serve] Humanity, whose we are entirely'.

Despite leading to the first definition of the term 'altruism', Comtean description of the construct has been criticised as too absolute and idealistic. Empirical validation of altruism as an absolute value is likely to face similar challenges to the theory of egoism as a sole human motive.

Although these philosophical theories of the moral motivation to altruism are largely conceptual, there is some evidence to support the presence of fundamental universal values that guide at least some individual decisions about 'right' and 'wrong' behaviour. Most notably, Schwartz (1994) identified two types of values relevant to altruism. Benevolence values originate from the need for affiliation and effective group functioning and emphasise voluntary concern for others' welfare (Kluckhohn 1951; Maslow 1965). While not necessarily prescribing self-sacrifice, benevolence can be considered as conflicting with another universal value of hedonism, originating from the need to seek pleasure for oneself (Schwartz 2006). The relative importance of these values depends on the cultural context, the circumstances in which individuals are making decisions about their behaviours, and the degree of moral development of an individual. Some empirical evidence suggested, for example, that individuals were willing to sacrifice their financial self-interest, even when there were no material or symbolic benefits, basing their actions upon an internalised sense of duty to uphold moral norms, or a sense of social responsibility. In one widely cited and replicated experiment, decision-makers responsible for distributing payouts to the participants of a game chose to reward participants who played more fairly with greater payouts and

'punish' the unfair players with lower payouts, supposedly based on internalised moral norms (Kahneman, Knetsch & Thaler 1986; Turillo et al. 2002; Cropanzano, Goldman & Folger 2005). Other scholars (see, for example, Friedland 1990) challenged this interpretation, arguing that similar outcomes could be promoted by rationally motivated decision-makers, noting in particular that other-oriented decisions could be moderated by how publicly visible those decisions are (Milinski, Semmann & Krambeck 2002).

The mechanism underpinning moral altruistic motivation is largely cognitive. Internalisation of moral norms was explored in theories of social learning (Bandura 1977; Piaget 1997), which presumed that children learn within the social context via observing and modelling behaviour. Cialdini, Baumann and Kenrick (1981), following on from Kohlberg's (1963; 1984) theory, described the adoption of moral norms as occurring in three stages; when children behaved prosocially, being motivated at first by external material rewards and punishments, later by both material and social rewards and punishments (both representing an egoistic motive), and only in adolescence by internalised norms of conduct. Similarly, Arjoon (2008) stated that ethical virtues develop over time through the experience of concrete situations and circumstances. Individuals in a society begin acting ethically by pursuing their self-interest in gaining social approval (or avoiding social disapproval) of their actions (Kulshreshtha 2005; Hoogervorst, De Cremer & van Dijke 2010). Situational regularity reinforces the development of virtues so that they become automated (Arjoon 2008).

Batson (2010; 2011; 2014) criticised the claim that a sense of duty underpinned 'true' altruism. He argued that, due to the lack of empirical evidence, it was premature to conclude that the desire to uphold a moral principle did not have an instrumental goal

of achieving some form of self-benefit, like appearing to be a good person or avoiding shame or guilt. Evidence of moral rationalisation – using situational factors to decide when the moral principles apply and when they can be compromised (Bandura 1977; Bersoff 1999) – suggested that cognitive reasons to self-sacrifice were not strong enough to counteract the desire to benefit oneself in some circumstances. In contrast, psychological theories of altruism considered altruistic behaviours to be a reaction originating from the individual's emotional state.

2.3.3 Psychological theories of altruistic motivation

The empathy-based theory of altruism, developed by Batson, proposed that individuals helped others because they found it upsetting to see others in distress or need (Batson et al. 1981; Batson 2010; 2011). They acted on this distress regardless of any possibility of a reward in return and despite costs to themselves. Batson (2010) argued that theories of the moral motivation for altruism started from the assumption of egoism as the only human motivation, and looked primarily for reasons why individuals would choose to sacrifice self-interest against their egoistic nature. In contrast, empathy-based altruism represents a non-egoistic motive. Instead of relying on external (societal) conditioning and rewards (such as satisfied need for approval), it originates internally as a result of experiencing concern for others. Two explanations – cognitive and emotion-based – are available to support the presence of empathy as a motivation for acting altruistically.

From the cognitive point of view, Parker and Axtell (2001) described perspective-taking as a cognitive process in which individuals adopted the viewpoints of others in order to understand their preferences, values and needs. At the group level, this process was more likely to take place towards those with whom they identified, based on perceived similarity, or the so-called 'in-group' (Hornstein 1978; Clark & Mills 1979;

Tajfel & Turner 1979). For example, Sime (1983) reported that when people fled a burning building, they were more likely to stay together if they were related. Piliavin et al.'s (1981) bystander intervention experiment in the New York subway showed that individuals were more likely to help people who they perceived to be similar to them. Madsen et al. (2007) studied the theory in the UK and South Africa by asking participants to perform a physically uncomfortable task in order to make a small amount of money for relatives of varying closeness, and found that participants were more willing to suffer for the benefit of the closest relatives.

On the other hand, emotional empathy theories are based on the evidence for neurological processes that require individuals to engage in helping behaviours in order to reduce the emotional tension arising from the feelings of sympathy and compassion towards others (Batson 1991). These feelings were shown to be associated with experience of emotional distress, which could best be alleviated by helping the victim. When the victim showed visible signs of relief or joy after being helped, the helper could actually feel their own emotional distress replaced by empathic joy. Having experienced empathic joy, he or she was likely to be subsequently motivated to help others regularly in order to experience the same feeling again (Hoffman 1981). Within this stream of thought Hoffmann (1981) was first to argue that altruism is at least in part, genetically embedded in human nature.

The mechanisms underpinning empathic motivation in humans, however, exposed empathy-based theory of altruism to criticism. According to the theory, the motivation for acts of self-sacrifice may be the benefactor's need to gain a good feeling, to avoid guilt, or to reduce their aversive arousal caused by witnessing another's suffering (Cialdini & Kenrick 1976; Batson et al. 1986; Batson 1991; Carlo et al. 2009; Batson 2011). Critics argued that empathic benefactors were, therefore, rewarded for the acts

of sacrifice through experiencing a reduction in the emotional distress that led to a sacrificial act. This implied that the action itself was motivated by self-gain, and reinforced the view that humans were egoistic by nature (Midgley 2010). In a counterargument Batson (2010) clarified that it was possible for the benefactor to obtain an intrinsic reward as a result of helping behaviour, but this reward, expressed as a reduction in emotional distress, was unintended by the benefactor and was not the reason why the sacrificial behaviour was initiated. The satisfied feeling following the act of helping did not necessarily mean that an individual initially acted in order to gain that feeling, and altruistic behaviour was still benevolent, not selfish.

Multiple empirical studies have been conducted to distinguish altruism from acts of sacrifice made with an expectation of a return to self. During one early experiment (Batson et al. 1981), participants observed a young woman receive electric shocks, and were given a chance to intervene by taking the remaining shocks themselves. The types of emotions experienced in the process were measured through a self-report questionnaire. The results of the experiment showed that participants choosing emotions describing empathic concern (compassion, concern) were more likely to help the woman, compared to those who chose emptions describing personal distress (shock, disgust, fear). In a different design, Toi and Batson (1982) manipulated levels of empathy by asking students to listen to a taped interview with another student who had ostensibly broken both legs in an accident and was behind in classes. The researchers controlled for the empathic vs non-empathic response among the participants by instructions given to them, as well as the costs to the participant of helping, measuring the likelihood of the participant to respond to a request to help the injured student catch up in class. As the empathy–altruism hypothesis predicted,

people in the high empathy condition helped regardless of cost, while those in the low empathy condition helped only if the cost of not helping was high.

2.3.4 *Summary*

This section reviewed the construct of altruism as described by the social science literature, highlighting three important aspects of altruism. First, motivation to help others and self-sacrificial behaviours are not necessarily linked: individuals can help others to pursue self-interest, or help others but not incur personal costs. Secondly, altruism specifically involves an expectation of loss to the benefactor and is not motivated by an expectation of a reward in return. Finally, empirical evidence supports the empathy-based theory of altruistic motivation, showing that individuals are likely to self-sacrifice to help others in need.

2.4 Integration of theory and research questions

This chapter aimed to inform the current research with a review of the literatures on leadership and altruism. It opened with a brief review of the current literature on leadership, explaining why 'altruism' emerged as an area of interest among leadership scholars. The current conceptualisations of the altruism construct were then analysed and compared to the description of the construct in the social science literature.

While transformational, servant, ethical, and spiritual leadership theories either directly refer to or imply altruism as a leader attribute, there are discrepancies in these conceptualisations. On the one hand, there is sufficient agreement that transformational, servant, ethical, and spiritual leaders pursue the interests of others (Greenleaf 1977; Bass 1998; Fry 2003; Trevino & Brown 2005). However, these theories have different interpretations of why leaders act in the interests of others, and say little about the potential direct and indirect benefits of self-sacrifice to the leader.

At the same time, transformational leaders focusing on the organisational goals are likely to experience advantages of collective success. Similarly, servant and spiritual leaders, who support the needs of their followers, could rationally expect the followers to contribute to organisational objectives in return (Stone, Russell & Patterson 2004). None of the existing leadership theories explicitly identify the leader's expectation to bear the costs of self-sacrifice. In contrast, social science literature specifies that altruism is different from other forms of prosocial or helping behaviours, as it involves an expected cost to the benefactor. Although some intrinsic rewards may be achieved after the act of self-sacrifice, these are not actively pursued by the altruistic individual (Batson 2011).

Furthermore, leadership theory provides little empirical evidence on the reasons why leaders may choose to sacrifice personal interests to benefit others. Theoretically, the existing approaches primarily explored the moral intentions of sacrificing leaders, contrasting them with leaders who pursue their own interests. But, descriptors of these motives and values are not included in the instruments that measure servant, ethical and spiritual leadership, perhaps as a result of methodological difficulties in assessing leader morality. At the same time, the literature on altruism offers a possible alternative explanation of leaders' desire to self-sacrifice. It argues that motivation to help others at the expense of own interests is associated with emotional experience of empathic concern, offering empirical evidence in support of empathy-based altruism. The link between emotional experiences of leaders and their self-sacrificial behaviours is missing from the existing leadership theories that include the concept of altruism.

This thesis argues that the understanding of altruistic leadership can be enhanced by examining the intentions and expectations of self-sacrificing leaders, in addition to their behaviours. First, it aims to detail the nature of altruistic leadership, by describing

the expectations and intentions of leaders who act in the interest of others, in addition to the behaviours they demonstrate. It will also examine the effects of such leadership, in order to establish which of these attributes assist in distinguishing between altruistic and non-altruistic leaders. The first set of research questions is:

- RQ1a. What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- RQ1b. How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?

In addition, operationalisations of leadership styles associated with altruism focus mainly on describing self-sacrificial behaviours, not accounting for potential differences in leaders' intentions and expectations. While some measures include indictors that could be describing the moral and emotional underpinnings of leaders' concern for others, these are presented as general leadership attributes (such as moral character or emotional intelligence), rather than specific antecedents of a self-sacrificial act. Partially, this is due to the reliance of the existing instruments on followers' perceptions of altruism in leadership, rather than leaders' own accounts of leaders' intentions. Indeed, followers may be unaware of leaders' true intentions and expectations, and so follower-based measures are only able to collect data on the visible attributes of altruism. It appears that adding leaders' own perspective to understand the reasons for acting in the interests of others could assist in exploring the motivational basis of altruistic leadership. In its empirical part this thesis research will collect and compare the leaders and followers' descriptions of altruistic leadership, and examine the differences in the effects of altruistic leadership between groups of

leaders with congruent and incongruent leader-follower ratings. The second research question is:

 RQ2. Are congruent leader-follower ratings of altruistic leadership associated with more positive follower outcomes than incongruent leader-follower ratings?

The next chapter with present and discuss the research strategy and methods chosen for answering these research questions.

Chapter 3. Methodology

This chapter explains the choice of research approach and methods for examining the nature and effects of altruistic leadership. The approach and methods were designed to answer three research questions:

- RQ1a. What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- RQ1b. How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?
- RQ2. Are congruent leader-follower ratings of altruistic leadership associated with more positive of follower outcomes, than incongruent leader-follower ratings?

First, the research philosophy is discussed through a comparison of ontological and epistemological perspectives (Section 3.1). These represent contrasting beliefs of researchers on the nature of scientific knowledge and, in particular, the appropriate ways of eliciting new knowledge. By reviewing the two approaches, I find that both are applicable for the current study, but each is useful at a different stage of the investigation. I therefore outline the rationale for a 'pragmatic' approach combining the two perspectives.

Section 3.2 presents the research strategy, or the logic of answering the research questions in accordance with the research philosophy, and the precise methods that support this strategy. The methods include a sequence of an exploratory study,

interviews based on the critical incident technique, and a survey of leaders and their followers. The advantages of these methods and recommendations for their application are discussed in sections 3.3, 3.4 and 3.5. In this chapter I focus on the general approach and suitability of each of the methods, while the exact procedures relevant to the current study are discussed in more detail in the subsequent chapters (4, 5 and 6).

Finally, section 3.6 summarises the challenges of sampling when conducting studies of leadership, and provides the justification for the approach chosen in this paper. Here I draw on the existing approaches to studying altruism and leadership, comparing the advantages and disadvantages of different sampling strategies. For example, as alluded to in the previous chapter, leadership has been conceptualised at various levels, including leader-centric, follower-centric, and dyad-centric approaches, each requiring a slightly different subject group. While follower-centric approaches often measure leadership on samples of followers, dyadic theories compare the accounts of leaders and followers to assess the ways in which the two interact. The choice of the sample in the current study is conditioned by the research methods, but with a degree of pragmatism in accessing research participants. Section 3.7 concludes the chapter with a summary of the chosen methodological approach.

3.1 Research philosophy and approach

The approach chosen to answer the research questions must follow a selected research paradigm, encompassing ontology, epistemology and methodology, so as to relate the interpretation of the findings to the larger body of scientific knowledge (Kuhn 1962). Ontology is a philosophical study of the fundamental beliefs about reality and the nature of being, while epistemology is concerned specifically with the nature of

knowledge in a particular ontological reality. Then the choice of methodology – the appropriate ways in which new knowledge is acquired – stems from ontological and epistemological beliefs. For example, if knowledge is believed to be objective (governed by the laws of nature), then discovering it with subjective methods, such as individual interpretations of reality, would be inappropriate (Bryman 2003). Attention to the choice of research paradigm is, therefore, critical to selecting suitable methods and designing studies that are relevant to and capable of enhancing the existing body of knowledge.

There are two polar paradigms that define methodological approaches to research in social science (Guba & Lincoln 1994; Collis & Hussey 2013). The positivist view of the world suggests a single scientific 'truth' or reality, in which knowledge requires empirical investigation. In its search for generalisable, objective 'laws' the positivist paradigm is often associated with quantitative methods of research testing causal relationships between observations. At the other end of the spectrum, the interpretivist (or constructivist) tradition argues the existence of multiple 'realities' constructed by individuals and groups. Applied to social phenomena in particular, the constructivist approach argues that human experiences are shaped by the specific social interactions around them and, therefore, cannot be studied by pure observation, or explained by a single causal mechanism. Instead, interpretivism explores the subjective meaning of experiences, usually through qualitative research methods (Guba & Lincoln 1994).

Between the positivist and constructivist paradigms is a perspective combining the two-critical realism—that allows for the existence of an objective world, but specifies that the causal relationships within that world may not be directly observable, or may be understood falsely when observed (Read & Marsh 2002; Fleetwood & Ackroyd

2004). Critical realism suggests a multitude of different perceptions of one reality, some of which are closer to the objective causalities than others. The advantage of this perspective is that it acknowledges subjective interpretations of reality, yet, at the same time, points at the role of social structures and systems that shape those individual experiences in a specific way. Methodologically, critical realism often relies on triangulation of different methods of inquiry, comparing external and constructed reality. See Table 2 below for a summary of the differences in the three paradigms discussed.

Table 2. Comparison of research paradigms

	Positivism	Critical realism	Interpretivism	
Ontological view: what is reality?	Objective reality	Objective reality is influenced by the researcher's presence and misunderstood through subjective interpretation.	Subjective reality	
Epistemological view: what is true?	Scientific, objective truth	Local examples of truths	Multiple realities and truths	
Methodology: how can knowledge be acquired?	Experimental testing; surveys	Ethnographic approach; grounded theory	Phenomenological research; qualitative inquiry	

Different routes can be taken to determine the choice of a research paradigm to inform the research approach. On the one hand, researchers might begin by identifying and defining their individual beliefs and assumptions about the nature of society and the nature of science before they formulate the research objectives and the research questions (Burrell & Morgan 1979). The focus of inquiry and the methodological approach would be developed in accordance with a particular world view. A different

route to selecting a research paradigm starts with a pragmatic consideration of methods that may be practicable in answering the research questions, which are often defined without first committing to a particular philosophical perspective on reality (Peirce 1997; Creswell 2003).

The choice of a mixed-method research approach for studying altruistic leadership is a result of combining these two routes. This rationale is linked to the way altruism and leadership are studied in the respective theoretical fields. On the one hand, altruism has previously been studied empirically by social science as objective phenomena (Toi & Batson 1982; Eckel & Grossman 1996; Batson 2011). This included experimental studies of altruistic motivation underpinned by empathic concern, which compared it with self-interested or rational motivation in acts of self-sacrifice. On the other hand, leadership has largely been construed as a social phenomenon. Leadership, particularly in its transformational form, relies on followers' perceptions of leader's impact, and may be conditioned by contextual factors, such as organisational characteristics. Development of new leadership theories, therefore, often starts with examination of subjective experiences through a range of behaviour is relatively unexplored (Singh & Krishnan 2008; Dinh et al. 2014), and so explication of the altruistic leadership construct required collecting initial qualitative methods, which is then complemented by quantitative studies that intend to establish patterns in the ways leadership is expressed and becomes effective. Similarly, it is likely that both subjective and objective perspectives are necessary for examination of altruistic leadership, as the construct of altruism is incorporated in the leadership theory. The research strategy, therefore, relied on a combination of qualitative and quantitative design to develop a detailed and robust description of the construct of altruistic leadership and its effects.

3.2 Research strategy and methods

Research strategy defines the means for answering the research questions, specifying the methods for data sampling and collection (Bryman 2003). Methodological strategies can be deductive or inductive. Deductive approaches are aimed at testing an existing theory or hypothesis. They emerge from the positivist paradigm and are largely associated with quantitative research methods. In contrast, inductive methods develop new theories by observing patterns in empirical data. These are associated with the interpretivist research paradigm and qualitative research methods (Burrell & Morgan 1979; Guba & Lincoln 1994; Johnson & Gill 1997). In turn, a mixed-method research approach builds on the strengths of qualitative and quantitative methods, where neither approach on its own can achieve complete understanding of the research question. It has been particularly associated with the 'pragmatic' research paradigm that allows researchers to select research methods that are appropriate for answering the research questions, rather than simply choosing the methods that reflect their ontological beliefs. Researchers then triangulate the data obtained via the different modes of inquiry (Teddlie & Tashakkori 2009; Clark & Creswell 2011). In line with the chosen research approach, combining positivist and interpretivist perspectives, the current study required a mixed-method research design consisting of exploratory (inductive) and confirmatory (deductive) research methods.

The main method required for answering the research questions of this study is a questionnaire-based survey of a matched sample of leaders and followers. Quantitative research is a data-led method of inquiry that allows for statistical testing of research hypotheses with empirical data on large samples (Collis & Hussey 2013). This is a commonly used method of research in leadership studies, as it provides the robustness

required for an understanding of the relationship between leadership and follower outcomes (Avolio, Walumbwa & Weber 2009). The quantitative method is appropriate for answering the research questions of this study as it allows the testing of similarities and differences between constructs relevant for comparing altruistic leadership with other leadership styles. Quantitative methods are also widely used to test the causal links between the presence or absence of a factor and the measures of impact necessary for comparing the effectiveness of altruistic leadership with that of non-altruistic leadership. Finally, this method provides for statistical comparisons of the responses between groups, for example between leaders' self-assessments and assessments of leaders by followers (Atwater & Yammarino 1992; Trevino, Brown & Hartman 2003; Mayer et al. 2012; Walumbwa, Morrison & Christensen 2012).

However, quantitative research methods are limited to the hypotheses they are testing, and are unlikely to uncover previously unknown aspects of a construct (Bryman 2003; Creswell 2003). At the same time, the novelty of the concept of altruistic leadership and the variation in its interpretation in the academic literature (Singh & Krishnan 2008; Dinh et al. 2014) necessitated an initial exploratory stage based on an inductive method of inquiry. Qualitative method is widely used to investigate poorly or confusingly defined constructs, in order to identify themes and generate hypotheses based on in-depth data gathering in smaller samples (Collis & Hussey 2013). Conger (1998b: 109) pointed out that the qualitative study of leadership is of particular value as 'for the foreseeable future, there will be no endpoint — a moment where researchers will be able to say that we now have a complete and shared understanding of leadership'. In appreciation of this observation, qualitative methods (most commonly interviews) have been used in the initial stages of defining leadership constructs, such as ethical leadership (Trevino, Brown & Hartman 2003), servant

leadership (Liden et al. 2008) and authentic leadership (Shamir & Eilam 2005). Similarly, the current research began with collecting accounts of attributes that might be characteristic of altruistic leaders.

As a result, the current study drew on three distinct methods to answer its research questions. The exploratory stage, which comprised two studies, was designed to find new subjective data on altruistic leadership to clarify the construct. The first study consisted of a survey enquiring about the existence of altruistic leadership and aiming to clarify the language used by leaders and followers in describing incidents of altruistic leadership. This was followed by a series of interviews based on the critical incident technique (CIT), with the purpose of identifying and defining the attitudes and behaviours associated with altruistic leadership. The findings of the exploratory stage were then used to develop a scale of altruistic leadership, and put forward a set of hypotheses about its effects.

These propositions about the nature and effects of altruistic leadership were then tested in the second phase of the research. A quantitative survey of leaders and followers was applied to measure the prevalence of altruistic leadership and compare the construct and the effectiveness of altruistic leadership with other leadership styles. Table 3 below summarises this two-stage research design.

Table 3. Research design

Method	Data collected	Aim of data collection and analysis	Relevant research question (RQ)					
Stage 1: Developing a measure of altruistic leadership.								
Exploratory survey	Leader and follower responses to closed and open questions about self- sacrifice, altruism, and empathy.	Identify possible characteristics of altruistic leadership.	RQ1a					
Interviews (CIT)	Accounts of altruistic leadership, collected from matched pairs of leaders and followers.	Describe the characteristics of altruistic leadership, as seen from leader and follower perspectives.	RQ1a					
Stage 2: Testing the measure of altruistic leadership.								
Quantitative survey	Altruistic leadership ratings, reported by leaders (self-ratings) and followers (observer-ratings) in matched pairs; transformational and servant leadership ratings, and self-reported leadership outcomes submitted by followers.	Compare altruistic leadership with other leadership styles. Compare effectiveness of altruistic leadership with that of non-altruistic leadership. Compare the effectiveness of altruistic leadership in congruent leaderfollower assessments with that in incongruent leaderfollower assessments.	RQ1a RQ1b					

The following sections discuss each of the methods used in the current study in detail, describing their strengths and weaknesses, and present the sampling approach adopted in this research.

3.3 Exploratory survey

Exploratory studies are often conducted at the early stages of research to clarify the research constructs, develop new insights about the study's phenomena, as well as to assist in selection of the most appropriate methods of further inquiry, rather than to provide conclusive evidence (Shamir 1995; Barling, Weber & Kelloway 1996; Wong & Law 2002). As further qualitative and quantitative data collection in the current study relied on the ability of leaders and followers to identify and reflect on the construct of altruistic leadership, the aim of this exploratory stage of data collection was to test the awareness of leaders and followers of altruistic leadership as a concept, and to probe for consistencies in the accounts of altruistic leadership submitted by leaders and followers.

The leadership literature includes exploratory studies testing hypotheses or exploring constructs on small samples of leaders and/or followers. For example, Shamir (1995) tested the theoretical propositions on the differences and similarities between close and distant charismatic leaders in an exploratory content analysis of interviews with 320 students. Similarly, Barling, Slater and Kevin Kelloway (2000) examined the link between emotional intelligence and transformational leadership on a sample of 49 managers and 187 subordinates, commenting on the appropriateness of the measure used in the study and offering considerations for future research. Importantly, these exploratory studies offered insight into future methodological development, including research techniques, sampling, and specific questions asked in the course of inquiry.

The short survey is a common method of exploratory research, aimed at uncovering issues and formulating a preliminary idea about a concept or phenomenon from a large number of respondents (Wong & Law 2002). At the same time, the standardised

method of inquiry may limit data gathering to surface information, without an opportunity to probe into detail. For that reason, exploratory surveys may use a combination of closed and open questions. Closed questions allow the testing of the participant's agreement with an issue, or the prevalence of an issue, while open questions can help with collecting examples or gathering free-text opinions on a topic (Fink 2003).

3.4 Critical incident technique

The development of the altruistic leadership scale necessitated an initial exploration of the concept in a series of qualitative interviews. However, as altruistic leadership is not a leadership style widely discussed in the academic literature, or day-to-day organisational life, asking leaders and followers directly to describe acts of altruistic leadership would not elicit the necessary detail on the attributes of altruistic leaders. Some scholars suggested that the interview approach has been overused in leadership research, despite being limited to the type and quality of data it provides for understanding leadership (Conger 1998b). Instead, the research required a technique that would focus on a specific situation, familiar to an individual, where clarifying questions could be asked about the leader's motivation and behaviours, and the impact the leader had on the follower. Such an approach would allow exploring reality as constructed by leaders and followers, and formulating hypotheses that could be then tested more broadly in the following stages of the research.

The critical incident technique (CIT) is a way of collecting individuals' direct observations or past recollections of a specific event in their lives, which provides the required methodological value (Flanagan 1954). CIT was originally used to assess performance in professional practice in a clearly defined context (e.g. military practice,

healthcare practice), and has been designed for task analysis and problem solving in specific time-bound events. However, the technique was later used successfully as an interview method to study complex behaviours and motivations, including those arising from and prevalent in organisational practice (Urquhart et al. 2003), suggesting that it can be effective in understanding individuals' perceptions and interpretation of phenomena that are not as clearly defined, or take time to have an effect on the participants. For example, Herriot, Manning and Kidd (1997) used CIT to study the content of the psychological contract on a sample of UK employees and their managers at the early stages of development of the relevant theory, focusing on the incidents where employees were treated 'badly' or 'favourably' by the organisation. Grover et al. (2014) applied the same method in studying followers' reactions to the violation of trust by leaders as one of the stages in the iterative process of developing a grounded theory. No studies have been found to use CIT for an investigation of leaders that act in the interests of others.

CIT data in the studies of organisational practice can be collected through personal interviews, group interviews and direct observation, or even records of events (Flanagan 1954), using real-time incidents, past events suggested by participants, or hypothetical situations (Bitner, Booms & Tetreault 1990; Gremler 2004). The data collection typically concerns the cause of the incident, the events before, during and after the incident, and the outcome of the incident (Edvardsson 1992). The questions can cover facts, as well as accounts of motivation, emotional and thought processes (Cassell & Symon 2004). By following a standard, factual protocol of inquiry this technique allows the collection of a range of accounts of an event or a theme, while avoiding imposing any researcher's preconceptions on the respondents (Koch et al. 2009). When used retrospectively, CIT offers an additional advantage for collecting

accounts of significant events, as those are the ones the participants are likely to recall in the interview (Urquhart et al. 2003). However, this focus on memorable events is also a source of criticism of the technique, as the respondent stories reported in incidents can be misinterpreted or misunderstood in the absence of comparison with 'routine events'. In order to address that issue, Gremler (2004) recommends a dyadic approach to data collection (interviewing both the actor and the subject in the critical incident), and triangulation of data with objective evidence. Piloting of the interview questions with a sample of the target population is recommended to test the consistency of respondents' interpretation of the questions, or face validity (Woloshynowych et al. 2005).

Analysis of CIT data involves determining a frame of reference, identifying the categories common across a series of similar events and making inferences about the characteristics, causes and effects of the phenomenon studied. Studies based on observation of specific types of incidents may report on the frequency of particular episodes, although it is the cause and effect accounts that are seen to be more significant in the analysis than the actual frequency of events (Flanagan 1954). Because of the high degree of significance attached to interpretation, the impact of a researcher's bias is also greater. This can be addressed through reference to theory when interpreting the data (Glaser 1978).

3.5 Quantitative survey of leaders and followers

The aim of this final stage of the thesis was to test the hypotheses developed at the earlier stages of investigation about the nature of the phenomenon and its effectiveness.

Testing the theory in a robust manner required gathering consistent data from a large cross-sectional sample of leaders and followers, in order to conduct further statistical

analysis of the data, including within-group and between-group comparisons, correlation analysis, or causal relationship analysis. The gathering of a sufficient amount of data could be achieved through a questionnaire-based survey.

The quantitative survey is a popular method of collecting data on participants' details – their thoughts, behaviours, feelings or opinions about themselves and others (Oppenheim 2000; Yukl 2006). The main advantage of the survey method is that it allows collecting standardised (and, therefore, comparable) data from large numbers of respondents within short periods of time (Creswell 2003). Traditionally, quantitative surveys have been conducted through a series of questions (questionnaires) delivered in a face-to-face, telephone, or postal format. The process can be further facilitated by collecting survey data online, reaching a wide group of participants and automating the response collection. With adequate sampling methods a cross-section of the studied population can be reached, which is advantageous for quantitative research purposes. At the same time, the disadvantages of the questionnaire-based survey method are its inflexibility, associated with the standardised format, and low response rates associated with impersonal delivery methods (postal or online recruitment).

The format of a survey relies on the use of closed questions to allow comparability of responses submitted by large numbers of respondents. Therefore, development of questions that support the objectives of the study, including question content, format, and phrasing, becomes the main challenge in designing a questionnaire (Creswell 2003; Fink 2003). Several techniques are available for improving its quality. First, development of the questions should rely on the theory associated with the studied construct or phenomenon. For example, this could involve an appropriate literature

review or an exploratory qualitative study, like the one conducted in the current research on altruistic leadership. Secondly, a pilot study is recommended to improve face validity by testing question clarity and consistency in respondents' interpretations of the questions), for example through cognitive interviewing. This technique comprises the collection of verbal feedback on the survey instrument from several respondents, enquiring about their understanding of the question and the way in which they arrived at the answer (DeMaio & Rothgeb 1996; Campanelli 1997). Similarly, the piloting stage can be used to test the layout of a printed or an online questionnaire and gauge the time it takes to respond to the survey. Survey piloting is usually conducted on small samples of the relevant population.

Another challenge of questionnaire-based surveys is the recruitment of a sufficient number of participants of an appropriate profile. Low response rates can be associated with a number of factors, including a lack of respondent interest in the research topic, the length of time it takes to complete the survey and concerns about data confidentiality, which can be addressed through survey design and the participant recruitment process. For example, information sheets and cover letters containing information about the survey and data protection statements should be issued to all participants during the recruitment stage. In addition, both the information sheet and the survey design should allow participants to refuse to take part in the survey or to drop out of completing the survey at any time (Creswell 2003; Fink 2003). Some studies use reminders to participants and/or offer participants incentives to increase response rates. However, some scholars have suggested that the use of incentives may reduce response quality and alter sample composition (Singer 2002).

As quantitative surveys are typically used for testing robustness of constructs and relationships between different types of data, researchers must ensure that the responses collected by instruments appropriately reflect the studied phenomena (Cassell & Symon 2004). One of the major limitations of questionnaire-based surveys is that the data is self-reported, and is, therefore, affected by the ability of respondents to recognise an describe their experiences accurately (Crowne & Marlowe 1964). Yet, multiple leadership theories relied on self-reported data to develop and validate measures of specific leadership styles (Lowe, Kroeck & Sivasubramaniam 1996; Trevino, Brown & Hartman 2003; Barbuto & Wheeler 2006; Liden et al. 2008; van Dierendonck & Nuijten 2011), as it is often the only type of insight on the attributes and effects of leadership. In recognition of the potential inaccuracies associated with self-report bias, researchers can seek to triangulate multiple sources of data on 'leadership' (Atwater & Yammarino 1992; Atwater et al. 2005). This includes collecting and contrasting the data submitted by leaders and followers, and/or organisational data, such as measures of performance. For example, when developing a scale of servant leadership, Liden et al. (2008) used both follower-nominated assessments of leaders and a random sample of managers and subordinates at different stages of the research process. Studying the effect of transformational and transactional leadership on performance, Howell and Avolio (1993) collected data from leaders and their followers using a Multifactor Leadership Questionnaire, as well as obtained unit performance data from company records. Where ratings are obtained from several followers (direct reports), the raters' responses are typically aggregated (Conway & Huffcutt 1997; Hallgren 2012).

3.6 Sampling

Appropriate sampling is critical to the robustness of data collected through both qualitative and quantitative research methods. At the same time, as revealed in the literature review, scholars disagree on the most appropriate ways to define a 'leader', so the population from which a sample can be drawn is relatively vague. However, the majority of leadership theories explicitly or implicitly highlight the presence of two actors in the process of leadership: leaders and those who are led, also referred to as 'others' or 'followers' (Yukl 2006; Avolio, Walumbwa & Weber 2009). Therefore, understanding the sampling approach chosen in the current study requires clarification of what 'leaders' and 'followers' are and how the subjects have been selected for this study.

There are three main approaches to defining 'leaders' emerging from the leadership literature, each associated with a particular theoretical viewpoint. The first approach focuses on a leader's formal role, stemming from the earliest leadership studies based primarily on senior managers (Blake & Mouton 1984), or other executives with responsibility for managing others (Katz 1950; Fleishman & Peters 1962). 'Followers' are, therefore, represented by the direct reports of these senior managers and supervisors. Although later studies have shown that certain personality traits and socioeconomic characteristics support both the emergence of individuals as formal leaders and their in-role effectiveness, evidence from research in groups confirms that leadership is also present in individuals that do not occupy formal leadership positions (Wolff, Pescosolido & Druskat 2002; Zhang & Bartol 2010), suggesting that the concept of leadership amounts to more than a leader's role in an organisation. This second group of theories approaches leadership from the viewpoint of attributes that

allow leaders to influence others in the achievement of collective goals, and are represented by two distinct groups: leader-centric and follower-centric theories. Leader-centric theories associate the nature of the leadership phenomenon with objective personality traits or behaviours associated with leadership. 'Followers' are represented by the group members influenced by a leader (Blake, Mouton & Bidwell 1962; Blake & Mouton 1984). Finally, follower-centric theories, such as implicit leadership theory, suggest that these leadership characteristics are subjectively attributed to leaders through followers' perceptions. "Followers" are central to this theory and represent individuals who select and follow someone they believe to be leader-like (Meindl 1995; Judge, Piccolo & Kosalka 2009).

In addition to theoretical considerations of 'leader' and 'follower' definitions, the selection of subjects for a study is inevitably impacted by a degree of pragmatism (Peirce 1997). Many organisational leadership studies today are focused on leaders occupying manager and supervisor roles. Barling (2013) found that all of the leadership papers in four academic journals since 2000 concerned senior, middle, or front line supervisors. Depending on their focus, studies may differ in how these individuals are recruited: some focus on one or several organisations, sampling managers and identifying their direct reports as followers (Trevino, Brown & Hartman 2003; Sendjaya, Sarros & Santora 2008; Hunter et al. 2013). Others approach students, in particular at the MBA level, asking them to nominate and rate their current or former line manager as a leader. Experimental studies are often conducted on students, probably for accessibility reasons (Toi & Batson 1982; Seltzer & Bass 1990; Kirkpatrick & Locke 1996). These sampling approaches are associated with certain limitations, for example, conflation of 'leadership' and in-role management responsibilities (Zaccaro 2007; Zhang et al. 2012), as well as the likelihood of

contextual variables impacting the presentation of leadership styles and perceptions of leadership effectiveness in a particular organisation and outside of organisational settings (Shamir & Howell 1999). However, the manager population remains to be one of the most accessible and relevant for researching leadership in organisations.

The choice of samples for the current study has taken into consideration the theoretical positioning of the inquiry into altruistic leadership, as well as a degree of pragmatism in sampling respondents and validity concerns. As discussed in the literature review, altruistic leadership is associated with the values, attitudes and behaviours of an individual leader, rather than with followers' perceptions of those attributes (as followers may misinterpret the actual intentions of a leader). This study, therefore, takes a leader-centric approach to defining 'leaders' and 'followers'. At the same time, self-assessments of motivation and behaviours may be under- or over-estimated (Yammarino & Atwater 1993). Consequently, throughout the study the sample included both leaders and followers, triangulating the assessments of leadership and its effectiveness from these two sources. At the exploratory stage the definition of a 'leader' was not limited to a formal managerial role – individuals could nominate themselves as leaders, or be nominated as leaders by their followers. However, in the quantitative stage of the study leaders and followers were randomly selected from a number of organisations, based on the individuals' formal roles as supervisors and subordinates, for pragmatic accessibility reasons. Both of these stages used nonprobability samples – a selection of respondents that is not representative of the larger population of leaders and followers, as the total size and the profile of such a population is impossible to determine. Sample profiles and recruitment techniques are described in detail in the relevant sections of the following chapters.

3.7 Summary

This chapter described the choice of methodology in support of three research questions within the study of altruistic leadership:

- RQ1a. What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- RQ1b. How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?
- RQ2. Are congruent leader–follower ratings of altruistic leadership associated with more positive follower outcomes than incongruent leader–follower ratings?

The chapter discussed the research approach and strategy, explaining the choices of research paradigm and the research methods, informed by the subject of the study, as well as a degree of pragmatism in developing research methods and sampling the study participants. A summary of the research stages and methods is outlined in Table 4 below. The next three chapters will present the research findings, reported for each of the studies.

Table 4. Summary of the research approach and methods

Study	Purpose	Aim	Method	Sample	Research question
Exploratory survey	Develop a measure of altruistic leadership	Enquire about the nature of altruistic leadership. Collect examples of altruistic leadership.	Survey combining closed and open questions	Stratified sample of managers and subordinates	RQ1a
Interviews		Identify and describe the characteristics of altruistic leadership.	Critical Incident Technique	Self-nominated matched pairs of leaders and followers	RQ1a
Survey of leaders and followers	Test the measure of altruistic leadership	Compare altruistic leadership with other leadership styles. Compare the effectiveness of altruistic leadership with that of non-altruistic leadership. Compare the effectiveness of altruistic leadership in congruent leader—follower assessments with that in incongruent leader—follower assessments.	Online quantitative questionnaire	Randomly selected matched pairs of managers and subordinates	RQ1a RQ1b RQ2

Chapter 4. Study 1: Exploratory survey of the UK workforce

This chapter describes the first of the two studies in the exploratory phase of the research: a survey of the UK workforce. The purpose of this study was to test whether leaders and followers recognise altruistic leadership as a concept, and which leadership attributes they associate with altruism. A survey of leaders and followers was conducted in the form of an online questionnaire, collecting descriptive data on the prevalence of various possible components of altruistic leadership, identified previously in the literature review. In addition, open questions were used to collect free-text examples of altruistic leadership from leaders and followers.

The following sections detail the design and the findings of this exploratory survey.

The chapter begins with an outline of the sampling approach, questionnaire design, data collection and analysis procedures applied in this study. The findings of the survey are presented and discussed in the latter part of the chapter, drawing conceptual and methodological implications for the further stages of this research.

4.1 Sampling, recruitment, and ethical considerations

This exploratory survey aimed to collect a range of accounts of altruistic leadership and, therefore, required drawing on a large sample of respondents, representing a range of backgrounds, to reflect the possible diversity of leader and follower experiences of altruistic leadership. Two criteria were particularly important in the sampling approach.

First, the survey had to collect a sufficient number of responses from both leaders (about their motivation and behaviours) and followers (about the motivation and behaviours of their leaders). As evident from the literature review, altruistic leadership

should be examined from both leaders' and followers' points of view. On the one hand, leaders can present a more accurate picture of their own intentions and reasoning processes and should be asked about those directly. On the other hand, followers' reactions to particular leader behaviours can be impacted by followers' perceptions of how genuine leaders' motives are, and these opinions are valuable in their own right. For data collection convenience, this study defined 'leaders' as individuals in managerial roles, with one or more direct reports (referred to in the survey as their followers). On the other hand, 'followers' were defined as individuals who had someone to report to at work (referred to in the survey as their leader). While leaders and followers should ideally belong to the same relationship dyad (so that their responses can be triangulated), the aim of this study was simply to describe the experiences of leaders and followers, and these two groups were sampled independently of each other.

Secondly, the survey aimed to construct a sample representative of the UK working population, so as to collect a diverse range of accounts on altruistic leadership, but also to draw reliable distinctions between the responses submitted by individuals from different age groups and working in different industry sectors. The UK working population profile is typically derived from the census – a regular count of people and households in the UK. According to the latest census, conducted in 2011, there were 23.5 million employees in the UK (economically active individuals employed full-time or part-time in an organisation, excluding students, self-employed, and those looking for work) (Office for National Statistics 2011). For a population of this size a 2.5% margin of error with a confidence level of 95% necessitates a sample of at least 1,600 (Krejcie & Morgan 1970).

The respondents for this exploratory survey were recruited opportunistically, as part of a wider research project on leadership and management conducted by the researcher for the Chartered Institute of Personnel and Development (CIPD) and administered to a sample of the members of a YouGov online survey panel of 350,000+ individuals. For ethical reasons, only respondents who were at least 18 years of age were able to take part in the survey. In addition, the respondents had to be employed in organisations with two or more employees. This was because of the definition of 'leader' and 'follower' used in the current study. As 'leaders' were defined as individuals with responsibility for managing others, it was essential that the organisations they were employed in consisted of more than one individual, so that they had at least one direct report.

The questionnaire was published on the YouGov online survey platform, where any member of the panel could access the survey if they matched the required demographic profile. Once the data were collected, the final sample was weighted by age, gender and social class (using Census 2011 data) to represent the profile of the UK working population. The total achieved sample consisted of:

- 1. 'Leaders' 806 individuals who indicated they manage one or more other people in response to the question 'And how many, if any, people do you have directly reporting into you?'
- 2. 'Followers' 1,049 individuals who answered 'Executive/clerical/other worker with no managerial responsibility' to the question 'What level of management responsibility do you hold in your current position?' AND 'Yes' to the question 'Do you have a manager, supervisor, boss or someone you report to as part of your job?'

The sample of leaders was predominantly male (61.5%), while the followers sample was fairly equally split between genders (48.0% male). The most prevalent age group in both samples was represented by those aged 55 and over, followed by 45–54-year-old individuals (see Table 5). The majority of the respondents worked in the private sector and in large organisations (see Table 6).

Table 5. Distribution of the sample by age and gender

	Gender		Age					
Sample	Male	Female	18–24	25–34	35–44	45–54	55+	
Leaders	61.5%	38.5%	3.5%	13.5%	22.1%	28.5%	32.3%	
(806)	(496)	(310)	(28)	(109)	(178)	(230)	(260)	
Followers	48.0%	52.0%	5.1%	14.1%	21.5%	25.8%	33.6%	
(1049)	(503)	(546)	(53)	(148)	(226)	(271)	(352)	

Table 6. Distribution of the sample by industry sector and organisational size

	Leaders		Followers		
	%	N	%	N	
Private sector	70.0%	565	71.8%	753	
Public sector	21.2%	171	22.0%	231	
Voluntary sector	7.8%	63	4.4%	46	
Micro (2–9)	15.1%	122	9.0%	94	
Small (10–49)	13.6%	110	13.0%	136	
Medium (50–249)	14.5%	117	9.8%	103	
Large (250+)	55.1%	444	64.8%	680	

Ethical considerations for dealing with personal data were strictly followed by YouGov, who administered the survey and collated the data without passing any personal data to the researcher. All participants received the information about the survey and the further use of the data, once they clicked the link to the survey. By continuing to the survey they confirmed their understanding and consent (see Appendix 1).

4.2 Questionnaire design

Development of the questionnaire took into account the aims of the study, as well as the pragmatic consideration of reducing the time necessary to complete the questionnaire, so as to prevent dropout from the survey. It consisted of 22 questions across four sections (see Appendix 2 for the full questionnaire):

- 1. Screening questions (employment status, management responsibilities, etc.)
- 2. Background questions (company size, sector, etc.)
- 3. Questions about managing others
- 4. Questions about being managed
- 5. Leadership outcomes

'Leaders' responded to sections 1, 2, 3 and 4 of the questionnaire, while 'Followers' responded to sections 1, 2, 4 and 5. Because of the length of the questionnaire, visual representation techniques, including grid questions and sliders, were used to manage the risk of dropout (Manfreda et al. 2008). Several types of questions were used:

 Single answer closed questions, where respondents were only able to select one option from the list.

- 2. Multiple answer questions, where respondents were able to select up to 3, up to 5, or all applicable options from the list.
- 3. Rating questions, where respondents were invited to agree or disagree with a statement, using a 5-point Likert scale from '1' Strongly Agree to '5' Strongly Disagree, with a mid-point at '3', and an additional option for the respondents who would like to answer 'Don't know'. The use of a mid-point in Likert scales is recommended as it may increase the reliability of measurement and construct validity (Garland 1991). Additionally, reverse questions were used to reduce response bias.
- 4. Ranking questions, where respondents were required to rank up to 3, up to 5, or all options from the list in their order of importance, '1' being most important.
- 5. Open questions, where respondents could enter their response in the form of free text.

4.3 Measures

Leader experiences were measured with seven questions. Ability to recognise the emotions of others, which is typically used as one of indicators of empathy, was measured with a single item 'I can describe accurately the way others in the team are feeling' on a 5-point Likert scale (Boyatzis, Goleman & Rhee 2000; Kellett, Humphrey & Sleeth 2002; Jordan & Lawrence 2009). Another question asked leaders whether they put followers' interests above their own, by asking them to agree or disagree with the statement 'I tend to put the needs of my team members above my own', previously used in measures of servant leadership (Barbuto & Wheeler 2006; Liden et al. 2008). Follow-up questions were used to find out about why they agreed

or disagreed with that statement, stating possible reasons for leaders to sacrifice their own interests to benefit followers. These questions were aimed at understanding whether the sacrificing leader expected any benefits in return (egoistic expectation of reciprocity) or was acting selflessly, as suggested by the literature on 'true' altruism (see Appendix 2).

In order to understand whether and how altruistic intentions and self-sacrificial behaviours are linked to the mechanisms of leadership influence, leaders were asked about the techniques they used to convince followers to respond to their requests (Pierro et al. 2013). The questionnaire asked leaders to imagine a situation in which they had to motivate a team member to work extra hours to meet a deadline. The respondents could choose from a range of options they would use to motivate followers, including 'Remind them of the times you supported them, hoping that they will help you in return' and 'Show that you will be working hard yourself to meet the objectives'. See Appendix 2 for the full list of options.

Finally, leaders were asked to submit an example, in a free-text format, of when they placed the needs of followers above their own. This question aimed to gather examples of altruistic leadership, as well as the reasons to sacrifice and the associated behaviours, where possible. The use of open-ended questions is a popular technique for gathering exploratory data where statistical verification of the data is not a prime objective (Patton 2005).

Follower experiences were measured with four questions concerning different aspects of followers' assessment of leaders and leadership behaviours. First, followers were asked to score their leader against a set of ten characteristics, using a 5-point Likert scale. Among those characteristics were 'Selfish', 'Caring', and 'Considerate',

measuring different possible indicators and contra-indicators of altruism. These were presented alongside other characteristics irrelevant to this study (such as 'Hardworking' and 'Independent'), as previous studies indicated that individuals are likely to score others consistently highly across a range of characteristics if they 'like' the leader overall (Stang 1973; Mumford & Fried 2014). Including irrelevant characteristics in the survey allowed testing of whether the altruism-related attributes were evaluated independently, or whether they were conflated with an overall positive opinion.

The followers were then asked to answer a similar question on a set of six leader behaviours, presented as statements about their leaders, for example 'My line manager puts the needs of the team above his/her own', and 'My line manager is genuinely concerned about my wellbeing'. These statements were developed based on the literature review on altruism and leadership.

In order to understand whether altruistic intentions and self-sacrificial behaviours can influence followers' attitudes and behaviours, the respondents were asked to reflect on the reasons they might follow the leader's request to work extra hours to meet a deadline. The respondents could choose up to three reasons why they would help the leader, including: 'He/she supported me before, and I should help now' and 'I admire and respect him/her'. See Appendix 2 for the full list of options.

Finally, in contrast to the leaders' survey, followers were asked to submit a free-text example of when their manager placed their own needs above those of the team (or, in other words, behaved selfishly). This question was aimed at providing a comparison with managers' accounts of altruistic leadership, so as to determine whether any differences between altruistic and egoistic behaviour could be found.

Leadership outcomes were measured with two questions. First, followers were asked about the extent to which they agreed with the statement 'I am motivated by my organisation's core purpose' on a 5-point Likert scale. This was used as a measure of leader ability to connect followers with the organisational (group) objectives. Secondly, the followers were asked about their overall level of satisfaction with their current job, again on a 5-point Likert scale. This is commonly used as a single-item measure of follower-level outcomes (Wanous, Reichers & Hudy 1997; Dolbier et al. 2005).

4.4 Distribution of the online survey and collation of the responses

The questionnaire was tested before being distributed to the core sample, in order to identify any flaws and potential sources of confusion that could lead to invalid responses. The face validity of the questionnaire was tested with seven colleagues in the form of structured cognitive interviews, in which the respondents answered the survey questions and provided feedback on the clarity and ordering of the questions. The feedback received from the colleagues piloting the questionnaire was collated and analysed as a whole, with the questionnaire being amended accordingly.

The questionnaire was then set up as an online survey to test the format. It was tested with a number of YouGov panel members for feedback on the length and visual presentation of the questionnaire, which could potentially affect the completion rates. YouGov conducted this pilot testing of the online questionnaire independently.

For the final sample, emails were sent to members of the YouGov panel at random over two weeks in July 2013. The e-mail invited them to take part in a survey and provided a generic survey link. Respondents were also offered an incentive for completing the survey, as part of their engagement with YouGov. Once a panel

member clicked on the link they were sent to a section of the survey, depending on their profile ('Leaders' or 'Followers'). Based on pilot testing, the entire questionnaire took about 15 minutes to complete. Once the questionnaire was completed, the responses were automatically collated and forwarded to the researcher.

4.5 Data analysis

The online format of the survey allowed automatic collation of the data into tabular format, which was then exported into MS Excel and SPSS software for data cleaning and analysis. Descriptive statistics, such as frequency analysis and cross-tabulation, were predominantly used to assess the prevalence of altruism components as reported by leaders and followers. Pearson's r was also applied to test the correlation between different components of altruism, as well as between those components and measures of leadership, as a recommended method of testing linear relationships between continuous variables (Field 2009).

Free-text responses were coded using thematic analysis. This method allows inductive analysis of patterns in qualitative data, where relevant information is identified and coded as it appears in the data source (Aronson 1995; Braun & Clarke 2006). Typically, thematic analysis begins with recording of individual codes within the data, which are later grouped into broader categories, or themes. As with other qualitative data analysis methods, thematic analysis relies on the researcher's interpretation of the data, and the final themes are unlikely to reflect the nuances of initial codes in full. However, at the exploratory stage thematic analysis provides a helpful sense of direction for a more detailed investigation in the further phases of research.

4.6 Results

This section summarises the findings of the survey of leaders and followers, including the prevalence of experiences of altruistic leadership, the extent to which altruism and sacrifice are used as mechanisms of leadership and the qualitative examples of altruistic leadership submitted by leaders and followers. Please see Appendix 3 for the tables reporting the findings in full.

Leaders' accounts of altruism and sacrifice

The survey aimed to identify the prevalence of several components of altruistic leadership suggested by the literature review: empathic concern, acts of self-sacrifice and the intent of the leader to meet the needs of others despite the cost of sacrificial behaviour to themselves.

The survey findings suggested high levels of leaders' confidence in their ability to **empathise** with their followers. In the survey 73% of managers (N=805) agreed or strongly agreed with the statement '*I can describe accurately the way others in the team are feeling*', and only 3% disagreed or strongly disagreed with the same statement. Across the age groups the largest proportion of leaders reporting awareness with the emotions of others was among 18–24-year-olds (85% agreed or strongly agreed, N=28), with the lowest proportion among the 45–54-year-olds (67%, N=229). A slightly larger proportion of female leaders agreed or strongly agreed with the statement, compared with male leaders (75%, N=495 vs 72%, N= 310). Comparing the results across industry sectors and organisational sizes, public sector leaders were most likely to agree or strongly agree they can describe the way others are feeling (77%, N=171, compared with 72% in the private sector, N=564, and 74% in the voluntary sector, N=63); the same was true of leaders in medium-sized organisations

(81% in organisations with 50-249 employees, N=117, compared with 73% of leaders in large organisations employing over 250 people, N=442).

Despite high self-reported ability to recognise the feelings of others, the survey found that a smaller proportion of leaders might be engaging in acts of self-sacrifice. In the survey, 58% of managers (N=805) agreed or strongly agreed with the statement 'I tend to put the needs of my team members above my own', with 8% disagreeing or strongly disagreeing. This time older respondents were more likely to agree with the statement (61% of 35–44-year olds, N=178, and 60% of 45–54-year-olds, N=229, compared with 55% of 18–24-year-olds, N=28, and 53% of 25–34-year-olds, N=109). A considerably greater proportion of females agreed that they put the needs of the team above their own, compared with male respondents (63%, N = 310, compared with 56%, N=495, respectively). Voluntary sector respondents stood out with 84% (N=63) agreeing or strongly agreeing with the statement about self-sacrifice, compared with 56% of private sector (N=564) and 59% of public sector leaders (N=171), which is an expected finding given the nature of work in not-for-profit organisations. Comparing the responses by manager seniority, senior managers were the least likely to agree or strongly agree with the statement (50%, N=292), compared with middle (68%, N=276) and junior managers (61%, N=206). Supervisors with more than five years of experience of managing people in their current organisation were less likely than less experienced managers to say they put the needs of the team above their own.

Finally, the survey enquired about the **intent** of the acting leader to meet the needs of others despite the cost of such behaviour to themselves. Following on from the statement regarding self-sacrifice above, the survey asked the managers about the reasons they did or did not choose to put the needs of the team above their own.

Although the managers could select several options in their response, it was impossible to determine which option was their first choice.

Most managers who agreed or strongly agreed that they put the needs of the team above their own (N=473) said that they were 'the kind of person who is likely to put others first' (59%). Fifty-three per cent indicated that they expected reciprocal favours: 'That way my team members are likely to respond with extra effort', and 41% suggested they acted out of duty: 'It's part of my job'. Finally, the options 'My team will think better of me' and 'It's part of organisational culture' were each selected by 21% of respondents. Female leaders were more likely that male leaders to rely on the expectations of reciprocity (55%, N=198, vs 51%, N=275, selecting the option 'That way my team members are likely to respond with extra effort') but less likely to select any other option. On the other hand, older respondents (35–55+ year-olds) were more likely to indicate intrinsic motivation to self-sacrifice (selecting the response 'I am the kind of person who is likely to put others first'), compared with 18–34-year-olds. There were some notable differences between industry sectors, with a large proportion of voluntary sector leaders noting that putting the needs of others first was part of organisational culture (33%, N=53, compared with 18% of public sector leaders, N=101, and 21% of private sector leaders, N=317), but a smaller proportion indicating self-sacrifice was part of a leader's job (26% compared with 42% of private sector and 46% of public sector leaders). In contrast, 24% of private sector managers suggested that the reason they put the needs of the team above their own was that the team would think better of them (compared with 15% of public sector and 12% of voluntary sector leaders). These findings show that while the reported prevalence of intrinsic motivation for self-sacrifice is high, it is closely followed by expectations of reciprocity.

The responses of non-sacrificing managers (those who initially disagreed or strongly disagreed with the statement 'I tend to put the needs of my team members above my own', N=67) similarly highlighted the role of reciprocity in leaders' sacrificial behaviours. The most popular reason for not putting the needs of others first was 'It's simply not effective', selected by 40% of leaders. A greater proportion of females and younger respondents selected this option, although the sample sizes here were small. The second most frequently cited reason for leaders to choose not to sacrifice own interests described an egoistic concern: 'I have to look out for myself first', selected by 32% of leaders. This response was also more likely to be selected by males and younger respondents.

There is some indication that the organisational context may impact managers' ability and desire to put the needs of others above their own. In response to the question asking whether leaders face situations where they have to put the interests of the organisation above the needs of the team, 28% of managers said they face such situations every day or often, and only 6% responded 'Never' (N=805). A larger proportion of middle managers said that they faced such situations every day or often (39%, N= 276), compared with senior (26%, N=292) and junior (20%, N=206) managers. Younger respondents were more likely than older respondents to say they are affected by the organisational context, which may relate to the high proportion of younger respondents putting their needs above those of their teams, observed above. However, there were no considerable differences in the responses between sectors.

Followers' experiences of altruism and sacrifice

The survey of followers asked respondents to score their leaders against a number of personal attributes that leaders demonstrated when managing individuals and teams.

First, the followers were asked to score their leaders against a set of descriptors such as 'Intelligent', 'Honest', 'Caring', 'Considerate', 'Selfish' and others. There was an overall consistency in the scores, pointing at a 'halo' effect in the followers' perceptions of leaders: a phenomenon where the general positive impression that a rater has of the individual being rated inflates the scores that the rater assigns to that individual across a range of attributes (Murphy, Jako & Anhalt, 1993; Solomonson & Lance, 1997; Bechger, Maris & Hsiao, 2010). However, a relatively smaller proportion of followers agreed or strongly agreed that their managers were 'Caring' and 'Considerate', compared with some other characteristics of leaders. At the same time, there were strong correlations between the scores on 'Caring' and 'Considerate' (0.87**); 'Caring' and 'Selfish' at (-0.67**); and 'Considerate' and 'Selfish' (-0.69**; N= 1015). These findings suggest that followers were able to differentiate between those attributes and their overall impressions of their managers, at least to some extent. It also points at the possible association between attributes of care, consideration, and unselfishness.

In line with leaders' own accounts of their ability to empathise with others and putting the needs of the team above their own, private sector followers were least likely to view their leaders as 'Caring' (53%) or 'Considerate' (52%) and more likely to perceive them as 'Selfish' (25%, N=735). Interestingly, voluntary sector leaders received a similar score (with 25% of followers agreeing or strongly agreeing that their leader is 'Selfish', N=45), despite a relatively high proportion of these leaders rating themselves as self-sacrificial. A greater proportion of female followers rated their leaders as 'Caring' and 'Considerate', compared with their male counterparts, and 25–34-year-olds stood out for being more likely to consider their leader to be 'Selfish'.

Another section of the followers' survey enquired about leadership behaviours that could either be associated with altruistic leadership (for example, 'Puts the needs of the team above his/her own'), or act as contra-indicators of altruism ('Frequently uses their authority to get their own way'). This set of questions was presented to both followers (about their leader) and leaders (about their respective leader) and, therefore, allowed comparisons of the scores leaders assign to themselves and their own leaders. Once again, a relatively small proportion of followers agreed or strongly agreed that their leader demonstrates behaviours associated with altruistic leadership. For example, 28% of followers agreed or strongly agreed that their manager puts the needs of the team above his/her own, while 31% disagreed or strongly disagreed (N=1015) with that statement. Interestingly, although the 'leader' respondents were overall more positive about their own managers, they were still more critical of them than they were of their own behaviour. In the survey of leaders 30% agreed or strongly agreed that their manager puts the needs of the team above his/her own (N=600), while 58% (N=805) said the same about their own behaviour. These findings point to the fact that leaders might be likely to over-rate themselves, but also that acts of self-sacrifice may not always be visible to followers. In that respect, one particular age group stood out, as 25–34-year-olds were the least likely to suggest that their leader demonstrated selfsacrificial behaviours.

However, 43% of followers and 39% of leaders suggested that their manager balances the needs of the organisation with the needs of individual employees, which is higher than the proportion of respondents who said that their leader puts the needs of the followers above their own. This indicates that the raters were able to differentiate between selfless managers and those who might pursue a balance of organisational and team needs, but retain a selfish purpose. Looking at the possible sources of

motivation for altruistic behaviour, 47% of employees and 46% of leaders agreed or strongly agreed that their manager is genuinely concerned about their wellbeing, while only 39% and 43% respectively said their manager recognises that providing emotional support to the team is part of their job. Similar to the leaders' survey, these findings suggest that leaders may be experiencing genuine concern for others (as opposed to something they have to do as part of their role), but they are not necessarily perceived as engaging in self-sacrifice at the same time.

There were some further differences in the responses of followers working in different industry sectors, with a relatively smaller proportion of respondents suggesting that private sector leaders are concerned with followers' needs or forego own needs in the interests of followers, and a relatively higher proportion of followers saying the same about voluntary sector leaders. In addition, interesting disparities between the responses of the followers and leaders samples were revealed. For example, in the voluntary sector only 19% of leaders said their manager puts the needs of the team above his/her own, and 50% said that their manager is genuinely concerned with their wellbeing (N=49), compared with 36% and 63% of followers respectively (N=45). In contrast, both private and public sector leaders were more positive about their managers, both with regard to empathic concern and self-sacrifice. While some of these results may be impacted by the small sample size, it is also possible that in the voluntary sector it is more difficult to demonstrate behaviours associated with altruism at higher levels in the organisational hierarchy. This is supported by the findings that across all sectors leaders scoring their own managers were more likely to say that their leader frequently uses their authority to get their own way, compared with the responses of followers who did not manage anyone themselves.

Sacrifice as a mechanism of influence

Followers' ratings of leaders' characteristics and behaviours were compared with their responses on the two items measuring leadership outcomes: the extent to which individuals were motivated by the organisation's core purpose and the level of their overall satisfaction with their job. All of the leaders' attributes and behaviours associated with altruistic leadership were associated with positive leadership outcomes, with Pearson r between 0.34** and 0.53** (see Appendix 3 for the full findings). For example, 42% of followers who agreed or strongly agreed that their leader puts the needs of the team above his/her own, also said they are motivated by the organisational core purpose, and 39% of the same group said they were overall satisfied or very satisfied with their job (compared with 18% and 13% of followers respectively who disagreed or strongly disagreed with the same statements). Moreover, items acting as contra-indicators of leadership behaviours were associated with a greater proportion of followers disagreeing with the statements about leadership outcomes. For example, only 11% of followers who rated their leader as 'Selfish' also said they are motivated by the organisational core purpose, and 9% of the same group said they were overall satisfied or very satisfied with their job (compared with 72% and 76% of followers respectively who disagreed that their leader was 'Selfish'). These findings suggest that altruistic leadership could be associated with positive leadership outcomes. However, this is unlikely to be a direct relationship.

In addition, in one section of the survey both leaders and followers were presented with a hypothetical situation where a manager had to ask the employee to stay to work extra hours to meet a deadline, despite the employee resisting. Leaders were asked about the types of influence they would choose to use to get their way, and followers

were asked about the leadership behaviours that were most likely to convince them to stay to help with the workload, including, for example, coercion, reward, or personal connection (Pierro et al. 2013).

The most common techniques that managers said they would use to get employees to stay extra hours were role modelling the desired behaviour and sacrificing own interests to elicit similar behaviours in followers: 60% of managers chose the option of showing the employees that they would be working hard themselves (N=805). Relationship-based and reciprocity-based mechanisms were chosen by about a quarter of managers: for example, 28% said they would 'hope that [team members] will stay because they know you wouldn't ask if you absolutely didn't have to', and 25% said they would promise the employee informal rewards (such as time off). Although few leaders selected formal reward- and coercion-based options, these influencing techniques were more popular among private sector respondents. Managers with five or more years of experience were more likely to quote options indicating reliance on the relationship with their teams, while managers with less than five years of experience preferred formal sources of power or had to hope that the employees would stay without trying to influence them. These findings suggest that leaders might see self-sacrifice as one of the most effective ways of influencing followers to demonstrate desired behaviours.

When followers were asked about the reasons that would make them stay extra hours, the majority said they would stay because of their work ethic (49%, N=1015), rather than because of any particular way their leader was influencing their choice. The next two most popular reasons were once again associated with the type of relationship the followers had with their leader and expectations of reciprocity. For example, 35% of

followers said they know their manager wouldn't ask them to stay behind at work unless they had to, while 27% and 23% respectively said the manager would appreciate their effort, or expected a reward/bonus. Only 13% of followers said they would follow the leader because the manager supported them before, and 13% said their manager 'is working hard too, and I should help' (both more likely to be selected by respondents working in the voluntary sector). Followers' responses point to the role of relationships in leader—follower dyads, suggesting that self-sacrificial acts might only become effective as a mechanism of leadership once a positive relationship is established.

Examples of altruistic leadership

Finally, both leaders and followers were asked to submit examples of leaders' behaviours in a free-text format. The managers in the survey were asked to provide an example where they put the needs of staff above their own, while followers were asked to describe the opposite type of situation, where the manager put their own needs above those of their teams. The received entries varied in quality, as the respondents were given no guidelines as to what to include in their example, simply being told to submit as much detail as possible. Some respondents included full accounts of the situations they were describing, while others only stated what was or was not given/received in the event. In total, 418 valid responses from leaders and 229 valid responses from followers were gathered and analysed (see Appendix 3 for the full breakdown of themes emerging from the data).

While leaders submitted a range of descriptions of their self-sacrificial behaviour, two themes gathered the largest proportion of all responses. The most popular type of response (190 descriptions) concerned giving priority to staff interests and giving up

personal time/private arrangements (e.g. allowing staff to go on a break, holiday, emergency leave, covering to enable them to attend to personal commitments). For example, one manager 'agreed for a member of staff to go home early for family matters and had to cover her job past my own home time'. Another said,

'A staff member needed to take time off at short notice, I stepped in to cover some field work which involved me having to restructure my week and considerably increased my travel and meant staying away from home more than I usually would. It also meant longer working days and extra work at the weekend to cover off my existing commitments.'

Taking on a team member's workload to achieve a target (e.g. doing work that they could not cope with/covering workload) was the next most popular theme, with 139 descriptions, such as:

'When tasks need to be finished I will send team members home and do the extra myself, as I need to ensure my team are fit for the following day. It may be completing paperwork or sorting the resources for the next day.'

Other themes included foregoing promotion or training opportunities in favour of staff, taking on criticism from superiors or responsibility for mistakes and negotiating with senior managers on behalf of staff. Unfortunately, few reflected on the reasons for demonstrating a particular behaviour, focusing instead on the events that had taken place. However, some referred to acting in a 'humane' way, 'leading from the front', and one manager appeared to hint at empathy, explaining that they worked extra hours to resolve an issue so that their colleague 'could return to work the next day without concerns about it'. In a more detailed example, a leader said:

'My [colleague] has a lot of personal issues so I often have to complete tasks myself rather than delegating them to her. I also have to be tolerant of the impact it has on her performance (she is the lynchpin of her family so has many responsibilities) on occasion, and also ensure she feels able to make me aware of her issues without being judged. Sometimes this creates extra pressure and workload for me, but she is generally a hard-working, conscientious, valuable member of staff who just also happens to have a lot on her plate. We are a small team and there is no one else who can help either of us out in times like this, plus I...feel that my line manager doesn't want to know about problems like this, so I have to absorb it all.'

It also appeared that some self-sacrificial acts could come at a significant cost to the leader – taking up their personal time, straining their relationships with others (like senior managers), or even resulting in financial costs. One leader noted:

'I had to make someone redundant. I could have sacked them for incompetence but felt that would have involved the organisation in a long conflict that would have made everyone suffer and would have affected business. I used my own savings and borrowed money from family to pay the considerable redundancy payment (£11k+).'

On the other hand, followers' examples of leaders behaving selfishly – putting their own interests above those of the team – were spread out more across a number of themes. The most popular type of descriptions concerned examples of leaders failing to support their team members, for example being unavailable when help is required and not pulling their weight in the team workload. One follower stated that 'instead of

meeting with me and other team members, [the manager] prioritised another meeting of a routine nature'. Another wrote,

'Quite often projects that I have brought to near completion are shelved because my manager is busy with some other pet project and "doesn't have time" to provide input from his particular skill set.'

The second group of examples involved the leader failing to treat team members as individuals (for example, not allowing time off for personal circumstances). One respondent said,

'He asks you to work weekends with only a day's notice. Other times he will tell you not to come in that day as there is no work but only give you a couple of hours' notice before you were due to leave. By that time the packed lunch is prepared and I'm in my work clothes.'

Another explained,

'My immediate line manager doesn't like it when I have doctor or dental appointments, even though I rarely take them, but he makes me feel uncomfortable when I request time off for such appointments.'

Others mentioned leaders putting business need above the needs of the team, albeit distinguishing between organisation-focused behaviour and selfishness, as explained by one respondent: '[My manager] placed his company's needs above my own, which is similar but not quite the same thing'. Selfish leaders were described as ones who take credit for the work of others, renege on their promises or, interestingly, avoid difficult conversations, therefore protecting their own interests in avoiding conflict. One individual noted their manager 'takes the path of least resistance; tells me to be

to deal with it'.

The examples submitted by the two groups of respondents show consistency in how the concept of 'putting the needs of others above one's own' is described by leaders and followers. Both groups refer to sacrifice of personal time (or lack of it), and followers in particular highlight the importance of paying attention to individual needs and circumstances, an indicator of empathy, which leaders implicitly refer to in their accounts of self-sacrifice.

4.7 Discussion

The survey finding highlighted a few important themes that have conceptual and methodological implications for the further exploration of altruistic leadership in Studies 2 and 3.

First, the survey gathered data on the prevalence of altruistic leadership across industry sectors, indicating that altruistic leadership is a meaningful concept for leaders and followers. Many respondents were able to describe examples of such leadership in their work practice. The themes emerging from the responses of leaders describing self-sacrificial behaviours and followers describing the *absence* of such behaviours highlighted similar types of incidents, suggesting that leaders and followers understand the construct in similar ways. Moreover, the differences in the incidence of concern for others and self-sacrifice across industry sectors confirm the few propositions reported in the academic literature about the extent of altruistic leadership. In line with Kanungo and Conger's (1993: 37) observation that 'altruism is a word rarely associated with the world of business', private sector leaders were the least likely to describe themselves as empathic and self-sacrificial and also the least likely

to be described in this way by followers. On the other hand, voluntary sector leaders stood out for putting the needs of the team above their own interests – as highlighted in previous literature on altruism in the voluntary sector (De Hoogh, Den Hartog & Koopman 2005). Both the consistency in leaders' and followers' descriptions of self-sacrifice and the predictability of cross-sector findings suggest that the construct of altruistic leadership has face validity: leaders and followers were able to report on motivations and behaviours that could be associated with altruistic leadership.

The reliability of this survey instrument in exploring the construct of altruistic leadership is also supported by the consistency with previous studies in the findings with regard to age and gender in the prevalence of empathy and sacrifice. For example, in the current survey a greater proportion of female managers indicated that they could describe accurately the way others in the team were feeling and put the needs of others before their own. Similarly, a recent systematic review on gender differences in narcissism, which is associated with selfishness and lack of empathy, found that men were more likely than women to have that personality trait (Grijalva et al. 2015). Other research also pointed to higher levels of emotional intelligence among women (Joseph & Newman 2010), their greater preference for working with people while men preferred to work with things (Su, Rounds & Armstrong 2009), and the greater likelihood that they would demonstrate reciprocity when distributing rewards in a game (Heinz, Juranek & Rau 2011). In the same way, the increase with age in the proportion of self-sacrificing managers is consistent with Wagner and Rush's (2000) exploration of organisational citizenship behaviour of employees towards supervisors, which found that older workers valued altruism as part of their moral reasoning framework and were disposed to engage in helping behaviours. At the same time, a comparative study of the importance to managers of different career factors, including the importance of 'service and dedication to a cause', did not reveal age differences between older and younger participants (Kniveton 2004). It is, nevertheless, likely that gender and age differences have at least some effect on individuals' desire to act altruistically, and these factors should be taken into account when testing hypotheses about the nature of altruistic leadership in future studies.

Secondly, the survey provided some understanding of the reasons underpinning altruistic leadership, pointing to the role of empathy, care, and compassion in altruistic leadership. The two themes dominating managers' descriptions of altruistic leadership associated self-sacrificial acts with leaders' concerns about the personal needs and circumstances of followers, or the difficulties that followers experience in completing work tasks. This is corroborated by followers' descriptions of egoistic leaders, which indicated that the absence of concern about individual needs and workload struggles is likely to be labelled by employees as 'selfish'. On the one hand, both of these themes point to the role of empathic concern being one of the mechanisms underlying altruistic leadership, as highlighted in the literature review. On the other hand, given the previously highlighted challenges that leaders have in balancing organisational needs with those of their teams, there is a concern that even altruistic leaders recognise the needs of others, they may be unable to respond to the individual circumstances of all of their followers, and are likely appear at least to some of their teams members to be egoistic.

At the same time, it may be methodologically difficult to differentiate between empathy-based altruism and self-sacrifice driven by an egoistic expectation of reciprocated benefits. The majority of leaders in the survey indicated that they put the needs of the team above their own due to 'the kind of person' they are. Although this answer does not provide a clear explanation of the intentions of a self-sacrificing individual, the absence of a reason to sacrifice may indicate that the leaders internalised altruistic behaviour, instead of expecting reciprocal favours. However, the expectation of return benefits, such as increased followers' performance, was a close second most popular reason for self-sacrifice. This type of self-interested motivation is also evidenced by self-sacrifice being chosen as the top tactic used by leaders to encourage followers to do extra work when required. Future studies should be designed in a way that distinguishes between leaders' expectations to benefit or bear costs as a result of an act of self-sacrifice.

Within the theme of leaders' desire to act altruistically, another important finding concerns the focus of sacrifice. Previously, Avolio and Locke (2002) pointed to the difference between individual-oriented and organisation-oriented self-sacrifice, arguing that where leaders forgo personal interests to achieve organisational goals, their behaviour is not truly altruistic, as the leader is likely to gain personal benefits as part of the group sharing organisational success. However, the existing theories did not offer a consistent approach to describing or measuring the distinction between these foci of a self-sacrificing leader. The current survey found some evidence of differences in the scores that followers assigned to their leaders against the statements 'Balances the needs of the organisation with the needs of individual employees' and 'Puts the needs of the team above his/her own', suggesting that such a distinction between the foci of self-sacrifice can be made effectively. The difference between organisation-oriented and follower-oriented leadership was also made in the qualitative descriptions of selfish leaders submitted by followers. In line with the literature review, these findings suggest that other-oriented behaviours of leaders are not always selfless and that managers can seek personal gains by pursuing the interests

of the organisation, but also that the differences between the foci of leaders' self-sacrifice can be identified and described by followers.

The third finding highlights the differences in the extent of altruism and self-sacrifice as reported by leaders and followers. A fairly large proportion of leaders said they were characterised by ability to recognise the feelings of others or self-sacrificial behaviours, while a much smaller proportion of followers described their own leaders in the same way. On the one hand, such a difference between the scores of managers and employees highlights self-reported assessment as a source of potential bias in describing altruistic leadership (see, for example, Brown, 1986). One methodological implication of this bias for future studies is the need to triangulate leaders' ratings of themselves with the ratings of their followers on the same dimensions of altruistic leadership, to achieve greater reliability and construct validity. Moreover, the way followers rated their leaders suggested that at least some degree of 'halo' effect was impacting individuals' ability to distinguish altruistic leadership from the overall positive impression a leader might have on their followers (in the same way that low altruistic leadership ratings submitted by followers might be associated with the overall dissatisfaction with the leader). This means that future studies should seek not only to recruit matched samples of leaders and followers, but also to compare the ratings of multiple followers, to reduce the potential impact of the 'halo' effect in followers' scores of leaders. This will also allow the clarification of the effect of altruistic leadership on follower outcomes, as the same 'halo' effect may be at least partially contributing to the correlation between altruistic leadership ratings and follower outcomes, such as having job satisfaction and being motivated by the organisation's core purpose, identified by the survey.

On the other hand, the difference in the scores submitted by leaders and followers may also point to the lack of visibility of altruistic leadership to followers. Where leaders are experiencing a desire to help others, it is possible that followers are unaware of these cognitive and emotional processes experienced by their leaders and, therefore, attribute the outcomes of altruistic leadership to other factors, which they may or may not associate with leadership. This was particularly evident in the responses of 25–34-year-old followers, who were the most likely age group to receive emotional support from their leader, but the least likely to say that their leader put the needs of the team above their own, with almost a third (32%) of respondents in this age group describing their leader as selfish. Interestingly, leaders belonging to this age group were also the least likely to say that they put the needs of the teams above their own (despite scoring similarly to other age groups on the questions related to empathy). These findings suggest that age may play a role both in the extent to which self-sacrifice is demonstrated by leaders and in the extent to which it is acknowledged by individuals, with some groups less attuned to other-oriented behaviours at work.

This potential lack of visibility of altruism raises two challenges for altruistic leadership motivation. First, the inability of followers to discern altruistic leadership might mean that they will not respond with increased levels of satisfaction with their leader and/or increased performance. While some leaders who are intrinsically motivated to self-sacrifice will continue to behave altruistically, other leaders might be discouraged from sustaining their behaviour, particularly if they are still developing their style and rely on extrinsic factors to motivate altruistic leadership (Kohlberg 1984). Future studies could compare leader and follower outcomes across a number of scenarios, including situations where altruistic leadership is present but is either visible or invisible to followers. Moreover, of particular interest are leadership

outcomes in dyads, where leaders do not see themselves as engaging in altruistic leadership, but the followers perceive their leaders to be altruistic.

Another question is whether altruistic leaders should strive to make their behaviours visible to followers. While highlighting desire to act altruistically can help followers recognise the intent of their leader, it is also possible that leaders who purposefully demonstrate altruism are then perceived as lacking humility, and their self-sacrifice is considered to be calculated rather than genuine. Previous leadership studies provide inconclusive evidence of whether leaders' self-promotion and impression management strategies are favourably received by their followers (Sosik, Avolio & Jung 2002; Nielsen, Marrone & Slay 2010; Grant & Berry 2011). Perceived authenticity/inauthenticity of altruistic leadership adds another dimension of measurement for understanding the nuances of the relationship between different components of altruistic leadership and follower outcomes.

Finally, the survey highlights the role of organisational context in the leaders' ability to demonstrate altruistic behaviour, which may partially explain the lack of visibility of altruistic leadership to followers. In the survey, the respondents reflected on a number of components associated with altruism that were identified in the literature review, including empathic concern, self-sacrifice and intent to sacrifice without expecting benefits in return. Both leaders and followers were more likely to agree/strongly agree with statements concerning empathy than with statements about acts of self-sacrifice, suggesting that although leaders experience and demonstrate concern for others, acts of self-sacrifice do not always ensue. The survey findings suggest that organisational context is a barrier between the experience of empathic concern and self-sacrificial behaviour. A large proportion of managers suggested they

faced situations where the interests of the organisation and their teams were conflicting every day and often, which could impact their ability to demonstrate altruistic leadership when making decisions in the context of competing stakeholder needs. This appeared to be particularly relevant for leaders occupying more senior positions within the organisational hierarchy: senior managers were the least likely to say that they put the needs of their teams above their own. Similarly, voluntary sector leaders rating behaviours of their own managers were considerably more critical of their behaviours than expected, given the high reported prevalence of altruistic leadership in the sector. This finding points to the difficulties that more senior managers have in balancing their own interests with those of their teams and organisational needs, which may prevent them from acting in the interests of others.

Equally, norms of organisational culture appeared to be an important factor contributing to decisions of leaders in the voluntary sector to put the needs of the team above their own. On the other hand, the majority of private sector managers who did not engage in self-sacrifice said that at work they had to look out for themselves first. These findings indicate that specific industry sectors may attract employees with altruistic traits and behaviours, and/or select individuals with these attributes for leadership positions, encouraging leaders to develop and demonstrate altruism and self-sacrifice. For example, the impact of organisational culture could be one of the reasons why 25–34-year-old leaders were least likely to describe themselves as self-sacrificial. These individuals might perceive altruism as a 'soft' attribute that could hamper progress in their career, if their organisations reward them for being competitive. Further exploration of the relationship between altruistic leadership and organisational context will be required to understand whether the relevant traits and behaviours can be identified and developed in leaders and whether leaders themselves

are able to demonstrate these behaviours at work, particularly in the private sector context where organisational culture may not be supportive of altruistic leadership.

4.8 Study limitations

The main limitation of the study is the accuracy of the data reflecting the possible attributes of altruistic leadership. The findings are likely to have been affected by selfreport bias, particularly in the leader sample, where participants had to describe their own attitudes and behaviours, potentially inclined to portray themselves in a more positive light. Similarly, the ability of followers to discern intentions and behaviours of leaders could have been affected by their overall attitude to the leader. If a follower 'likes' their manager, they are more likely to score them positively across a number of behaviours, failing to distinguish the leader's strengths and weaknesses (Stang 1973). Finally, the study did not include any previously validated scales of empathy, self-sacrifice, or altruism. The potential to generalise the findings is, therefore, limited. For example, it is unlikely that the list of reasons why managers chose to self-sacrifice (or not self-sacrifice) was exhaustive. Nevertheless, the purpose of this survey was to explore concepts related to altruistic leadership and to generate hypotheses for further research, rather than to test them. Studies 2 and 3 aim to deepen the understanding of the altruistic leadership construct and quantitatively examine leaders' attributes that are associated with altruism.

Although the current study collected responses based on the profile of the UK working population, some workforce groups were poorly represented in the final sample due to the total sample size. Specifically, the number of responses from the voluntary sector was fairly low, which made further data breakdowns difficult. Considering that altruistic leadership was more likely to be found among voluntary sector leaders, due

to the nature of the work they do, it would be interesting to explore the motivations and behaviours of those individuals in more detail. Future studies exploring the prevalence of altruism and self-sacrifice might consider a boost to the sample of voluntary sector respondents, given that the proportion of these workers in the overall UK population is relatively small.

4.9 Summary

This chapter described and discussed the findings of a cross-sector survey of leaders and followers in the UK. It provided several important insights on the possible components of altruistic leadership, including empathic concern of leaders for followers' wellbeing, acts of sacrifice (putting the needs of others above one's own), and the expectation to bear the cost of an altruistic act. In addition, the survey findings highlight implications for developing the methodology in future studies of altruistic leadership.

Specifically, several themes emerging from the findings offer further avenues for studying altruistic leadership:

- Altruistic leadership is a meaningful concept and there are consistencies in leaders' and followers' descriptions of the construct.
- Concern for others is highlighted as the most likely intrinsic reason for acting
 altruistically, although expectation of reciprocity is also a possibility, which
 requires further exploration designed to discern between the two types of
 leaders' intentions.
- There is a difference in the prevalence of altruistic leadership as reported by leaders and followers, which may be associated with the lack of visibility of

altruistic behaviours of leaders. Future studies should compare the effectiveness of visible and invisible altruistic leadership, as well as compare followers' perceptions of altruistic leaders who proactively make their altruistic behaviours known to followers and those who do not.

- Age may play a role both in the extent to which self-sacrifice is demonstrated
 by leaders and the extent to which it is experienced by followers, and the ways
 in which followers recognise altruistic leadership need to be defined in more
 detail.
- Altruistic leadership is most prevalent in the voluntary sector and least
 prevalent in the private sector, which warrants further investigation into the
 impact of organisational context and culture on the emergence of altruistic
 leaders and their ability to demonstrate altruistic leadership.

In addition, there are several methodological implications:

- Altruistic leadership described in terms of empathic concern, self-sacrifice and intent to bear the costs of the sacrificial act has face validity.
- There is a degree of 'halo' effect in followers' descriptions of altruistic leadership and the associated follower outcomes, and future studies of altruistic leadership should triangulate leaders' and followers' responses and survey multiple raters to ensure reliability and validity of measurement.

The next chapter presents the findings of a qualitative study that aimed to describe the components of altruistic leadership in more detail.

Chapter 5. Study 2: Interviews with leaders and followers

This chapter describes the second of the two studies in the exploratory phase of the research: qualitative interviews with leaders and their followers. The purpose of this stage was to collect examples of altruistic leadership and identify attributes associated with altruistic leadership, which could support the following quantitative stage of research.

A series of interviews based on the critical incident technique gathered recollections of leader–follower pairs about incidents where leaders applied self-sacrificial behaviours in order to engage followers in achieving group goals. These interviews explored the leaders' motivation to bear personal costs for the benefit of others, the types of personal resources sacrificed by the leader and the expected outcomes of sacrifice for leaders and followers. Additionally, the ways in which leaders and followers described the same episode of altruistic leadership were compared, in order to expand the understanding of congruence in their experiences of altruistic leadership.

5.1 Sampling, recruitment, and ethical considerations

The aim of the study was to collect detailed accounts of altruistic leadership while comparing the ways in which a leader and a follower would describe the construct, resulting in the need for several criteria for the sampling approach. First, the process of exploring specific episodes of altruistic leadership required matched pairs of leaders and followers in order to triangulate the different perspectives on the same episode and to contrast the motivation and behaviours intended by the leader with the motivations, behaviours and leadership perceived by the follower. Unlike in the previous study, the recruitment process for the CIT interviews did not limit 'leaders'

and 'followers' to the formal roles of 'managers' and 'direct reports'. Instead, the participants could self-nominate as altruistic leaders or as followers of altruistic leaders. Secondly, a spread of sectors was likely to add variety to the types of leadership experiences and the contexts in which they are experienced. Leaders and followers were, therefore, drawn from a variety of sectors, where possible, although representativeness of industries was difficult to control, due to self-nomination and small sample size. The final consideration concerned the language used in recruiting respondents. The focus of the study was on detailed accounts of altruistic leadership, namely leaders sacrificing personal resources for the benefit of others without an expectation of benefit to themselves in return. However, in everyday life the term 'altruistic leader' might not always be used to describe the construct in this way. For that reason the advert invited participants to account for acts of 'self-sacrifice' performed by leaders, where they 'put the needs of others before their own' (see Appendix 4).

To recruit participants for the CIT interviews, the invitation to the study was advertised through several channels for communicating with HR and management professionals, available to the researcher through CIPD. Due to the difficulties in securing participants, the following recruitment strategies were used:

- communication in the monthly research update to CIPD members;
- communication in the monthly magazine *People Management*;
- invitations extended to the participants in parallel CIPD research projects on leadership.

The advert specified two types of individuals who could come forward for the research: 1) leaders who identified themselves as engaging in self-sacrificial acts; and

2) followers who believed they worked with self-sacrificing leaders. The two-route approach to nomination was chosen to reduce the bias of leaders, who may wish to portray themselves in a positive light, and followers, who may 'romanticise' their leaders, describing them as altruistic only because they like them overall. Volunteers identifying themselves as leaders were asked to nominate one (or several) of their followers for an interview, while volunteer followers were asked to approach their leader to take part. As a result, matched accounts of the same episode from leaders and followers could be collected.

All of the participants were issued with an information sheet about the interview prior to the data collection (see Appendix 5). Immediately before the interview they were given a consent form, which sought permission to record the sessions (see Appendix 6). Although the leaders and followers formed the same pair and knew they were both being interviewed, the sessions were conducted separately and confidentially and only the factual examples of self-sacrifice were shared, so as to collect data about the same episode from both participants in the pair. The respondents were free to stop the interview at any time. No personal data was collected during the interviews and all of the details that could identify the participants were subsequently deleted from the transcripts.

In total, recollections of 15 sets of leaders and followers were collected in autumn 2013. Of those, nine were initiated by leaders and six were initiated by followers. As a result of some participants submitting more than one example of altruistic leadership, a total of 35 incidents were discussed. The majority of the interviews came from large organisations, which is likely to reflect the recruitment strategy: the majority of CIPD

channels target representatives of large businesses. See Appendix 7 for brief profiles of the respondents.

5.2 Question design

Questions for the interviews were carefully designed so as to avoid confusion around the constructs of altruism and leadership. As both 'altruism' and 'leadership' have multiple connotations in non-specialist use, the questions in the critical incident technique aimed first to understand what the participants meant by 'leadership', 'altruism' and 'sacrifice'. They asked leaders and followers for examples of behaviour where leaders exhibited helping behaviours, but did not seem to expect any benefit to themselves, or had clearly forgone personal interests to achieve a goal.

As the purpose of this study was to clarify the construct of altruistic leadership, the questions focused on the possible characteristics of altruistic leadership identified in the literature review. The interviews aimed to gather detailed descriptions of the motivation and behaviours of altruistic leaders, as well as the ways in which those aspects of altruistic leadership manifest themselves in practice, according to followers. The interviews aimed to collect information on the following topics:

- motivation to sacrifice personal resources, as reported by leaders;
- contextual factors that could contribute to decisions to self-sacrifice;
- costs of altruistic behaviour expected by leaders;
- followers' perceptions of altruistic leaders' motivation and behaviours;
- outcomes of behaviour for the leader and the follower.

Interviews based on the critical incident technique follow a rigid protocol, aiming to collect detailed factual data on a particular episode from a respondent's life. In social

science research, such interviews typically cover three broad areas: 1) fact-finding (who was involved, what happened, when, where); 2) the actions of the respondent and any other participants; 3) the consequences of these actions (Flanagan 1954; Urquhart et al. 2003). Participants reporting on the same episode (in this case, leaders and their followers) are asked similar questions, so as to enable comparisons of their accounts. In the current study the following broad structure of questions was followed as part of the critical incident technique (see Appendices 8 and 9 for the detailed questionnaires used in the interviews with leaders and followers respectively):

- 1) Introduction.
- 2) What was the situation leading up to the event?
- 3) What did you/the leader do?
- 4) What was the outcome of your/your leader's actions?

5.3 Piloting of the questionnaire

Interview questions were piloted with eight colleagues. Half were asked to recall examples of when they sacrificed personal interests for the benefit of someone they lead. Others were asked to think of examples of sacrifice that their leaders made.

The participants were then taken through the interview questions. They were asked to answer the question itself, to test whether the understanding of the question was consistent across the participants. They were also asked to comment on the clarity of the question and the ease of reflecting back on their experiences of sacrificial behaviours, according to a cognitive interview protocol. The feedback from the interviews was analysed as a whole and minor amendments to the interview questions were made at the end of the piloting process.

5.4 Data collection

Prior to the interview and during the recruitment process, the leaders and followers who initiated the contact were asked to recollect recent examples where they sacrificed personal resources in order to achieve a group goal, or where they experienced such behaviour on the part of their leader. Each participant was asked to prepare 2–3 examples and, where possible, to reflect on those examples in advance of the discussion to ensure that they remembered as much detail as possible and were able to describe their motivation and behaviours in the act of self-sacrifice.

The interviews followed a semi-structured protocol, aiming to collect the details of the episode of a leader's self-sacrifice. Both the leader and the follower reported on the same episode(s) that the nominating member of the matched pair had proposed as an example of altruistic leadership. In addition, both followers and leaders could suggest other examples of altruistic leadership that they experienced or demonstrated. Each interview took between 30 and 60 minutes.

During the interviews particular attention was paid to the way the interviewer communicated with the respondents, as explicit judgement of the situation could have contributed to participants' desire to describe the events in a way that portrayed them favourably, rather than answering truthfully. For example, in responding about the motivation to sacrifice, it was important that the leaders felt safe to attribute their helping behaviours to a calculated form of sacrifice, even though selfishness is not a socially desirable value. This was achieved through building rapport with the interviewees at the start of the interview, providing information about the purpose of the study and strictly following the CIT protocol, asking factual questions in an impartial manner.

The interviews were recorded with participants' consent and transcribed for further analysis. Additional notes were taken by the researcher during the interviews and kept on record together with the interview transcripts.

5.5 Data analysis

Analysis of the data was largely qualitative, as quantitative breakdown of the relatively small number of incidents collected would not have produced meaningful results. Analysis of critical incident data typically follows the interview protocol, as it is designed to collect data in a structured way (Flanagan 1954). However, in this instance effective use of critical incident technique required a semi-structured format to gather detailed information on participants' motivation and expectations. For this reason interpretative thematic analysis was used, with the purpose of identifying contextual aspects of the studied behaviours, the experience of these behaviours, and their outcomes for various participants (Boyatzis, Goleman & Rhee 2000; Cassell & Symon 2004).

A frame of reference was created for coding the themes within the qualitative data (see Table 7 below). The choice of frame of reference can be influenced by many factors, and is typically aligned to the purpose of the study and the ways in which the results are to be used (Flanagan 1954). In this study the frame of reference was built on the aspects of altruistic leadership identified in the literature review, so as to understand how to map the themes emerging from the data onto the existing knowledge of altruistic behaviours and self-sacrificial leadership. This was organised around three aspects of altruistic leadership: sacrifice of personal needs by the leader (acts of self-sacrifice); intention to benefit others (for example, because as a result of empathising with them); and decision to benefit another despite the anticipated costs to the leader.

The frame of reference also included the issue of congruence between leaders' and followers' accounts of altruistic leadership and the outcomes of altruistic leadership for followers and the organisation. Sub-themes emerging from the data were coded against these five broad categories, but reviewed and modified as new sub-themes appeared, until all the incidents were coded.

Table 7. Coding frame for qualitative interviews

Theme	Code	Description of code
1. Acts of self-sacrifice	Costs to leader	Types of expected and actual costs to the leader.
	Self-sacrificial behaviours	Descriptions of leader behaviours in the act of self-sacrifice.
	Context	Details of the context necessitating an act of self-sacrifice.
2. Intention to benefit others	Developing an intention to self-sacrifice	Leaders' identification of followers' need for help.
	Empathic concern	Leaders' experiences of concern for others/emotional discomfort when seeing others in need of help.
	Perceived duty to help others	Leaders' experiences of perceived duty to support others/cognitive and moral reasons for helping others.
	Other motives	Other types of motives for helping others.
3. Expectation of costs to self	Benefits to leader	Types of expected and actual benefits to the leader.
	Benefits to others	Types of expected and actual benefits to followers and/or the organisation.
	Perceived outcomes of not behaving altruistically	Types of expected costs and benefits to the leader and others in the absence of self-sacrifice.
	Calculated sacrifice	Leader assessing the possible benefits before engaging in self-sacrificing behaviour, and only sacrificing when expecting return benefits to self.

	Selfless sacrifice	Leader assessing the possible benefits before engaging in self-sacrificing behaviour, and sacrificing despite the costs of behaviour outweighing the benefits to self.
4. Congruence in leader—follower accounts	Congruent	Examples of the second interviewee in the dyad (leader or follower) agreeing with the first interviewee's perception of leadership as altruistic.
	Incongruent	Examples of the second interviewee in the dyad (leader or follower) disagreeing with the first interviewee's perception of leadership as altruistic.
5. Effectiveness of altruistic leadership	Follower-level outcomes	Changes in followers' attitudes or behaviours as a result of leaders demonstrating altruism.
	Organisation-level outcomes	Changes in organisational processes as a result of leaders demonstrating altruism.

5.6 Results

This section summarises the findings of the interviews with leaders and their followers, based on the critical incident technique. The section reports on the types of incidents recorded, as well as the results against each of the five themes of analysis identified above.

Acts of self-sacrifice

Several groups of incidents identified in the analysis were consistent with the examples of self-sacrifice collected in Study 1 and previous classification described by Choi and Mai-Dalton (1999), pointing to the validity of the method chosen to collect the examples.

The most readily offered episodes of self-sacrifice described giving up **time**, for example when leaders helped followers with workloads and difficult tasks, or when they used personal time for followers' benefit, such as coaching team members before

important events, or preparing for meetings or joint activities. For example, one follower explained that his leader spends time each Friday night to write an email to the team with the updates from the previous week:

'[In the email] she might have said she was shopping for a dress or something with her daughter, [and although] that was not what she mailed me for, that engenders a bit more of an understanding that somebody has a life outside of work... You can tell that there had been time and thought put into it. It is not just something that has just been cut and pasted from somebody else's email...She has taken the time to structure it, to think about it...I am not based here and whilst I tend to talk to [the leader] at least once a week at the end of a telephone and more via email, [this email] shows me what the team are doing, and it does engender a team atmosphere.'

However, not all leaders chose to sacrifice their own time to support the needs of their followers. In fact, some leaders explained that they chose *not* to help their followers in instances where team members could benefit from developmental opportunities by tackling the challenge on their own. In these examples, leaders talked about having to suppress their desire to step in and resolve the situation more quickly and competently, often sacrificing their **status and reputation**, being ultimately accountable for delivery of projects on time. One leader reflected on a situation where he had to manage the expectations of his own managers to allow one of the followers to develop in their role:

'There is a high-profile project, where I have intentionally decided not to take over it, and let [my team member] arrive to it himself. First time it was delayed I gave some advice to help. Second time it happened again and at that point I

could have said, "This is the way it's going to work". But I know I hired capable people, I have no doubt in that, so I have to let them do their jobs...What I had to sacrifice in this process is my reputation, because I'm accountable for this, and I became the conduit between [my team member] and the stakeholders. I had to explain to my managers and to some other stakeholders why it is not delivered — again and again. Now it has been finished, and we will have a session to understand the lessons learnt, and how these situations can be prevented in the future.'

Additionally, several leaders spoke of forgoing **praise or developmental opportunities**, putting forward their followers instead. A few followers described such examples, often referring to leaders as 'empowering', suggesting that they sacrificed something that could be of value to them, ultimately having control over deciding whether to forgo their own interests or not. Interestingly, the leaders themselves did not perceive these types of self-sacrifice were as costly as followers thought:

'Often I will be asked to do articles or to speak publicly about the work we are doing. But, for me, I've done it so many times before; one more article is not going to make a difference. I've started to put forward my team members to do these things, so that they can get exposure and recognition for it...And I think my manager also notices I'm doing this.'

Followers contrasted examples of self-sacrificial leaders with incidents describing selfish leaders. Specifically, selfish leaders were characterised as lacking concern for individual needs and preparedness to give up power or status. One interviewee explained:

"Just before [my leader] was preparing to leave for a job outside this organisation he signed off a particular project. That project went wrong, just slightly, but enough for that person to get concerned with how it might affect his reputation. He called me in a room...and said, "I never told you to go ahead with it. It's a good thing [name] is leaving, he can take the blame with him." In that one moment I lost all respect for [the leader]."

When offering examples of putting the needs of others before their own, leaders sometimes struggled with the word 'sacrifice'. According to some of the respondents, not all incidents of forgoing time, praise, or reputation for the benefit of the follower 'felt like hardship', in the words of one interviewee. It appeared that self-sacrifice was associated with **emotional costs** for the leader, while helping behaviours that did not involve emotional discomfort were not seen as self-sacrificial. Some examples of such emotional costs involved leaders changing a preferred way of working, committing to something that they did not want or have to do to help their teams or, in contrast, delegating to their team members activities that they liked doing themselves. Acceptance of emotional costs was associated with exercising self-control. A leader said:

'The higher up you get the more you have to relinquish a certain amount of control. Personally this is quite difficult to say "ok this is yours, off you go!" and I have to be trusting. It is a learning curve and it's difficult at times to delegate, and delegate effectively.

I am a real numbers person. I gained a degree in maths and therefore my strengths are numbers and spreadsheets. I do a monthly report for the regional management team and [my boss] said I had to delegate that. But that is the

part of my job I like! I had to think about that and make better use of my time according to my role.'

In some instances emotional discomfort was described as a form of sacrifice in itself, where a leader felt anxious or frustrated because of the situation they were dealing with for the benefit of their followers, even though they did not have to give up time, praise or status in the process. One follower observed:

'I know [the leader] in other lives and in other arenas as well. I recognise that it is actually a personal sacrifice for her [to lead by example], because by nature she is much more introverted. She really has to put herself out there to do some of the activities that we do in the business. When she is talking about getting outside your comfort zone, trying something different [in coaching conversations], I recognise that she is not just telling me to do it, she has had to do it personally, she does it herself.'

Leaders' intention to benefit others

In describing the incidents, participants offered a number of reasons why leaders sacrificed personal resources or needs. It was clear that attributing the act of self-sacrifice to a single motivating factor was difficult for the interviewees, so some respondents started by talking about care and concern that a leader showed towards followers' circumstances, recognising and attending to their needs. One respondent said:

'I had some personal issues at the beginning of the year. [My leader] was really, really good; really understanding. He didn't put any pressure on me to rush back or anything like that. He's also really approachable and he's always

helpful. So there's never a problem where you might [be afraid] to speak to him because he's going to go mad. It's just not like that.'

At times, leaders' caring intentions were placed at the level of **commitment to serve** the entire organisation or society, rather than individual followers, which is consistent with the ideas of servant leadership (Greenleaf 1977). For example, one follower said about her leader:

'[The leader] is successful because he is great, but he does not want to be promoted. He has no interest in that. He is actually genuinely passionate about the service that we are providing. He hasn't forgotten that, in going through everything else.'

Other leaders saw care and concern for personal needs of followers as **part of their job**. For example, giving team members development opportunities and offering praise was considered by some as one of the functional responsibilities of a manager:

'A leader's job is to inspire the vision. You need people to deliver that vision or that plan, and so if you don't serve and look after those people, then your role doesn't exist, your plan won't get delivered. After you have created and communicated the vision, it is all about serving the people so that they can deliver that plan. And so give them the support they need, the encouragement they need, the resources, clearing obstacles, whatever it may be but your role is then to serve the people so they can get on and deliver... Obviously there are lots of different types of leadership, for me it is inherent to be a good leader I think. If you link it back to my force around the values for who you are as a leader, I guess values and qualities, selflessness are really important.'

Within the same theme one leader suggested that she liked sacrificing her time to spend it with her team members, as this allowed her to fulfil her understanding of what a 'good' or 'inspirational' leader should be like:

'Why do I do it? Because I like people. I like talking, and so [spending time with them] helps me do what I do best. I like finding out about people and what makes them tick so that I can help them progress, as others helped me to progress. It is about giving back as well. I had role models throughout my career and I have been really lucky to work with some really inspirational leaders and who really helped me to understand me and I like doing that for others.'

Finally, care and self-sacrifice were attributed to the leader's 'character', 'sense of duty', or 'obligation', associated with personal **integrity** and commitment to do the right thing. While some respondents described this motivation as one of their traits, other also mentioned a link with a particular sector they worked in, as described by one leader:

'You have no choice but to do this because we're public servants, and that's why we joined the job. I could never live with myself if I've said, "No I can't be bothered," and somebody ended up getting killed.'

At the same time, several respondents believed that it was **empathising** with followers' needs that made leaders' actions distinctly altruistic. Several participants described how they recognised the negative or difficult experiences of their team members and having to act on that feeling to support followers, through one's own sacrifice. One leader said:

'If you were on an operations or training exercise you would be lying in the middle of the woods somewhere. Probably it would be cold and it would be raining. You'd have sentries out all throughout the night... As an officer I didn't have to get up in the middle of the night to go and visit and check on those soldiers, but I always would because I knew it was cold, it was dark, it was lonely and they were tired. So actually, if I am going to be a good officer I am going to get up out of my bed, I will go round and I will have a chat with them in the night, check they are all okay.'

While demonstrating character, or behaviours that form part of a manager's job were associated with 'good' and 'effective' leadership, it appears that self-sacrificial behaviours form a distinct set, and followers were able to comment on the degree to which their leader put the needs of others first, without conflating it with their overall opinion of the leader. One follower said:

"To be honest, I don't [see him as altruistic]. I see him as very inclusive, but I also see him as very ambitious. There is not a right or wrong in being ambitious, in my opinion, I don't think that makes him any the less effective... He is very engaging, but you get a strong sense of a driven personality who expects certain things to be done by certain points."

One leader highlighted specifically that the needs of her followers were varied, but the common element in her approach to all of them was listening and understanding, tailoring the self-sacrificial support to individual team members:

"If you speak to any of my direct reports, they would all tell you something different, because they are all individuals and they all want something different from me. [I lead] by understanding them and helping them with whatever it is

that they want to do. They'd probably say that I listen, I treat them as individuals that I can create a vision. I can understand what they are really good at and help them be better at what they are great at...so that they feel successful every day when they go home."

Similarly, in several examples leaders and followers expanded on the role of integrity in caring for others, explaining that self-sacrificial leaders combined that trait with understanding and caring for the needs of followers. They described self-sacrificing leaders as capable of remaining considerate when having a difficult conversation with a team member. One follower explained:

'There was a recent situation where there had been a criticism from above of something that I had done. [The leader] took that criticism, spoke to me, understood the situation, didn't prejudge anything, was very open with me, and then dealt with that situation appropriately.'

Although not explicitly pointing to the link between empathy and self-sacrifice, in a reverse example, another respondent expressed concerns about the leader's self-sacrifice being potentially unnecessary and not aligned with followers' needs. She said:

"I imagine he would get a certain amount of satisfaction from helping people. It is in his nature and it is something that he has gone on to do a lot of. I think his motivation behind that was to do what is right, or what he decided was the right thing to do, but it is a weak example for me. When he put himself out there, it was just for him, even though it was probably hard."

Balance of costs and benefits

As discussed in the literature review, the decision of an individual to engage in self-sacrificial behaviours despite cost to self is one of the aspects of altruism. Both leaders and followers discussed the rational process of calculating the costs and benefits of self-sacrificial behaviours. One follower gave an example of how such calculations could be conditioned by the nature of the job, or the sector in which an individual works, where altruistic behaviour is explicitly incentivised. She said:

'We work in an emergency response sector, and people who work there would suggest that [they self-sacrifice] when an incident happens. But, everybody knows deep down that they really want an incident to happen because it gives them a chance to prove themselves, have opportunities to be fully functional, and to shine. Purely from the fact they do not want to admit that, there is a certain amount of distrust created. If someone is too self-sacrificing I would have to question the motivation, and why they are in it, what people are getting from it. If any leader is too self-sacrificing [it's questionable] because you just want to achieve your objectives at the end of the day.'

In a reverse example, a follower explained that her leader sacrificed development opportunities because she would not get as much out of it as the followers would. This type of incident (also mentioned by other leaders and followers) presents a similar calculation of costs and benefits by the leader before deciding whether to engage in an act of self-sacrifice. The respondent explained:

"[The leader] had dealt with more complex [similar] projects in the past, and it was not going to develop her massively. If it was around her development and if it was for selfish reasons, then I suppose it would be more led by [her]...

But the fact that it was not that directive, it was more collaborative, would suggest to me that it was not."

Interestingly, the timing with which leaders were performing calculations of costs and benefits associated with self-sacrifice was described in two ways. For one group of leaders, the decision to forgo personal interests was dependent on the **anticipation** before the self-sacrificial act of either immediate or short-term returns. Several leaders stated explicitly that demonstrating self-sacrifice gave them a lever for asking followers to reciprocate with discretionary effort in return. A leader noted:

'It's just deciding [what your costs are] long-term and short-term. It just got to the point [when I thought], "No, because in the future I can't do this stuff, you need to do it, so I'm just going to show you now how to do it". As you get bigger [as an organisation] you need to delegate to people, because it is hard to manage it otherwise.'

Trust and followers' commitment were mentioned among the factors that leaders were considering when weighing the costs and benefits of self-sacrifice, particularly where the example concerned the leader's reputation or status. If a follower was trusted to cope with a difficult task that a leader could fulfil better or more quickly, the leader was prepared to sacrifice time, power, and reputation for that individual. One leader said:

'Trust is a big thing for me and so I trusted [the follower]. He has borne this out and he is brilliant at what he does. So it was just listening to the things that he needed in place to manage the situation, and to be fair, [whether he is] good or bad, it's his job...Because he put it quite clearly and articulately why [the

way the situation was managed] was wrong, I understood him. So I had to go into a bit of a battle with somebody else to move forward.'

Another leader added:

'You have to [know] the ones who are really determined to make it work, and will make it work. And they are the ones you spend most of your time with. I am actually prepared to sacrifice time, energy, resources for people who are doing what they say they are going to do...They have to show some commitment in return for what we give them.'

The second group of leaders spoke of the benefits they gained from acts of sacrifice as **unintended consequences**, rather than something they took into account before putting the needs of others before their own. While leaders were suggesting that they gained personal satisfaction or greater follower commitment as a result of their actions, those were not the reasons why they behaved altruistically in the first place. One leader explained:

'It is the most exhausting job some days because you are giving of yourself every minute of every day...I enjoy spending my time with people and there is nothing more rewarding for me than seeing one of my direct reports or one of my wider team get recognition for something that they have done, something that they are really good at, and the thrill that that gives me. So it is not selfless because I get something back. It gives me every emotion, I can be on the ceiling one minute and I can be on the floor the next minute because somebody has done something and I don't think there is much in between.'

The unintended benefits cited by leaders were primarily emotional or developmental, rather than gains of immediate transactional value, even though the respondents often described the experience as 'rewarding'. Another leader said:

'First of all it is really nice seeing people develop as individuals, their personal growth. Another thing is that you develop yourself, because one of the best ways of learning things yourself is by teaching it to other people. So by teaching other people and helping them develop you are bound to develop yourself, and ultimately it grows the business. Some of it is altruistic and some of it is purely practical.'

Some followers recognised the difference between these two types of self-sacrifice, suggesting that they were able to distinguish between 'genuine' and selfish sacrifice, pointing to consistency in leaders' behaviours. Where leaders were continually able to offer care and support to followers, regardless of the costs to themselves, followers defined them as altruistic, even if there were some unintended benefits of self-sacrifice for the leaders as a result. On the other hand, if leaders were demonstrating self-sacrifice only in anticipation of getting something in return, such behaviours were described as intrinsically selfish. One follower said:

"I can tell there is a difference between sacrifice that is done to get something out of it, and when someone genuinely cares about you, but it's difficult to say how [to distinguish between the two]. I think for me it's about consistency. When I spoke to [my leader], and we spoke about various things, it was always the same level of care...She knew me very well, and she would always know how I felt, and go straight to the issue, rather than asking generally [how I was]."

Congruence between leaders' and followers' accounts

Several leaders and followers of the same pair offered opposing perspectives on the **motivation** for self-sacrifice. In some instances, these inconsistencies were brought up by followers who believed that their managers behaved selfishly, while the leaders suggested otherwise. However, in one example the leader disagreed with a follower's perspective that she was self-sacrificial, forgoing control and personal preference in letting the team decide how to complete a task. The leader then explained that she had, in fact, anticipated how the situation would develop, and the benefits of her initial sacrifice were not as unintended as the follower suggested.

The follower said:

'We have restructured parts of the team and it would have been very easy for her to [say] what it should look like. But she deliberately said, "I have got my ideas but I don't want to say them, I want you to go away and...come back with your own ideas." [When we came up with a plan] I could tell that it wasn't [what she wanted]; you could tell from her kind of face and from the questions that she was asking. But, she has actually gone with those ideas...knowing that she actually rips up a lot of stuff that she has already done and wanted. That [episode] has pushed, encouraged and in a way developed both the team capability and us being a team as well.'

And the leader explained the same situation:

'My perspective is slightly different because I know what is going on in my head! I believe if you are trying to do something different, you have to take people on a journey. We will get to the same place at the same time but will be then quicker at the implementation, because the people are "on the bus", they

are on the journey...So I think they came up with half the story and I think it is important to let them run that story because their ideas then developed as they went along.

I have been doing this for a long time, so I know how things are going to play out. For me it is important to teach them how they go about it, let them run with things and understand that they have got something done and that is not going to work. So it is probably not quite what [my team member] thinks because I knew instinctively that...they needed to work that through as a group.'

In a different example, the leader and the follower disagreed on whether the **behaviours** of the leader were self-sacrificial at all. Where the leader believed that he was putting the needs of the team before his own, the follower suggested that the costs to the leader may not have been as significant:

'It was a sacrifice for the organisation but not for himself. Some would say it was a sacrifice to have to drop everything [attend to the needs of the business] but for me it was an opportunity. It was a problem that needed resolving.'

It is clear that the experience of self-sacrificial leadership may be different for leaders and followers, due both to the visibility of leaders' behaviours and intentions and to differences in the interpretation of the same situation from different perspectives. Some respondents proposed that the ability of followers to notice self-sacrificial acts is increased when they have had previous experience of selfish leaders and are therefore more aware of unselfishness in comparison. One leader spoke of her experience:

'Some of them really value [sacrifices] and are really appreciative. They will say this publicly and they will talk to other people about the support that they are getting. Lots of them are really surprised to get that level of support. In fact the most common comment we get is that people have never had that kind of support before and it really surprises them.

Another leader said:

'[Some of] the times when I have made personal sacrifices as a leader, these were really, really small things, and I think sometimes your followers won't even notice the things that you are doing and the sacrifices that you are making. That's why it's all a bit of a paradox because you are doing this [for them] but do your people even know that you are doing it, and if they don't know that you are doing it, how is that having a motivating effect on them?'

Effects of self-sacrifice on followers

The respondents cited several types of outcomes resulting from leaders' self-sacrificial behaviours, and different types of sacrifice were loosely associated with specific types of outcomes for the follower. At the very basic level, leaders who sacrificed time to help their teams with workloads ensured effective **task management** by plugging gaps in existing resources. One interviewee said:

'The team had more help with the workload, and a dedicated senior member of staff supporting them through transition. The benefit to the stakeholders was that there was real dedicated time to the service that came in.'

However, a number of outcomes cited pointed to wider transformational effects of self-sacrifice on followers. One frequent theme was **professional and personal development**. Leaders spending time to support their team members, as well as sacrificing opportunities to take on complex projects, were helping their followers to obtain new skills and become more confident in their roles. One respondent said about their leader:

'He chose to take three-monthly meetings individually with [the two young colleagues] to discuss their progression, and he came up with ideas and opportunities to help them develop their careers, which he did not have to do. They were full of potential but the existing structure did not allow that to be explored, and since then they have both moved on within the organisation and both got good jobs.'

Finally, taking blame for followers or sacrificing one's own reputation to support the team was associated with **emotional benefits**, expressed in feelings of safety and being protected from negative experiences in an organisation. One follower said:

'Part of the reason I like working with [the leader] is because he can see around a lot of this nonsense and he shields us from a lot of it, I'm sure. He's now starting to be pressured by the politics of the organisation and a lot of what he gets us to do could be influenced by that.'

The way that self-sacrificial leadership was translated into followers' outcomes was underpinned by at least two mechanisms. One of these concerned an increase in emotional commitment to the leader and, ultimately, to the organisation. A second mechanism was associated with a more rational cognitive response, where followers noted that as a result of their leader role-modelling selfless behaviour, they were encouraged to reciprocate with extra effort at work. One follower said:

'It's nice to see someone that is open to ideas and makes you feel safe to share those. Whereas if you weren't encouraged to do so you might keep them to yourself, and you may continue with the status quo or whatever you do. It certainly encourages you to be more creative or innovative, and it certainly makes you feel like you are contributing more to the team, to the organisation, and so more content and happier at work.'

Another added:

'There was a time when we were really busy, and we were all down in another office together. On the last day [my leader] said that I should go home, and she would stay and finish the job herself...I understand why she did it, because

she was the senior manager, and perhaps it was her job to do that. But the next day I felt I should do something for her as well, so I worked from home, and did a fair amount of work. There is a degree of reciprocity when you see that your leader is pulling their weight."

However, a small number of negative experiences of leaders' self-sacrifice were described, for example where a follower believed that, in fact, the leader's desire to help with the workload deprived her of development opportunities. She said:

'When I was first working with him, he held many projects very tightly and did not allow others to work on them. There were few development opportunities for me, because he didn't think I could do it. When I [progressed] it was immense for me as I have not been given the opportunity to take on certain things...I wanted him to give up some of that power while I still felt comfortable, and give me clear guidance and clear responsibilities.'

Only one leader believed that her self-sacrificial behaviours had led to a negative effect on followers, when she decided not to tell her staff about upcoming organisational restructure until she knew exactly what was going to happen to their jobs. While from her perspective she was going through the emotionally difficult times on her own, protecting the team from unnecessary anxiety, in retrospect she wished she had told her followers about the situation earlier, so that they could prepare for the news and start working together to find a solution. The leader explained:

'When I finally told them it was a shock...I think they understood why I did it the way I did, and they knew how difficult it was for me to carry that information without being able to tell anyone. But, as you develop as a manager you realise that certain things should be done differently. I would have had more time and could have prepared them better to the new structure before I had to leave the organisation.'

5.7 Discussion

The examples discussed in the interviews highlighted the respondents' sensitivity to different types of sacrificial behaviour. Both leaders and followers observed that only some episodes of a leader helping followers could be labelled 'self-sacrifice' or 'altruism', suggesting that they could differentiate between the different types of intentions and behaviours of sacrificing leaders. Three specific elements that could be attributed to altruistic leadership were identified.

First, leaders specified that true sacrifice felt like a 'hardship', pointing to the acceptance of emotional costs as a characteristic of altruistic behaviour. The respondents highlighted that emotional discomfort accompanied acts of self-sacrifice and was sometimes a form of sacrifice in itself, for example where leaders had to give up activities they liked doing, or where they had to behave in ways that were not part of their natural style. This finding suggests that individuals view altruistic leadership as a style that requires leaders to accept personal emotional costs, in addition to the dedication of other resources. This distinguishes it from general helping behaviour, which can involve giving up time, for example, but is not necessarily a 'hardship' for the leader. This distinction can assist in differentiating between leadership styles from the leader's own point of view, but is unlikely to be obvious to the followers, who are not always aware of the leader's intrinsic costs, as the interviews suggested.

Secondly, the respondents highlighted a difference in leaders' expectations of the outcomes of their self-sacrifice, suggesting that altruistic leaders put the needs of others first, without anticipating any benefits to themselves in return. While altruistic

leaders could find the act of self-sacrifice intrinsically 'rewarding', the resulting value is of an emotional nature and often realised in the long term, for example through seeing followers develop. This is consistent with Batson's (2011) analysis of the balance of costs and benefits in an altruistic act. In contrast, non-altruistic leaders focused on the transactional aspects of the costs and benefits in the act of self-sacrifice, dedicating personal resources only where there was a rational, calculated case for performance gains. This finding points to the difference between altruistic leadership and self-interested sacrifice previously discussed in the literature theoretically (House & Howell 1992; Price 2003), suggesting that the two can be effectively distinguished in measurements.

Thirdly, the findings suggested that participants might be able to distinguish between the different types of reasons underlying leaders' desire to act in the interests of others. In discussions about the reasons why leaders may self-sacrifice, the respondents named a number of possible motives associated with caring behaviours of leaders. However, only empathic concern was linked to caring that was specific to individuals' needs and, therefore, was seen as meaningful by the followers. This observation resonates with the theme of empathy as a specific motivation for altruistic leadership, as proposed by the theoretical framework developed earlier. It also suggests that while integrity and commitment to serve others could be characteristic of altruistic leaders, these values are not exclusive to this type of leadership.

At the same time, the ability of leaders and followers to distinguish between altruistic and non-altruistic leadership is challenged by the inconsistencies in leaders' and followers' descriptions of self-sacrificial leadership incidents uncovered by the study. Even though the majority of respondents offered the same accounts of a leader's

behaviours and motivation, some disagreed on the reasons why the leader put the needs of others before their own, even questioning whether there were any costs to the leader at all. On the one hand, this could be associated with the challenge of visibility of leaders' self-sacrifice. For example, the frequency with which different types of sacrifice were cited suggests that time commitment is more noticeable to leaders and followers, while sacrifice of status and recognition may occur without followers' knowledge of the cost to the leader. There is also a question about the accuracy of participants' accounts: followers could be attributing their own values and the ways they would behave in a particular situation to their leader, while leaders may be portraying themselves in more or less positive light depending on how modest they are. These methodological challenges to the accuracy of descriptions of altruistic leadership informs the design of the next stage of the research, triangulating perspectives of leaders and followers.

5.8 Study limitations

While this study offered a useful insight into the attributes and behaviours of altruistic leaders, its scope and design had a number of limitations.

First, the research collected only a small number of critical incidents describing altruistic leadership. Other studies based on the critical incident technique reported findings from several hundreds of episodes (Grove & Fisk 1997; Herriot, Manning & Kidd 1997), although some gathered only a few dozen incidents (Kaulio 2008). Because of the number of incidents collected in this study, quantitative analysis of the data was not appropriate. In addition, the range of organisational sectors and sizes within the sample was not very diverse, with a considerable proportion of the leader–follower pairs represented by large public and voluntary sector organisations. It is

possible that altruistic leaders are more likely to be found in these sectors, as shown in Study 1. Future studies could aim to collect a larger number of incidents, as well as to use targeted recruitment strategies to ensure representativeness of organisational sectors and sizes in the sample.

The second limitation is the self-report bias in the descriptions of altruistic leadership by leaders and followers. The recruitment strategy involved self-nomination, relying on individuals' interpretation of their own behaviours (or behaviours of their leaders, in the case of followers) as self-sacrificial. Cultural factors, for example the ways in which the concepts of 'sacrifice' and 'altruism' are presented in popular culture and through the education system, could affect the ways in which individuals interpret leaders' behaviours and motivations. To an extent, this limitation was overcome by triangulating the data submitted by leaders and followers in the same pair, and the presence of incongruent responses suggests that this approach was effective. However, it is also possible that the responses of the second interviewee in a pair were to a degree affected by the nomination for this study. For example, leaders who were nominated by followers as altruistic could have found it difficult to disagree with such descriptions of themselves, or, on the contrary, felt that they have to downplay how selfless they were. Future studies should take into account the potential impact of such bias when designing the research and interpreting the findings.

Finally, the current study was not designed to prevent conflation of altruistic leadership with other types of leadership, and/or to single out the effect that followers' positive opinion of their leaders could have on their description of leaders' motivation to self-sacrifice. While offering a foundation for hypotheses about attributes and behaviours that distinguish altruistic leaders from non-altruistic ones, the results of

this study are insufficient to allow conclusions to be drawn about the nature and effectiveness of altruistic leadership. Further quantitative research is required to compare the effects of altruistic and non-altruistic leadership and to test whether altruistic leadership is a better predictor of follower and organisational outcomes than other leadership styles.

5.9 Summary

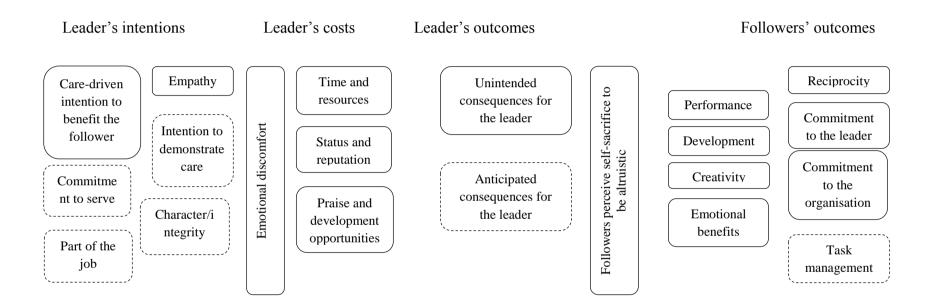
This study comprised a series of qualitative interviews with self-sacrificing leaders and their followers, based on the critical incident technique, with the purpose of clarifying the components of altruistic leadership identified through the literature review. Crucially, it highlighted a number of specific attributes and behaviours of altruistic leaders, which can be measured in the next stage of research. These are:

- accepting emotional and other costs in the act of self-sacrifice;
- engaging in self-sacrifice despite these costs and not anticipating any immediate tangible benefits in return;
- empathising with followers' needs and intending to benefit followers in ways that meet their specific needs.

The study also collected data on a number of possible follower outcomes of altruistic leadership, as reported by the participants. Figure 1 presents an updated conceptual model of altruistic leadership, including aspects of this leadership style and its effects on followers, considered in the scope of the current study, although impact of altruistic leadership on other stakeholders (for example, organisations and society) may be possible. This model will be tested in Study 3.

Figure 1. Updated conceptual model of altruistic leadership

Items in dotted boxes can be characteristic of altruistic leaders, but are not exclusive to this leadership style



Chapter 6. Study 3: Survey of leaders and their followers

This final part of the research aimed to test the insights about the nature and effectiveness of altruistic leadership gathered during the exploratory stage. In line with the research questions outlined in Chapter 3, a scale measuring altruistic leadership was developed and tested in a quantitative survey of leaders and followers. The power of the new instrument to predict a range of leadership outcomes compared with two other measures of leadership styles. Unlike Study 1, this survey gathered responses from matched leader–follower pairs, which allowed comparison of leadership outcomes between leaders whose self-ratings matched observer ratings and leaders who rated themselves higher or lower than their followers.

This chapter opens with a section formulating the hypotheses for this stage of research, drawing on the propositions identified through the literature review and the exploratory research findings (Chapters 4 and 5). It proceeds to describe study design, including the sample, the measures used in the survey instrument and the technical aspects of data collection and analysis. The results of the survey are described and discussed in the latter part of the chapter.

6.1 Formulating hypotheses for testing

Before the final study could be designed, the findings of the exploratory stage of the research were aggregated and examined to formulate concrete hypotheses that could be tested quantitatively through a survey of leaders and followers.

First, it was necessary to define the structure of the altruistic leadership model to be tested. As discovered earlier, through combining literatures on altruism and leadership, altruistic leadership could be described with three principal components: an act of self-

sacrifice, the expectation of the leader to bear the net costs of the act, and empathy with followers' needs as the primary driver of altruistic behaviours. Further empirical exploration of leader and follower experiences of self-sacrifice and altruism in Studies 1 and 2 established that these three dimensions were relevant to the construct of altruistic leadership, and highlighted attributes that could describe this leadership style.

The exploratory stage, therefore, provided a foundation for developing the components of the instrument for measuring altruistic leadership. Furthermore, by collecting examples of such leadership from leaders' and followers' perspectives, it helped formulate specific items within each of the components of the model. For instance, the act of self-sacrifice could be expressed through offering time, praise or status to followers, as suggested by previous literature (Choi & Mai-Dalton 1998; 1999), as well as by the incidents described by leaders and followers in the current research. Of particular value were the descriptions of the intended and unintended costs associated with the act of self-sacrifice. This is an area where respondents were more likely to provide responses that portrayed leaders in a favourable light. It was, therefore, important that statements corresponding to the consequences of the act of self-sacrifice were worded in a way that respondents could recognise, but that did not lead them to inflate their responses. These considerations were used to design and test the scale of altruistic leadership in the first stage of the study, describing the nature of this leadership style.

Another important objective of Study 3 was to understand the effects of altruistic leadership. Although previous research has linked ethical, servant, self-sacrificial and other similar leadership styles to follower outcomes, it could be that altruism – as a combination of self-sacrifice, empathy, and intention to bear the costs of self-sacrifice – is not effective as a mechanism of influencing others towards shared objectives. Yet,

to meet Yukl's (2006) definition of leadership as 'the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives', an association between altruistic leadership style and leadership outcomes had to be demonstrated. Several types of positive outcomes (such as perceived leader effectiveness and job satisfaction) were selected based on the findings of Studies 1 and 2, and previous research on servant and self-sacrificial leadership effectiveness (see, for example, van Knippenberg & van Knippenberg 2005; Walumbwa, Hartnell & Oke 2010; Grant & Berry 2011). Details of the measures used will be discussed in later sections of this chapter.

Hypothesis 1A. Perceived leader effectiveness, followers' job satisfaction, perceptions of organisational climate and perceptions of support for creativity will be higher when the leader exhibits altruistic leadership.

Furthermore, as existing leadership theories already provided a considerable body of evidence on the relationship between various leadership styles and organisational outcomes (Lowe, Kroeck & Sivasubramaniam 1996; Barbuto & Wheeler 2006; Liden et al. 2008), it was essential to compare the predictive power of the altruistic leadership scale with that of other instruments describing similar leadership styles. Considering the large amount of variance typically predicted by robust measures of leadership, such as transformational leadership (Bass et al. 2003), it is critical that new leadership instruments provide additional value by offering incremental improvements on the predictive power of existing scales (Mumford & Fried 2014). In order to appreciate the potential of altruistic leadership to predict follower outcomes, two additional leadership instruments were selected: transformational leadership, as an example of

statistically robust leadership scale, and servant leadership, for its closeness to the construct studied in the current research.

Hypothesis 1B. The altruistic leadership scale will explain additional variance in leader effectiveness above and beyond that explained by transformational and servant leadership.

Finally, both Study 1 and Study 2 highlighted the differences in the ways leaders and followers describe altruistic leadership, and the degree to which they perceive their own behaviours and the behaviours of their leaders as altruistic. On the one hand, these differences could be explored descriptively, in the process of developing and testing a scale of altruistic leadership. On the other hand, previous research into the inconsistencies between self-ratings and observer-ratings suggested that the difference itself may have an effect on the outcomes of leadership. Several widely cited papers (Atwater & Yammarino 1992; Yammarino & Atwater 1993; Atwater et al. 1998) describe a technique for comparing leadership outcomes across four groups of leaders, depending on whether they rate themselves higher or lower than followers and on the magnitude of that difference. Over-estimators typically score themselves considerably higher than they are scored by followers and have the worst leadership outcomes. Conversely, under-estimators are likely to score themselves significantly lower than they are rated by others, but are most effective as leaders. In-agreement leaders provide self-ratings consistent with ratings supplied by their followers: within that group in-agreement/good leaders are rated by followers higher than in-agreement poor leaders, and are also more effective.

The reason why agreement of leaders and followers is relevant to the current research is that it may help understand how altruistic leadership becomes visible to followers.

The differences between groups of leaders with different self- and observer-ratings have been linked to emotional intelligence, narcissism and conscientiousness, which may impact on how individuals express their leadership style. For example, Campbell, Goodie and Foster (2004) and Chatterjee & Hambrick (2007) explained that overestimators might be characterised by an inflated view of selves, over-confidence and focus on their own interests at work, rather than the interests of others. On the other hand, under-estimators have been shown as more self-aware with greater levels of emotional intelligence, but lower levels of self-confidence, which may lead them to compensate for their perceived lack of leadership ability by providing greater practical and emotional support to followers (Sosik & Megerian 1999; Sosik 2001). Considering that these types of perceptions and behaviours may be associated with various aspects of altruistic leadership, such as selfishness/unselfishness and concern for others, it was interesting to investigate the difference in altruistic leadership ratings submitted by leaders and their followers. Hypotheses were formulated in line with the previous observations on the effectiveness of different types of leaders.

Hypothesis 2A. Over-estimators will have lower altruistic leadership ratings compared with the other categories, as perceived by followers.

Hypothesis 2B. Under-estimators will have higher altruistic leadership ratings than 'in-agreement/good' and 'in-agreement/poor' leaders, as perceived by followers.

Hypothesis 2C. Leader effectiveness, job satisfaction and organisation outcomes will be higher for 'in-agreement/good' leaders than 'in-agreement/poor' leaders.

6.2 Sample design, recruitment, and ethical considerations

Quantitative testing of the hypotheses about the nature of altruistic leadership and its relationship with other leadership constructs required a large sample of leaders and followers, sufficient for statistical analysis. Moreover, given the identified differences in the ways leaders and followers perceive sacrifice, it was necessary to match the leader respondents to the individuals they lead, so as to triangulate the accounts of those demonstrating altruistic leadership and those experiencing it. It would be preferable to base the sampling approach on the wider definition of a 'leader', where followers nominate and rate individuals they consider to be leader-like, with the nominees also invited to take part in the survey. However, managing the process of such nominations and matching the leaders to the followers on a large scale to build a sample big enough for the statistical analysis was not feasible. Instead, this study adopted role-centric definitions of 'leaders' and 'followers', sampling managers and their direct reports to fit those respondent categories.

Similar to the approach taken in Study 1, appropriate respondents for this survey were recruited opportunistically, as part of a wider research project on management of employee wellbeing, which was conducted by the researcher for the Chartered Institute of Personnel and Development (CIPD). The project involved collecting matched responses of managers and their direct reports, working in four UK banks, with three of those banks representing the private sector and one bank being a public sector organisation. The banks were asked to nominate a selection of up to 90 managers, as well as 3–4 subordinates per manager, for participation in the survey. The organisations were free to nominate managers using any appropriate criteria (for example, some chose managers from areas where taking time off to complete the

survey caused minimal disruption to the business operations). However, for data comparability purposes, all organisations were asked to put forward managers of the same level of responsibility in the organisation (first line supervisor, managing employees without supervisory responsibilities), and from the same business area (call centre). One participating organisation did not have a call centre function, and instead selected middle managers (supervisors managing other supervisors and/or employees without supervisory responsibility) from several business functions, including Operations, Information Services, HR, and others. This difference in the managers' key roles was taken into account during data analysis.

The 'leader' survey was sent out to 250 managers, as nominated by the participating organisations, returning 184 usable responses, which represented a response rate of 73.6%. The 'follower' survey was received by 1,743 direct reports, as nominated by the participating organisations, gathering 532 valid responses, representing a response rate of 30.5%. The distribution of the sample by age, gender, and organisation is presented in tables 8 and 9 below.

Table 8. Distribution of the sample by participating organisation

		Bank 1 (call centre)	Bank 2 (office- based roles)	Bank 3 (call centre)	Bank 4 (call centre)
Leaders	N	65	38	56	25
(184)	% of the total sample	35.3%	20.7%	30.4%	13.6%
Followers	N	123	119	125	165
(532)	% of the total sample	23.1%	22.4%	23.5%	31.0%

Table 9. Distribution of the sample by age and gender

	Gender	Gender		Age				
Sample	Male	Female	18-24	25-34	35-44	45-54	55+	
Leaders	36.4%	62.5%	1.6%	24.5%	35.3%	32.1%	3.8%	
(184)	(67)	(115)	(3)	(45)	(65)	(59)	(7)	
Followers	35.7%	60.9%	12.4%	35.5%	26.1%	17.9%	5.3%	
(532)	(190)	(324)	(66)	(189)	(139)	(95)	(28)	

However, when the responses of managers and employees were matched, only 120 managers had received corresponding ratings from their direct reports, with an average of 2.82 raters per leader, totalling 338 follower responses. The profile of the matched sample is presented in tables 10 and 11 below.

Table 10. Distribution of the matched sample, by participating organisation

		Bank 1 (call centre)	Bank 2 (office- based roles)	Bank 3 (call centre)	Bank 4 (call centre)
Leaders	N	40	26	33	21
(120)	% of the total sample	33.0%	21.7%	27.5%	17.5%
Followers	N	100	68	72	98
(338)	% of the total sample	29.6%	20.1%	21.3%	29.0%

Table 11. Distribution of the matched sample, by age and gender

	Gender		Age				
Sample	Male	Female	18-24	25-34	35-44	45-54	55+
Leaders	38.3%	60.0%	2.5%	26.7%	33.3%	31.7%	2.5%
(120)	(46)	(72)	(3)	(32)	(40)	(38)	(3)
Followers	37.3%	58.3%	13.3%	36.7%	24.6%	18.3%	4.1%
(338)	(126)	(197)	(45)	(124)	(83)	(62)	(14)

Ethical considerations for dealing with personal data were followed during survey administration and data collation. While the nominating organisations provided participant names and contact details for survey distribution purposes, these were coded and stored in a secure location, separate from the main data file. Each participant was assigned a unique code, used both for anonymity purposes and for matching the responses of leaders with those of their followers in the final dataset.

All participants were invited to complete the survey via an email, which contained the summary of the research and the respondent's unique identifying code (see Appendices 10 and 11). Once participants clicked on the link to the survey they were able to view the information sheet about the survey (Appendix 12). Given the sensitive nature of the questions, with participants providing feedback on their managers and their organisations, the information sheet included a statement about the use of data in an aggregate format and assured participants of the confidentiality of their responses and the procedures for data handling (see Appendix 12). The respondents were also informed that they were free to drop out of the survey at any time, without informing their nominating organisation. By continuing to the survey the respondents confirmed their understanding and consent.

6.3 Questionnaire design

In order to test the hypotheses put forward for this study, the questionnaire included items related to the construct of altruistic leadership, as well as previously validated measures of related leadership styles (servant and transformational leadership). In addition, to test the predictive power of altruistic leadership, several indicators of follower and organisational outcomes were included. The design of the questionnaire also took into account pragmatic considerations, such as reducing the time necessary to complete the questionnaire, so as to prevent dropout from the survey.

Although leaders and followers received different questionnaires, the questions used in both surveys were based on the same measures. While the leaders responded to the questions about themselves, the followers scored the same items re-worded to describe their leaders. In addition, the followers received a number of questions about the outcomes of leadership. The final questionnaire was structured across seven sections (see Appendices 13 and 14):

- 1. Demographic questions (age, gender, experience of managing people);
- 2. Altruistic leadership items;
- 3. Other measures of related leadership styles (self-sacrificial, servant, transformational);
- 4. Follower perceptions of leader effectiveness;
- 5. Follower outcomes (such as job satisfaction, turnover intentions).

Leaders responded to sections 1 and 2 of the questionnaire, answering seven questions in total. Followers responded to all of the sections, and a total of nine questions, including additional measures of servant and transformational leadership scales, which have only been validated on follower samples. Each question incorporated a

number of individual statements, scored on the same scale. Although it is recommended that leader assessments and outcomes data are collected with a time lag to reduce common method bias (Podsakoff et al. 2003), it was not possible to send individuals two surveys at two different times, due to the restrictions applied by their parent organisations.

Several types of questions were used:

- Single-answer closed questions, where respondents were only able to select one option from the list. These questions were recoded into categorical variables for analysis.
- 2. Rating questions, where respondents were invited to agree or disagree with a statement, using a 5-point Likert scale from '1' Strongly Agree to '5' Strongly Disagree, and a mid-point at '3'. Reverse questions were used to reduce response bias. Although Likert scales collect ordinal data (data where the distance between points on the scale is arbitrary), they are often treated as interval scales in analysis, provided that normality and reliability tests are carried out on the data (Blaikie 2003).
- 3. Open questions where respondents could enter their response in the form of free text, usually number (for example, their age). All of the questions of this type were recoded into interval variables.

Considering the large number of questions, visual representation techniques were utilised in the questionnaire, including grid questions and dropdown menus, to reduce dropout from the survey (Manfreda et al. 2008). The respondents were also able to save their responses and return to the survey, which allowed them to manage questionnaire completion around their schedule. It was estimated that the leader

questionnaire would take between 3 and 5 minutes to complete, while followers would require 10–12 minutes to respond to the survey.

Questionnaire-based measures of complex constructs, such as altruistic leadership, often rely on a series of often ambiguous and/or subjective questions and/or measures to represent different aspects of the construct. This is why considerations of the reliability and validity were critical at the research design and analysis stage to improve the quality of the survey findings. Table 12 below summarises the types of reliability and validity applicable to a survey instrument, and indicates how these were addressed in the current study.

Table 12. Types of validity and reliability

Reliability & validity types	Purpose	Whether addressed in the current study	
Test-retest reliability	Stability of responses submitted by the same respondents to the same questions over time	No, as only one measure point was available	
Alternate-form reliability	Stability of responses to the same question worded differently, or where response options are presented in a different order	No, due to the survey instrument constraints	
Internal consistency	Consistency between several items that measure different aspects of the same concept	Yes, through including several items per concept in the survey	
Inter-rater reliability	Agreement in the assessment of different raters	Yes, in the follower sample, by including several direct reports per manager	
Content validity	Appropriateness of the questions, assessed by expert reviewers	Yes, by testing the questionnaire with colleagues before the survey was sent to respondents	
Construct validity	Ability of the instrument to distinguish between similar but distinct constructs	Yes, through testing discriminant validity of altruistic leadership subscales	
Criterion validity	Measure of the instrument against other available instruments of the same construct		
Predictive validity	Measure of the instrument against dependent variables	Yes, by including some measures of leadership outcomes as reported by followers, such as job satisfaction, and items measuring perceived leader effectiveness	

6.4 Measures

The questionnaire included a new measure of altruistic leadership, as well as several existing measures of similar constructs. In addition, items measuring leader effectiveness and follower and organisation outcomes were used. See Appendices 13 and 14 for the full list of items used in the measures described below.

Altruistic leadership (AL) was measured with 13 new items developed on the basis of the findings from the exploratory stage of the current study, taking into account the ways in which leaders and followers described incidents of self-sacrifice. These items fell into one of the three groups identified in the conceptual model:

- act of sacrifice, inspired by Choi and Mai-Dalton's (1998; 1999) work on self-sacrificial leadership (for example, 'I pitch in to support extra workload' and 'I would not compromise my status to support a team member');
- expectation of the leader to bear the cost and/or to benefit as a result of the self-sacrificing act (for example, 'I would only help a team member if there was value in it for me' and 'I tend to agree to help others before I consider the implications it would have on me');
- concern for others (for example, 'I am the kind of person who looks after my team, even if that means forgoing my own interests').

Two existing instruments measuring transformational and servant leadership were included in the questionnaire, for the purpose of testing distinctiveness of altruistic leadership from similar leadership constructs. Although a number of measures for these leadership styles are available in the literature, the instruments for this study were chosen based on their reported quality and the number of items, the latter necessary to reduce the overall length of the questionnaire.

The scale measuring transformational leadership (TL) was originally developed by Bass (1985), but later adjusted and shortened to be used alongside measures of other leadership styles (Conger & Kanungo 1994; Carless, Wearing & Mann 2000; Avolio & Bass 2004). This study used the Global Transformational Leadership scale developed by Carless, Wearing and Mann (2000), which is much shorter than other measures of transformational leadership and has been validated against the full Multifactor Leadership Questionnaire (Avolio, Bass & Jung 1995). This 7-item measure included items such as 'My manager treats staff as individuals, supports and encourages their development' and 'My manager instils pride and respect in others and inspires me by being highly competent'. The scale is designed for followers to rate their leaders and is scored on a 5-point Likert scale. Cronbach's alpha for this scale was .95.

In addition, *servant leadership* (SL) was measured with nine items based on the scale of servant leadership developed by Barbuto and Wheeler (2006). This particular instrument was chosen as some of its aspects are conceptually the closest to aspects of altruistic leadership. It included items, such as 'My manager does everything he/she can to serve me' and 'My manager believes that the organisation needs to play a moral role in society', measured on a 5-point Likert scale. Cronbach's alpha for this scale was .91.

Leadership effectiveness is not defined or measured consistently by leadership studies, but the measures of leadership effectiveness can be broadly grouped into three categories. First, perceptions of leader effectiveness (as reported by followers) are commonly measured as one of the leadership outcomes. For example, Conger, Kanungo and Menon (2000) included 'reverence for the leader', 'trust in the leader' and 'satisfaction with the leader' as measures in a study of charismatic leadership. The

second type of leadership effectiveness measures relate to follower outcomes: followers' sense of collective identity, intention to reciprocate, job satisfaction and commitment to the leader and the organisation. Walumbwa, Hartnell, and Oke (2010), for example, examined several types of follower outcomes associated with servant leadership: commitment to the leader, perceptions of procedural justice, perceptions of support to deliver quality work and service, and organisational citizenship behaviour (employee behaviour aimed at benefiting colleagues and organisations). Finally, leadership studies may include measures of organisational outcomes associated with effective leadership, such as objective measures of individual and group performance (Duarte, Goodson & Klich 1993; Rosete & Ciarrochi 2005). However, obtaining objective performance data in this study was not possible due to the lack of reliable and comparable data in the participating organisations. As a result measurement of leadership effectiveness was limited to a number of self-reported measures in the follower survey.

In the current study, items measuring leader effectiveness were inspired by previous research on leadership (Carless, Wearing & Mann 2000; van Knippenberg & van Knippenberg 2005). Perceived leader effectiveness (LE) was measured with eight items, including generic statements such as 'My manager is an effective leader', as well as indicators of cognitive and emotional affiliation with the leader, such as 'My manager and I think alike when analysing and/or solving a problem' and 'I feel understood and appreciated by my manager', all measured on a 5-point Likert scale (α =.97).

At the follower outcome level, the questionnaire included a 5-point Likert measure of satisfaction with the job (JS), adapted from Belligham and Campanello (2004). This included six items, such as 'I am overall satisfied with my job' and 'I feel used up at

the end of the work day' (reverse item). Cronbach's alpha for job satisfaction was .80. Perceived organisational climate (OC) was assessed on a 5-point Likert scale with six items, such as 'Communication in this organisation is open and transparent' and 'Performance management in this organisation is impartial and supportive' (α =.81), based on literature on perceived organisational support (Eisenberger, Huntington & Sowa 1986). Additionally, support for creativity (SC) – a possible outcome identified in Study 2 – was measured with four items, including 'This workplace is a mutually supportive environment, encouraging collaboration' and 'I feel isolated because of my views and values' (α =.77), based on previous work on organisational and team environment supporting creativity and innovation (Siegel & Kaemmerer 1978; Madjar, Oldham & Pratt 2002).

6.5 Distribution of the online survey and collation of the responses

Before the survey was distributed to the core sample, both questionnaires were tested with three colleagues in the form of structured cognitive interviews, in order to gain feedback on the clarity of the questions and ensure face validity of the survey instrument. The feedback received from the colleagues piloting the questionnaire was collated and analysed as a whole, with the questionnaire being amended accordingly. The questionnaires were then set up as online surveys for testing of the format. The online survey was tested with four colleagues for feedback on the length and visual presentation, which could potentially affect completion rates, and any further comments on the content. Minor amends were made to the presentation of the questionnaire online as a result of the testers' feedback.

Between December 2014 and April 2015 managers and their direct reports received emails inviting them to complete the online survey. The phased distribution of the

invites was linked to the staged participation of the organisations in the wider research project. The email invited the respondents to take part in a survey by following a survey link specific to their profile ('Leaders' or 'Followers'), in accordance with the participant lists provided by their organisations. Once the participants clicked through to the survey, they were asked to provide their unique identifying number, necessary for matching the responses of the two samples. To ensure correct matching of the data and given the high turnover rates associated with the call centre environment (Schalk & Van Rijckevorsel 2007; Townsend 2007), the email invite sent to the followers confirmed the name of the relevant manager and asked the respondent to take part in the survey only if they could identify the named individual as their supervisor.

The participants were given two weeks to complete the survey, and reminders were sent out one week after the original invite email, in order to increase the response rates (Baruch & Holtom 2008). Two banks also chose to post the links to the survey on their internal websites. However, only individuals who had received their unique identifying code via email could access the questionnaire. Hosting the survey through Ultimate Survey software allowed automatic collation of the data into tabular format, which was then exported into MS Excel and SPSS software for matching and analysis.

Additional paper questionnaires were issued to one of the participating banks, as lack of access to external email and internet was identified as a barrier to participation in the survey for a considerably large group of managers only after the initial emails were sent. The participants were then posted a paper questionnaire for completion, which they were invited to return to the researcher anonymously. These responses were manually added to the database of online survey responses. In the final sample of managers 25% completed the paper version of the questionnaire.

6.6 Data screening

Prior to analysis, the data was examined for normality and linearity (Field 2009). First, the data was screened for the presence of outliers. The majority of items were measured on Likert scales, across which no outliers were found, as responses fell within the constraints of the five-point range. In addition, the data was visually screened for 'disengaged respondents' – individuals who might not have been answering the questions carefully). This was achieved by comparing the types of scores submitted by a single respondent, and comparing the scores for reverse-coded questions with the scores for normal questions. Data points that showed extreme homogeneity in responses (for example, all scores equalled '4') were removed from the sample.

Data was also screened for respondent errors and omissions. The Likert-type scales attracted very few omissions. In the manager sample, less than 5% of cases were missing any data, while in the follower sample 8.1% of cases were missing only one response, and only 3% of cases were missing two or more responses. No pattern to missing data was detected. While listwise deletion is typically recommended for missing data, deleting all cases with any missing data would diminish the power of the analysis by reducing the sample size. Instead, and because of the small number of missing data points, two approaches to address missing data were deployed (Roth 1994; Downey & King 1998). For calculating mean scale scores (for example, the mean score for the transformational leadership scale) where the scale had only one missing data point, the item score was replaced by the mean of the remaining items for the scale. This method allowed the calculation of scale scores without affecting the mean. Where a scale had more than one missing item score, the mean was not

calculated and the missing mean scores were excluded pairwise in further analyses. See Appendix 15 for the frequencies of missing data points in leader and follower samples.

As leader and follower responses were obtained from four different organisations, data was also tested for homogeneity (Field 2009). One-way ANOVA was carried out on the aggregate scores of the key scales used in the research (AL, TL, SL, and others) to test between-groups differences in responses originating from the four banks in the study. There were no significant differences in the mean scores between any two organisations within the leader self-ratings, suggesting that data was homogeneous and could be combined into a single sample. However, there were significant differences in mean scores within the follower ratings across nearly all scales, except for job satisfaction (JS). Despite the original proposition that Bank 2 would stand out in the sample, due to the different nature of the roles that individuals in Bank 2 perform (office-based roles vs call centre roles), post hoc tests indicated that it was responses from Bank 3 that differed significantly from the scores supplied by the followers working for the other three banks.

Data normality was evaluated using the Kolmogorov-Smirnov test, skewness and kurtosis values on aggregate scores for the key scales (AL, TL, SL and others). As it has been shown that the Kolmogorov-Smirnov test can adopt high values in large samples, histograms were additionally drawn to aid visual assessment of data (Pallant 2007; Field 2009). Once again, leader responses were shown to be normally distributed and suitable for analysis as a combined sample. However, follower responses did not show normality of distribution (apart from SL) when treated as a single sample, indicating a skew towards positive responses on all scales. This was corroborated by high Cronbach's alpha for scales such as transformational and servant

leadership. Separating the sample by parent organisation helped improve the scores of normality, with the exception of TL and leader effectiveness (LE), which suggests that organisational membership may have had an effect on followers' responses.

6.7 Data analysis

There were three stages in the analysis. First, using the data provided by managers and their direct reports, a combination of principal components analysis (PCA) and confirmatory factor analysis (CFA) was applied to identify the components underlying the proposed model of altruistic leadership. The second part of the analysis examined usefulness of the altruistic leadership measure, determining consensual, discriminant, and predictive validity. Specifically, altruistic leadership components were compared with short measures of transformational and servant leadership, and the links between altruistic leadership and a range of leadership outcomes were interrogated. A range of bivariate and multivariate tests, such as correlation, hierarchical regression, t-tests, and one-way ANOVA were used for that purpose. The final part of the analysis compared leaders' self-ratings with followers' ratings of their leaders, once the two samples were matched. The manager sample was split into four groups depending on the level of agreement between their self-ratings and the scores attributed by their direct reports. Altruistic leadership scores and leadership effectiveness outcomes were then compared across the four groups. IBM SPSS 23.0 and STATA 14 statistical packages were used at various stages of the analysis.

Principal components analysis and confirmatory factor analysis

The combination of PCA and CFA in a two-step method is a common approach for developing measurement scales, where possible factors can be identified and tested on subsamples of data to cross-validate the factor structure of a scale (Patterson et al.

2005). As a first step, PCA helps identify relationships between variables entered into the model, highlighting items that are important for measuring the construct, as well as variables that do not represent the construct, or may be redundant as they do not provide explanatory power additional to other variables (Dunteman 1989). CFA is then used on a different sample or a subsample of data to test whether the proposed structure of variables actually represents a good fit for the data. Through comparing the results of PCA and CFA the model can be refined to improve internal consistency of scale items and discrimination between constructs.

In order to apply the combination of PCA and CFA in the current study, two subsamples of data were created, based on the recommendation of 5–10 cases per variable entered in PCA (Nunally & Bernstein 1978; Tinsley & Kass 1979). The samples of supervisors and direct reports were first combined and divided randomly into two subsamples for PCA (N=363) and CFA (N=353). As the number of manager respondents was initially smaller than the number of follower respondents, the two types of respondents were construed as equal in the analysis, using group equality constraints (Rabe-Hesketh & Everitt 2003). Examination of correlation matrices and Kaiser-Mayer-Olkin index (KMO) and Bartlett's tests indicated adequacy of both subsamples for factor extraction (Field 2009).

PCA was conducted on the first subsample, identifying the number of possible components with the eigenvalues matrix, where only factors with eigenvalues of 1 and above were selected for interpretation. An important consideration in PCA is the type of rotation used for identifying the factor structure. Principally, the choice of rotation depends on the suspected relationship between components of the measurement scale. Two rotation methods were attempted during factor extraction to improve loadings: varimax orthogonal rotation (used for models where components are not correlated

with each other) and direct oblimin rotation (used for models where components are expected to correlate with each other). The weight of items loading on each of the components, as well as correlations between components, were examined and used to assign items to a factor or to remove it from the structure, if the loading was insufficient (Field 2009).

The proposed component structure was then entered in CFA for verification on the second subsample of leaders and followers. The associations between each of the items and the corresponding factor, as well as between-factor associations were examined for significance. Goodness-of-fit indices were calculated for the model, when applied to the subsample as a whole, as well as constraining for equality between manager–follower groups. For the full sample this included the chi-squared test, root mean square error of approximation (RMSEA), comparative fit index (CFI) and Tucker-Lewis index (TLI) (Hooper, Coughlan & Mullen 2008) with the Satorra-Bentler technique (SB) used to adjust for violations of sample normality (Satorra & Bentler 1994). Constraining for group equality, standardized root mean square residual (SRMR) and coefficient of determination (CD) represented appropriate group-level fit statistics (Hooper, Coughlan & Mullen 2008).

Mean (M), standard deviation (SD), and Cronbach's alpha (α) were calculated for each of the new subscales and for the full scale. In order to assess the reliability of measurement offered by the instrument, intra-class correlations (ICC) (Shrout & Fleiss 1979) for single ratings and average ratings were calculated (Bliese 2000; Hallgren 2012) to assess the independence of self-ratings between leaders (ICC(1,1)) and consistency of ratings between followers of the same leader (ICC(2,k)). In addition, agreement between raters was calculated using the within-group agreement index (rWG(J)) developed by James, Demaree, and Wolf (1984; 1993), as some scholars

have argued that ICC(2) does not always provide a sufficient measure of ratings consistency (Shrout & Fleiss 1979; Patterson et al. 2005). Both ICC and rWG(J) calculations were performed using the techniques developed by LeBreton and Senter (2007).

T-tests and One-way ANOVA

Independent samples t-tests were used to test for significant differences in the mean scores of a scale between two groups of respondents (e.g. genders) (Field 2009). A non-parametric t-test was chosen, where data normality could not be demonstrated. In the case of multiple groups (e.g. age groups) one-way ANOVA was used to investigate the differences in the mean scores between those groups for normally distributed data, and its equivalent, the Kruskal-Wallis test, for non-normal data. As these multivariate tests do not indicate the groups where the difference is statistically significant, post hoc tests were then conducted to compare the groups pairwise. Although a number of post hoc tests exist, many of those require the sample sizes of the compared groups to be equal. In line with Field's (2009) recommendations for different group sizes, Hochberg's GT2 test was used where population variances were equal, and the Games-Howell procedure was applied for groups with unequal variances.

Correlations and regressions

Pearson's correlation r was computed to test the relationship between altruistic leadership and other leadership styles, as well as between the scores of altruistic leadership submitted by leaders and followers. Spearman rho was used as a corresponding non-parametric statistic, when examining correlations between altruistic leadership and follower outcomes. The interpretation of correlation scores followed Cohen's (1988) guidelines, where significant associations of 0.5 and above

are considered to be large, correlations of between 0.3 and 0.49 – medium, and those of 0.29 and below – small.

Finally, hierarchical multiple regression was used to explore a predictive association between altruistic leadership and follower outcomes, and the amount of incremental predictive validity of altruistic leadership over transformational and servant leadership. Compared with standard multiple regression, which highlights the overall strength of association between independent and dependent variables, hierarchical modelling enters each of the independent variables into the calculation in separate blocks. The resulting values of \mathbb{R}^2 indicate the additional proportion of variation in the dependent variable that can be explained by the independent variable(s) in each block (Field 2009).

6.8 Results

This section presents the results obtained at the three stages of the analysis: 1) developing the altruistic leadership scale; 2) testing the association between altruistic leadership and a range of leadership outcomes; 3) comparing leaders' and followers' ratings of altruistic leadership, and the association of the difference in ratings with a range of leadership outcomes.

Developing the altruistic leadership scale

The principal components analysis of the original 13 items on the first subsample (combined managers and employees) identified four factors, using Kaiser's criterion of retaining components of eigenvalue 1 and above (Field 2009). Together the four factors explained 66.66% of total variance. Stevens (2012) recommends [0.4] as a cutoff point for component loadings on an item, and no variables were removed from the model at this stage based on that criterion. However, one factor was represented by one item only: 'My manager would not compromise his/her status to support me'. Varimax and direct oblimin rotations were then applied to the component model, restricting the number of extracted factors to three, so as to increase factor loadings on items and avoid single-item factors. While the same three components emerged with both types of rotation, explaining 58.86% of total variance (see Appendix 15), analysis of the component correlation matrix suggested that oblique rotation was more meaningful, as the association between components 1 and 3 was .447, even though component 2 was not strongly correlated with factors 1 (.009) and 3 (.059). Table 13 below presents the pattern matrix resulting from direct oblimin rotation of the threecomponent model.

Table 13. Pattern matrix of component loadings after direct oblimin rotation

The table presents statements as used in the followers' questionnaire.

	Comp	onent	
	1	2	3
My manager accepts personal costs beyond his/her role to help me	.771		
(e.g. staying behind to help, pitching in with workloads).			
My manager is the kind of person who looks after the team, even	.754		
if that means forgoing his/her own interests.			
My manager pitches in to support extra workload.	.735		
My manager tends to agree to help others before considering the	.665		
implications it would have on him/her.			
My manager makes sure to ask me how I feel.	.593		
My manager can't bear a team member being treated unfairly or	.556	.530	
taken advantage of.			
My manager is likely to go beyond the call of duty only for the		.802	
colleagues he/she likes.			
My manager helps me as long as it doesn't interfere with his/her		.778	
personal interests.			
My manager only helps me if there is value in it for him/her.		.773	
My manager would share the praise they receive with me and my	.455	.470	
team.			
My manager would not compromise his/her status to support me.			
My manager expects me to get on with work on my own and			.842
approach him/her only if there is an issue.			
My manager lets me do my job the way I want.			.745

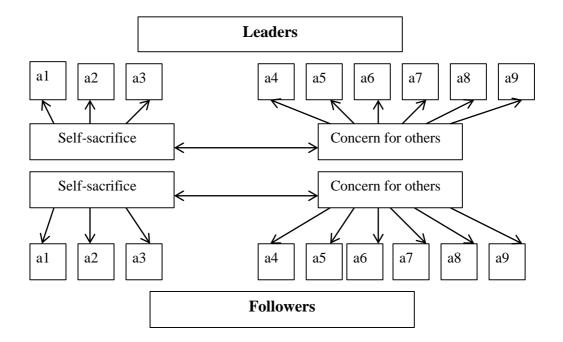
The interpretation of components that emerged from PCA was based on examination of factor loadings, taking into account theoretical considerations around the constructs of self-sacrifice and altruism. As a result, the second component, represented by two factors related to the idea of 'empowerment' ('My manager expects me to get on with work on my own and approach him/her only if there is an issue' and 'My manager lets me do my job the way I want') was excluded from the model due to low correlation with the other two components, suggesting that empowering behaviours of leaders are distinct from altruistic leadership, even though individuals might associate both empowering and altruistic behaviours with 'good' leadership. In addition, two items with loadings below 0.4, which is the suggested cut-off point for retaining variables in the model, were excluded at this stage (Stevens 2012). The remaining nine items were grouped into two components: 'Empathic helping' and 'Expectation to bear the costs of self-sacrifice'.

Analysis of discriminant validity between the two components was conducted by comparing the average variance extracted (AVE) and the squared correlation between them (Fornell & Larcker 1981). Calculated by averaging the squared factor loadings for each subscale, AVE was found to be 0.55, higher than the squared correlation between subscales – 0.17, providing evidence for discriminant validity.

In order to assess its goodness of fit, the proposed model was entered in a confirmatory factor analysis on the second leader—follower subsample, construing manager and follower groups as equal (see Figure 2 below). Six items were specified to load onto the 'Empathic helping' factor, with three items loading onto 'Expectation to bear the costs of self-sacrifice', but correlation among the latent factors was permitted, assuming that the components reflected related constructs. The standardised factor loadings were significant for all items entered in the model and are presented in

Appendix 15. Analysis of covariance was also conducted to identify any highly correlated items, and/or latent factors, which could indicate that they were measuring the same constructs. However, no covariances above the recommended 0.8 were identified (Patterson et al. 2005). Examination of group-level fit indices showed that the model was an acceptable fit for both leader and follower groups, with a moderate fit in the manager group and a good fit in the follower group. Group-level fit indices were the SRMR index at 0.165 and 0.055 in manager and follower groups respectively (recommended value <=.08) and the CD index at 0.9 and 0.97 respectively (recommended value <=.90) (Hu & Bentler 1999).

Figure 2. Component structure entered in CFA



The final scale of altruistic leadership was represented by the following arrangement of items into two subscales:

- 1) 'Empathic helping', represented by six items:
 - a. My manager pitches in to support extra workload.
 - b. My manager accepts personal costs beyond his/her role to help me.
 - c. My manager makes sure to ask me how I feel.
 - d. My manager is the kind of person who looks after the team, even if that means forgoing his/her own interests.
 - e. My manager tends to agree to help others before considering the implications it would have on him/her.
 - f. My manager can't bear a team member being treated unfairly or taken advantage of.
- 2) 'Expectation to bear the costs of sacrifice', represented by three items:
 - a. My manager helps me as long as it doesn't interfere with his/her personal interests.
 - b. My manager is likely to go beyond the call of duty only for the colleagues he/she likes.
 - c. My manager only helps me if there is value in it for him/her.

Evaluation of the scale reliability and consistency has led to similar conclusions about relevance of the model to self- and observer-ratings. Cronbach's alpha of .86 in the employee sample demonstrated good scale reliability, but in the manager sample Cronbach's alpha was only .65, representing a questionable level of reliability (George & Mallery 2003). This value could not be increased by removing individual items. The one-way random, single measure intraclass correlation (ICC(1,1)) coefficient in the manager sample was .13 with p<.001. This value is deemed appropriate, based on

existing guidelines of between 0.05 and 0.20 (Bliese 2000), therefore indicating a good ability of the instrument to distinguish between managers with different levels of altruistic leadership. In the employee sample, the two-way random, average measure intraclass correlation (ICC(2,k)) coefficient was .86 with p<.001, with values above 0.7 considered acceptable, indicating good consistency of scores between raters (Klein & Kozlowski 2000). Additionally, the average inter-rater agreement index (rWG(J)) was calculated to be .82, which is above the recommended cut-off point of 0.7 (James 1982). This index was above 0.7 for 80.4% of managers rated. The latter two coefficients suggest that observers' ratings of the same managers are in good agreement, and can be aggregated for further analysis (LeBreton & Senter 2007).

Descriptive statistics

Scale and subscale means were calculated for altruistic leadership and compared across different groups of respondents, using an independent-samples t-test for two independent groups and one-way ANOVA for groups of three or more categories, such as age groups. No significant differences were found in the self-ratings of female and male managers, or between groups of managers of different gender and with different numbers of years of managing experience. Similarly, there were no significant differences in followers' ratings of male and female leaders, or managers representing different age groups and different levels of management experience.

However, observer ratings did differ between followers of different demographic profiles. Although male and female followers scored their leaders in a similar way, followers belonging to different age groups provided significantly different scores of their leaders, both on the altruistic leadership scale (Kruskal-Wallis H=11.579, df=4, p<.05), and on the 'Empathic helping' subscale (H=18.002, df=4, p<.01). Those aged

18–25 were significantly more likely to score their leaders higher than those aged 25–34 and those aged 55+.

Predictive validity of the altruistic leadership scale

Hypothesis 1A. Perceived leader effectiveness, followers' job satisfaction, perceptions of organisational climate and perceptions of support for creativity will be higher when the leader exhibits altruistic leadership.

Significant positive correlations were found between altruistic leadership and four measures of leadership effectiveness: perceived leader effectiveness, job satisfaction, organisational climate and support for creativity (see Table 14). According to Cohen's (1988) criteria for correlation scores, the association between AL and LE was high at 0.79***, and the associations between AL and the other follower outcomes (JS, OC, SC) – medium, at 0.39***, 0.40***, and 0.44*** respectively. These findings support hypothesis 1A.

Table 14. Correlations between altruistic leadership and leadership effectiveness measures

		LE	JS	OC	SC
	Correlation Coefficient	.79	.39	.40	.44
AL	Sig. (2-tailed)	.000	.000	.000	.000
	N	526	529	509	510

Hypothesis 1B. The altruistic leadership scale will explain additional variance in leader effectiveness above and beyond that explained by transformational and servant leadership.

In order to assess how distinct the scale of altruistic leadership is from other measures of leadership styles, correlations between the scale, its subscales, and measures of transformational and servant leadership were calculated. The altruistic leadership scale correlated strongly with TL and SL (Pearson r = 0.84*** and 0.82***), indicating that the scales draw on related constructs. However, correlations between the subscales of the altruistic leadership measure and transformational and servant leadership scales showed that "Expectation of cost to self" was less strongly related to TL and SL (Pearson r = 0.64*** and 0.56***), pointing to the distinctiveness of this construct, and altruistic leadership measure as a whole. The dimensions of altruistic leadership and different scales measuring leadership outcomes were then entered in a hierarchical regression model, alongside transformational and servant leadership measures, to evaluate the additional predictive value that altruistic leadership can offer after transformational and servant leadership are taken into account. Two types of tests were conducted: in the first approach transformational and servant leadership were entered in the model independently, to determine whether altruistic leadership has an effect on leadership effectiveness above each of these measures; in the second approach transformational and servant leadership were entered in the model simultaneously, to determine whether altruistic leadership has an effect over the two measures together.

When transformational and servant leadership measures were entered in the model independently, altruistic leadership predicted an additional proportion of variance of

between 0.7% and 4.5% for leader effectiveness, organisational climate and support for creativity, but not job satisfaction. This percentage was the highest for the leader effectiveness scale, where adding altruistic leadership to the model helped explained an additional 3.8% of variance to the 75.1% of variance already explained by transformational leadership, and an additional 4.5% of variance to the 76.0% explained by servant leadership. For OC and SC scales, altruistic leadership had slightly more explanatory power compared with servant leadership than compared with transformational leadership. All of the additional variance explained by altruistic leadership was significant, with the exception of the regression model carried out with JS as an outcome (see Table 15).

Yet, when transformational and servant leadership measures were entered in the model together, altruistic leadership only predicted an additional 1.7% of variance in leader effectiveness, but did not make significant contributions in predicting job satisfaction, organisational climate and support for creativity (Table 16). These findings provide partial support for hypothesis 1B, suggesting that altruistic leadership predicts some additional variance in perceived leader effectiveness, organisational climate and support for creativity above each of the measures of transformational and servant leadership applied separately, but has only limited power in predicting leadership outcomes over the two transformational and servant leadership measures applied together.

Table 15. Summary of results of hierarchical regression analysis between altruistic leadership and a range of leadership outcomes, when controlled for transformational and servant leadership, entered independently.

			В	SE	β	\mathbb{R}^2	R ² change
LE		AL	1.07	.03	.84***	.697	
	Step 1	TL	.97	.02	.87***	.751	.038
	Step 2	TL	.63	.04	.56***	.789	
		AL	.47	.05	.36***		
	Step 1	SL	1.06	.03	.87***	.760	.045
	Step 2	SL	.70	.04	.57***	.805	
		AL	.48	.04	.37***		
JS		AL	.36	.04	.37***	.140	
	Step 1	TL	.36	.03	.42***	.179	.001
	Step 2	TL	.32	.06	.37***	.180	
		AL	.06	.07	.06		
	Step 1	SL	.41	.04	.44***	.195	.001
	Step 2	SL	.37	.06	.40***	.196	
		AL	.05	.07	.05		
OC		AL	.43	.04	.44***	.189	
	Step 1	TL	.39	.03	.46***	.210	.008
	Step 2	TL	.27	.06	.32***	.218	
		AL	.16	.07	.17*		
	Step 1	SL	.41	.04	.44***	.192	.018
	Step 2	SL	.23	.06	.25***	.210	
		AL	.23	.07	.23**		
SC		AL	.47	.04	.45***	.206	
	Step 1	TL	.44	.04	.48***	.234	.007
	Step 2	TL	.32	.07	.35***	.241	
		AL	.16	.08	.16*		
	Step 1	SL	.45	.04	.45***	.205	.022
	Step 2	SL	.24	.07	.25***	.227	
		AL	.26	.07	.25***		

Table 16. Summary of results of hierarchical regression analysis between altruistic leadership and a range of leadership outcomes, when controlled for transformational and servant leadership, entered simultaneously.

			В	SE	β	R2	R2 change
LE		AL	1.07	.03	.84***	.697	
	Step 1	TL	.50	04	.44***	.807	.017
		SL	.59	05	.49***		
	Step 2	TL	.34	.05	.31***	.824	
		SL	.49	.05	.40***		
		AL	.32	.05	.25***		
JS		AL	.36	04	.37***	.140	
	Step 1	TL	.14	07	.17*	.202	.000
		SL	.27	07	.30***		
	Step 2	TL	.15	.07	.18	.202	
		SL	.28	.08	.30***		
		AL	02	.07	02		
OC		AL	.43	04	.44***	.189	
	Step 1	TL	.28	07	.32***	.213	.003
		SL	.15	08	.16		
	Step 2	TL	.21	.08	.24***	.216	
		SL	.11	.08	.11		
		AL	.13	.08	.14		
SC		AL	.47	04	.45***	.206	
	Step 1	TL	.34	07	.37***	.238	.005
		SL	.13	08	.13		
	Step 2	TL	.21	08	.30**	.243	
		SL	.08	08	.08		
		AL	.14	08	.14		

Comparing leaders' self-ratings and followers' ratings of leaders

Hypothesis 2A. Over-estimators will have lower altruistic leadership ratings compared with the other categories, as perceived by followers.

Hypothesis 2B. Under-estimators will have higher altruistic leadership ratings than 'in-agreement/good' and 'in-agreement/poor' leaders, as perceived by followers.

Hypothesis 2C. Leader effectiveness, job satisfaction and organisation outcomes will be higher for 'in-agreement/good' leaders than 'in-agreement/poor' leaders.

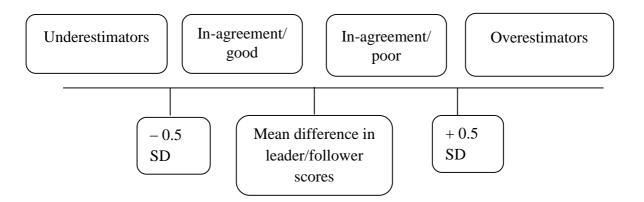
For the last stage of the analysis the two datasets were matched, so as to compare leaders' self-ratings with the ratings attributed by followers. As a large proportion of leaders were scored by more than one rater, subordinate scores had to be aggregated for analysis. Based on high inter-rater agreement indices ICC(2,k) and rWG(J) (see Appendix 15), and the precedence set by earlier research on dealing with multiple raters (Sosik & Megerian 1999; Berson & Sosik 2007), aggregation of individual follower scores was deemed appropriate.

There were no significant correlations between leaders' self-ratings and followers' ratings of leaders on altruistic leadership. The Wilcoxon signed-rank test conducted on the pairs of score averages confirmed significant differences between the means of the leader self-ratings and the followers' ratings of leaders (Z=-6.99, p<.001), suggesting that the two groups perceive altruistic leadership in different ways.

Depending on how supervisors' self-ratings compared to the scores submitted by followers, leaders were then categorised into four groups: overestimators,

underestimators, in-agreement/good and in-agreement/poor. This is an approach to rating agreement categorisation developed by Yammarino and Atwater (1993). The principle of grouping relies on the distance between a leader's score and the mean difference in the scores of leaders and followers. Leaders who score themselves at least one-half a standard deviation above the mean difference are classed as 'overestimators', while those scoring at least one-half a standard deviation below the mean difference are categorised as 'underestimators'. In the 'in-agreement' category (also called 'self-aware' by Sosik and Megerian (1999), leaders who were above the mean difference, but within one-half a standard deviation, are classed as 'in-agreement/poor', and the remaining leaders as 'in-agreement/good' (see Figure 3 below for visual clarification).

Figure 3. Groups of leaders, based on agreement in leader/follower scores



The Kruskal-Wallis test indicated significant differences in the leaders' self-ratings and followers' ratings of leaders on the altruistic leadership scale. Self-ratings provided by leaders differed between all group pairs, except for between inagreement/poor and overestimators. The difference between inagreement/good leaders and overestimators, and in-agreement/good leaders and in-agreement/poor

leaders was significant but weak. Followers' ratings demonstrated statistically significant differences between all groups.

Leadership outcomes were then compared across the four groups of leaders, with the Kruskal-Wallis test indicating significant differences across all of the outcome types. Comparing the average leadership outcome scores across the groups of leaders, the outcomes in the overestimator category were significantly lower than outcomes in any other group, supporting hypothesis 2A. A significant difference between underestimators and in-agreement/poor leaders was found for TL, SL, LE, and SC, in favour of underestimating leaders. No significant differences were highlighted between underestimators and in-agreement/good leaders. In-agreement/good leaders received better ratings from followers, compared with in-agreement/poor leaders on scales concerning transformational and servant leadership, as well as leader effectiveness (TL, SL, LE). However, the same did not apply to follower outcomes (JS, OC, SC). Hypotheses 2B and 2C were, therefore, only partially supported. Full results are available in Appendix 15; Table 17 below summarises the significant differences between four groups of leaders.

Table 17. Differences in leadership outcomes between four groups of leaders (summary of statistically significant differences)

Outcome	Leader groups
TL	U>I(P), U>O
	I(G)>I(P), I(G)>O
	I(P)>O
SL	U>I(P), U>O
	I(G)>I(P), I(G)>O
	I(P)>O
LE	U>I(P), U>O
	I(G)>I(P), I(G)>O
	I(P)>O
JS	U>O
	I(G)>O
	I(P)>O
OC	U>O
	I(G)>O
	I(P)>O
SC	U>I(P), U>O
	I(G)>O
	I(P)>O

6.9 Discussion

The process of development and testing of the scale highlighted three important findings, leading to a number of theoretical and practical implications. First, the structure of the altruistic leadership instrument confirmed some of the theoretical propositions about the nature of this leadership style. One the one hand, the 'Empathic helping' factor linked leaders' helping behaviours (pitching in to support extra workload; accepting personal costs) with empathy (asking followers how they feel; inability of the leader to bear followers being treated unfairly). Although empathy has previously been discussed in the context of servant leadership theory as one of the attributes of servant leaders, it has not to date been linked specifically with selfsacrificial behaviours of leaders. In the new model of altruistic leadership both constructs were associated with a single latent factor, suggesting that they may be closely related. On the other hand, the second dimension of the scale distinguished between calculated self-sacrifice and self-sacrificial acts where the leader does not have an expectation to benefit as a result of their behaviour. This is an important distinction which has previously been made only theoretically (House & Howell 1992; Avolio & Locke 2002). The ability to measure the intentions as well as the behaviours of the sacrificing leader – as reported by the individual, as well as by their followers - offers a model for further research into aspects of altruistic leadership, such as the effectiveness of this leadership style and its prevalence across various industry sectors. This finding also provides further theoretical direction beyond altruistic leadership, suggesting that the difference between leaders' intentions and their behaviours can be made empirically – a proposition that can be applied to and tested with other leadership styles.

Interestingly, the concept of empowerment was excluded from the final model of altruistic leadership, challenging some of the previous theoretical assumptions about self-sacrifice and altruism. Although qualitative interviews suggested empowering behaviours as an attribute of altruistic leaders, it is possible that those are characteristic of 'good' leadership overall, rather than altruistic leadership specifically. Equally, statements corresponding to sacrifice of status by the leader and sharing praise with the team were not part of the model, despite being highlighted in self-sacrificial leadership theory (Choi & Mai-Dalton 1998; 1999) and the qualitative stage of the current study (see Study 2). It is possible that the specific profile of the current sample meant that leaders and followers were not able to offer praise or sacrifices of status within their organisations. Another possibility is that these types of self-sacrifice are conceptually dissimilar from helping with workloads and represent a different construct, which may or may not be associated with altruistic leadership. Further empirical research is required to test this proposal.

Importantly, the two dimensions of altruistic leadership — 'Empathic helping' and 'Expectation to bear the costs of self-sacrifice' represent a new 9-item scale, validated in the current study. The instrument showed good reliability and fit in the follower sample and questionable reliability and fit in the manager sample. The measure can be used by scholars in future studies of altruistic leadership, as well as in research on related leadership constructs to distinguish altruistic leadership from other leadership styles. In addition, practitioners can apply the new scale to assess the prevalence and effects of altruistic leadership in organisational settings, comparing leaders' own ratings with followers' perceptions of their leaders for a more accurate account of this leadership style.

The second finding of the study concerns the effects of altruistic leadership. The study used the new measure of altruistic leadership to test the association of this leadership style with a range of leadership outcomes, including perceived leader effectiveness, job satisfaction, organisational climate and support for creativity. Altruistic leadership was positively associated with followers' perceptions of leadership outcomes across all these areas. Furthermore, hierarchical regression analysis showed that altruistic leadership explains an additional proportion of variance in perceived leader effectiveness, organisational climate and support for creativity, above each of the measures of transformational or servant leadership, and an additional proportion of variance in perceived leader effectiveness over the two measures of transformational and servant leadership applied together. By offering a small but significant improvement on the already existing measures of leadership, altruistic leadership can provide a new and useful perspective on helping intentions and behaviours of leaders, with potential to explain a range of follower outcomes better than it is currently possible with existing measures of leadership styles. Specifically, the positive association between altruistic leadership and support for creativity is encouraging, as recent studies have pointed to the potential link between sacrifice and innovation, requiring further, more accurate instruments for understanding the relationship between these two constructs (Grant & Berry 2011).

Finally, by combining leaders' own ratings with the scores submitted by followers, this study explored the perceived effectiveness of leaders who significantly over- or underestimated how altruistic they were, compared to the ratings they received from their followers. As suggested in previous research (Yammarino & Atwater 1997), overestimating leaders received the lowest scores across a range of outcomes, reported by followers. Low effectiveness of these leaders has been previously linked with their

overconfidence and focus on selves rather than on others and/or their organisations (Sosik 2001; Moshavi, Brown & Dodd 2003), which may make overestimating managers provide less support to their teams. Conversely, followers of underestimating leaders reported the highest levels of leadership outcomes. In contrast to overestimators, these leaders may be inclined to compensate for their perceived lack of altruism, demonstrating acts of self-sacrifice to benefit others. These findings suggest that the effects of altruistic leadership may depend on the relative differences in the ways it is perceived by leaders and their followers. Both individual leaders and organisations could benefit by becoming aware of these differences.

6.10 Study limitations

The main limitation of this study is that it was based on self-reported data. The responses of leaders and followers describing altruistic leadership could have been affected by social desirability bias, or the tendency of respondents to provide such accounts of events and phenomena that would be viewed favourably by others (Fisher & Katz 2008). Considering that altruism is likely to be viewed as a desirable attribute, leaders' assessments of how altruistic they were might have been somewhat overestimated. The current study attempted to address that limitation by combining self- and observer-ratings for a better understanding of differences between the ways leaders see themselves and are seen by others.

Self-report method of data collection was likely to impact the findings on the effects of altruistic leadership. In the current study leader effectiveness was measured only through outcomes reported by followers. As these measures are subjective, they might be impacted by followers' positive or negative impressions of the leader and the organisation (Stang 1973). Similarly, common method bias, associated with gathering

altruistic leadership and leadership outcomes data in the same survey, could account for some of the links between altruistic leadership and perceived effectiveness of leaders (Podsakoff et al. 2003). To improve the quality of measurement, future studies could collect data on altruistic leadership and its outcomes in several stages, triangulating data reported by followers with objective performance data.

Secondly, the instrument only limited capacity of the instrument to reflect leaders' self-ratings. Although the instrument showed good reliability and consistency in the follower sample, the model fit and reliability were questionable when applied to the sample of leaders. It is possible that the poorer psychometric properties of the instrument in this instance were associated with the relatively smaller size of the manager sample. At the same time, it is also likely that individuals' self-ratings are more nuanced than ratings of observers, particularly in relation to traits and beliefs, which are less visible to others than are individuals' behaviours (Connolly, Kavanagh & Viswesvaran 2007; Vazire & Carlson 2011). For example, where followers associated leaders' self-sacrificing behaviours with concern for others, leaders themselves could be linking the same behaviours with a range of other types of motives. Future studies could attempt to enhance the capacity of the instrument to accurately reflect leaders' own views of their style by incorporating additional items measuring leaders' values and aspects of moral character to understand whether additional subscales could improve the reliability of the altruistic leadership instrument for self-ratings.

Finally, the implications that can be drawn from the study findings are limited by the sampling approach. This study was conducted on a relatively small sample of managers and employees in four organisations in the financial sector in the UK. Furthermore, it adopted the role-centric definition of leaders and followers,

represented by line managers and their direct reports respectively. There is scope for expanding the sample population to different industries and/or countries to test the validity of the altruistic leadership instrument in different industries, and appreciate the prevalence and effectiveness of this leadership styles across a range of organisational settings.

6.11 Summary

This study has drawn on a matched sample of leaders and their followers to test hypotheses about the nature and effectiveness of altruistic leadership in a quantitative survey. The research explored the structure of the altruistic leadership model to arrive at a new instrument measuring altruistic leadership. It also demonstrated the predictive power of the instrument to explain a range of leadership outcomes, with a small but significant improvement on the predictive power of previously developed measures of transformational and servant leadership styles. Finally, the analysis provided a perspective on the differences between self- and observer-ratings of altruistic leadership.

The next chapter integrates the findings of all three studies within the current research, commenting on the theoretical and practical implications of the thesis as a whole.

Chapter 7. Discussion and conclusions

There is growing interest in leaders who act in the interests of other members of the organisation or the wider society (Kanungo & Conger 1993; Avolio & Locke 2002; Trevino & Brown 2005; Brown & Trevino 2006; Dinh et al. 2014), stimulated in part by concerns about self-interested charismatic leaders derailing international and national corporations through their unethical behaviours. Given the inconsistencies in current conceptualisations of leaders' behaviours and intentions associated with altruistic sacrifice, this thesis sought to detail the construct of altruistic leadership and examine the effectiveness of this leadership style. Three research questions were posed at the beginning of this endeavour:

- RQ1a. What is altruistic leadership? How is it similar to or different from related constructs among leadership styles?
- RQ1b. How do followers' perceptions of altruistic leadership effectiveness compare with followers' perceptions of non-altruistic leadership effectiveness?
- RQ2. Are congruent leader—follower ratings of altruistic leadership associated with more positive follower outcomes than incongruent leader—follower ratings?

The thesis presented a theoretical framework of altruistic leadership, based on leadership and social science literatures, and employed a series of empirical studies to develop and test a measure of altruistic leadership on samples of leaders and followers in organisational settings in the UK. Three studies were conducted:

- Study 1 (reported in Chapter 4) identified attributes and behaviours that leaders and followers associate with altruistic leadership and collected free-text examples of this leadership style in an exploratory survey of 806 managers and 1,049 employees working in UK organisations of different sectors and sizes.
- Study 2 (reported in Chapter 5) elicited 35 critical incidents of altruistic leadership through qualitative interviews with leaders and their followers, in order to identify the descriptors of altruistic leadership and develop a scale of the construct.
- Study 3 (reported in Chapter 6) validated the altruistic leadership scale and tested the relationship between altruistic leadership and follower outcomes on a matched sample of 184 leaders and 532 followers working in four organisations in the financial services sector in the UK.

This chapter opens with a summary of the main findings across all of the studies conducted in the research process. The following two sections outline and discuss the contribution of the findings to leadership theory and practice. Finally, a commentary on the research limitations and recommendations for future studies in the area of altruistic leadership are provided.

7.1 Main findings

This section discusses the most significant findings that are relevant to the research questions posed. In response to the first research question (RQ1a), the thesis revealed the distinct nature of altruistic leadership, by examining current leadership theories and enhancing the understanding of the construct with concepts borrowed from social science literature. Building on the theoretical propositions identified during that

review, the research showed that altruistic leadership does not simply equate to acts of self-sacrifice, revealing two dimensions of the construct: 1) leaders' expectation to bear the costs of sacrifice, and 2) empathic concern underpinning the desire to self-sacrifice. Both of these dimensions set altruistic leadership apart from other related constructs among leadership styles associated with the concept of altruism.

First, not only do altruistic leaders put the interests of others before their own, as currently described by the leadership literature, but they also do so selflessly, without an expectation of benefit to themselves. At the same time, Study 2 indicated that leaders and followers participating in the qualitative interviews were able to distinguish between two types of self-sacrificing leaders. Calculating leaders accepted personal costs only to achieve benefits for themselves in return; for example, they helped their followers in order to reach performance targets, or to encourage extra effort at work. In contrast, when discussing the intentions of selfless leaders, respondents explained that even though some of those individuals experienced benefits as a result of their self-sacrifice, their gains were likely to be intangible and long-term (such as personal development, satisfaction with the progress of others), but most importantly - unintended. Only such selfless leaders were considered by interview participants to be truly altruistic. Following on from the propositions formulated through the qualitative study, a survey of leaders and their followers in Study 3 later confirmed 'expectation to bear the costs of sacrifice' as one of the subscales of the altruistic leadership measure. This dimension of altruistic selfsacrifice has not been included in operationalisations of related leadership constructs, such as servant and spiritual leadership, and appears to be a distinct attribute of altruistic leadership.

Secondly, the research showed that leaders' desire to self-sacrifice is underpinned by empathic concern, or individuals' emotional response to perceiving someone in need (Batson & Shaw 1991; Batson 2011; Batson 2014). Although empathy has previously been discussed as a characteristic of servant leadership style, existing theories did not link it to altruism as a reason for leaders to self-sacrifice, attributing leaders' desire to act altruistically to their moral values (Spears 1998; Patterson 2003; Trevino, Brown & Hartman 2003; Liden et al. 2008). However, the sequence of empirical studies within the current thesis linked leaders' self-sacrificial behaviours to their concern for others. For instance, the presence of emotional discomfort was the reason that leaders participating in Studies 1 and 2 gave to explain why they chose to benefit others despite costs to themselves. Furthermore, Study 2 respondents described genuine altruism as a 'hardship', suggesting that altruistic leadership requires leaders to accept personal emotional costs, in addition to other types of resources they sacrifice in the act of helping others. In the final part of the research (Study 3), empathic concern was revealed as the second subscale of altruistic leadership.

The next major finding concerns the effects of altruistic leadership, suggesting that followers perceive altruistic leadership as more effective than non-altruistic leadership (RQ1b). Positive outcomes of altruistic leadership, including job satisfaction, followers' commitment to the leader and the organisation, individual development and increased performance, were highlighted across all three empirical studies. Predictive validity of the new altruistic leadership instruments was demonstrated by Study 3, where altruistic leadership was positively associated with perceived leader effectiveness, job satisfaction, organisational climate, and support for creativity.

Furthermore, followers perceived altruistic leadership as more effective than transformational and servant leadership. Hierarchical regression analysis was used to

examine the ability of the altruistic leadership scale to predict a range of follower outcomes above and beyond each of the measures of transformational and servant leadership, included as independent control variables in Study 3. It indicated that altruistic leadership predicted between 0.7% and 3.8% of additional variance in perceived leader effectiveness, organisational climate and support for creativity, when controlled for transformational leadership, and between 1.8% and 4.5% of additional variance in the same outcomes, when controlled for servant leadership. When measures of transformational and servant leadership were applied together, altruistic leadership predicted 1.7% of additional variance in perceived leader effectiveness. This incremental gain in predictive power – albeit small – is meaningful, given the already large proportion of variance in follower outcomes typically explained by established leadership theories (van Dierendonck 2011; Wang et al. 2011). It appears that the operationalisation of the altruistic leadership construct included a more comprehensive description of intentions and behaviours of self-sacrificing leaders, which enabled greater predictive power in relation to follower-perceived outcomes.

In order to answer the final research question (RQ2), the thesis gathered and compared leaders' own descriptions of altruistic leadership and followers' accounts of altruistic leaders. Both the exploratory and the main empirical research studies highlighted the differences between the way altruistic leaders described themselves and the ways they were described by followers. In Study 1, 58% of managers agreed or strongly agreed that they tend to put the needs of their team members above their own, but only 28% of followers said the same about their managers. Similarly, in Study 3 average scores on the altruistic leadership scale were higher for leaders' self-ratings (M = 4.10, SD = 0.39), compared with followers' ratings of their leaders (M = 3.54, SD = 0.71). This difference in ratings points to possible leaders' bias in rating their own motivation and

behaviours, signifying that leaders are likely to overestimate how altruistic they are. However, it may also indicate that altruistic leadership is not always visible to followers. In some of the cases reported in Study 2, leaders explained that they were performing acts of self-sacrifice to benefit their followers without making them aware of the support they provide 'behind the scenes', which may have resulted in these leaders being perceived as non-altruistic.

Comparison of ratings within leader–follower pairs in Study 3 indicated further differences in the effects of altruistic leadership, depending on whether the scores submitted by leaders and their followers were congruent or not. Followers reported the least positive leadership outcomes if their leaders considerably overestimated how altruistic they were, compared with the ratings given to them by their direct reports. In contrast, underestimating leaders (scored highest by their followers) appeared to elicit the most positive leadership outcomes. Congruent leader–follower ratings were associated with outcomes more positive than those of overestimating leaders, but less positive than those of underestimating leaders. In response to the second research question (RQ2), this finding suggests that in order to become effective, leaders must be perceived by followers to be altruistic. Furthermore, the effects of altruistic leadership are associated not only with followers' impressions of this leadership style, but also with the relative differences in the way altruistic leadership is described by leaders and their followers.

7.2 Theoretical contribution

The current research makes two key contributions to leadership theory. First, the thesis explicated the construct of altruistic leadership by examining the intentions of altruistic leaders alongside their self-sacrificial behaviours. This included exploring the reasons why leaders may feel the desire to benefit others (such as empathic concern), as well as their expectations regarding the costs and benefits of self-sacrifice, which have not been detailed by existing leadership theories to date. Both of these dimensions of altruistic leadership illustrate the likely antecedents of self-sacrifice, providing a fuller understanding of the nature of altruistic leadership.

The research began by bringing together the leadership literature on altruism, identifying links with a number of leadership theories, such as self-sacrificial, servant, spiritual, and ethical leadership styles. It highlighted the gap between theoretical issues identified in the leadership literature on the moral character of leaders and the relatively narrow operationalisation of altruism, based on existing leadership theories. On the one hand, scholars described altruism as a leadership virtue (Kanungo 2001) and offered a conceptual differentiation between personalised (or self-interested) and socialised (or other-oriented) leadership (House & Howell 1992), illustrating the potential complexity of leaders' intentions. They also debated whether personalised and socialised leadership can co-exist, suggesting that not all self-interested leaders behave selfishly, but some might engage in acts of self-sacrifice with an underlying expectation of benefiting themselves (Avolio & Locke 2002; Maner & Mead 2010). On the other hand, the majority of operationalisations of altruism in leadership theories assumed congruence between leaders' intentions and behaviours, using self-sacrificial behaviours as indicators of altruism in leadership. For instance, Choi and Mai-Dalton

(1999) described the types of personal costs borne by charismatic leaders, without explaining the likely benefits that leaders may receive when their charisma increases as a result of demonstrating self-sacrificial behaviours. Similarly, Barbuto and Wheeler's (2006) model of servant leadership included putting the interests of others ahead of one's own and sacrificing own interests to meet others' needs, but did not specify the intentions of a servant leader.

By drawing on the social science literature, which explored altruism in more detail, this work enhanced the theoretical framework underpinning altruistic leadership and developed a more nuanced articulation of the construct. Specifically, it identified two types of intentions of self-sacrificing leaders, providing a number of indicators for distinguishing between leaders who benefit others with an expectation of return benefits to self, and selfless leaders who act in the interest of others despite having to bear the personal costs of their behaviours. Although the attributes of self-interested and truly altruistic leaders attracted sufficient theoretical debate in the leadership literature (House & Howell 1992; Avolio & Locke 2002; Maner & Mead 2010), the distinction between these types of leaders' intentions has not been demonstrated empirically. This study clearly shows that leaders and followers are sensitive to the nature of leaders' intentions and behaviours, and can account for the differences in those when describing altruistic leadership. While this new construct does not fully account for the differences between personalised and socialised leadership, it may act as one of the indicators for distinguishing between self-interested leaders and those who prioritise the goals of others.

In addition, clarification of the construct of altruistic leadership helped to develop the current understanding of why altruistic leaders may engage in acts of self-sacrifice. Existing leadership theories associate altruism with a leader's moral and religious

values, virtues, stages of moral development, or the personal meaning they attach to leadership (Greenleaf 1977; Sosik 2000; Fry 2003; Barbuto & Wheeler 2006; Brown & Trevino 2006). Apart from ethical leadership theory, which explains that leaders might self-sacrifice if such behaviour represents the most ethical course of action, these approaches do not detail the mechanisms linking leaders' moral character with the helping behaviours of leaders. At the same time, identification of empathic concern as a dimension of altruistic leadership suggests an emotional basis for acting in the interests of others. It is possible that empathic concern is experienced as a consequence of particular moral values of leaders who internalised care and concern for others as part of their character virtues (Kohlberg 1984; Peterson & Seligman 2004; Kochanska et al. 2010). Alternatively, it could represent a distinct type of motivation for altruistic leadership, similar to the way social science literature on altruism distinguishes between moral duty-based and empathy-based altruism. By linking empathic concern with other-oriented intentions and self-sacrificial behaviours of altruistic leaders into a single construct, this thesis offers a direction for bridging the gap between conceptualisation of altruism as one of the leadership virtues and altruistic leadership practice.

The second contribution of this work is in improving understanding of the differences in how altruistic leadership is intended by leaders and perceived by followers. Consistency between leaders' self-ratings and followers' ratings of leadership has been explored to some extent as part of leader—member exchange theory (Yammarino & Atwater 1997), but not in relation to altruistic leadership. The existing leadership theories relied primarily on followers' ratings of leaders, gathering data on self-sacrificial behaviours and observable attributes of these leaders (Brown, Treviño & Harrison 2005; Barbuto & Wheeler 2006; Liden et al. 2008). To develop the

understanding of the less visible aspects of altruistic leadership, this thesis gathered both leaders' and followers' perspectives, asking leaders directly about their intentions and comparing those reports with followers' interpretations of leaders' attitudes and behaviours. In addition to leaders and followers who gave similar accounts of altruistic leadership, the research identified two groups of leaders who described themselves as less or more altruistic, compared with how they were rated by their followers. The followers of underestimating leaders reported the most positive leadership outcomes of the group, while the outcomes reported by the followers of overestimating leaders were the least positive.

While the effectiveness of leaders' self-sacrifice has previously been explained by its association with followers' perceptions of charisma (Choi & Mai-Dalton 1998; Conger 1998a), the importance of both self- and observer-ratings in understanding the effects of altruistic leadership lays the foundation for revealing additional mechanisms of how altruistic leaders become effective. Specifically, the findings of the current research provide some evidence to suggest that leaders might modify their behaviours, in order to make their altruistic leadership more or less visible. For instance, some of the leaders participating in the qualitative interviews in Study 2 suggested they were aware of the possible positive effects of their action being perceived as altruistic, and ensured that those were acknowledged by followers. Others were more reluctant to make their self-sacrifice known to others, possibly as they were concerned that their actions would be perceived as an attempt to improve their own image and, therefore, would undermine the possible benefits of altruistic leadership. These findings suggest that one of the mechanisms by which altruistic leadership becomes effective could be associated with the ways in which leaders choose to express altruistic intentions.

This more detailed understanding of the nature of altruistic leadership and its effects also provides an opportunity to rethink the way in which altruism is conceptualised within leadership theory more generally. Altruistic leadership is associated with a number of positive follower outcomes, including perceived leader effectiveness, organisational climate and support for creativity. Furthermore, the predictive power offered by the altruistic leadership construct, above and beyond other leadership styles, suggests that it is an important – and potentially a more precise – conceptualisation of a leadership style that is characterised by a dominant empathic concern, associated with serving the needs of others at the expense of personal interest. Where acting in the interests of others may previously have been included as a sub-dimension within existing leadership theories, the current thesis suggests that altruistic leadership is a distinct construct, which articulates a fundamental characteristic of leadership that should be considered in our conceptions of effective leadership.

The method of collecting self- and follower-ratings of altruistic leadership also provides a model for examining the effectiveness of other leadership styles, where understanding self-reported accounts of leaders' intentions may be important, alongside followers' perceptions of leadership. Within the leadership theory there is a growing interest in leaders' legacy, purpose, virtues, and morality (McAdams & de St Aubin 1992; Parry & Proctor-Thomson 2002; Stone, Russell & Patterson 2004; Hannah & Avolio 2011). These concepts describe attributes of leaders that might be invisible to their followers, but could be acknowledged and reported by the leaders themselves. As some commentators have drawn attention to the accuracy of methods of identifying and measuring aspects of leaders' character (Wright & Quick 2011), the approach chosen in the current research illustrates one way of incorporating multiple

accounts of leaders' intentions, attitudes and behaviours, by combining and comparing leaders and followers' perspectives.

7.3 Contribution to practice

The findings of this research have three practical implications for those wishing to identify and develop altruistic leaders. First, the thesis can encourage organisations and individual practitioners to open up the debate about altruism in business environments. By explaining the concept of altruistic leadership, the research challenges the ongoing scepticism around compatibility of altruistic behaviours with some of the values currently prevalent in the world of business (Kanungo & Conger 1993; Joseph 2015). For instance, while the first of the empirical studies in the thesis showed that the prevalence of attributes associated with altruistic leadership was the lowest among private sector leaders, the last study revealed that a proportion of leaders working in four financial services organisations acted altruistically and impacted on a number of positive follower outcomes. As positive follower outcomes have been previously linked to improved team and organisational performance, the findings suggest that altruistic leadership style is relevant to business practice through its potential contribution to organisational outcomes.

Secondly, the instrument developed in the current thesis provides practitioners with a measure of altruistic leadership validated in organisational settings. The scale of altruistic leadership allows organisations to distinguish between altruistic and non-altruistic leaders and examine the relationship between altruistic leadership and follower outcomes, specifying some of the possible effects of this leadership style. The instrument can be applied to collect and compare both leader self-ratings and follower ratings of their leaders for a more accurate description of the prevalence of

altruistic leadership and its effects. As a one-off measure it can assist firms in identifying altruistic leaders, for example, during recruitment and progression decisions. Furthermore, as a repeated measure it could help track the progress of leaders developing their altruistic attitudes and behaviours, for example, measuring altruistic leadership before and after participation in a training programme. Similarly, the instrument could assist in evaluating the change in followers' perceptions of altruistic leadership in response to certain organisational campaigns or events that make altruistic leadership more visible, such as communications about the involvement of organisational leaders in corporate social responsibility (CSR) initiatives.

Thirdly, the differences identified between leader and follower perceptions of altruistic leadership could be used in leader development by organisational practitioners and by the leaders themselves. In addition to leaders who score themselves similarly to the way they are perceived by their followers, the study highlighted groups of leaders who significantly underestimate or overestimate how altruistic they are, compared with followers' ratings. This difference in perceptions may impact on the way leaders and followers interact, as well as the organisational outcomes that altruistic leaders are able to achieve. For instance, it is possible that underestimating leaders engage in costly behaviours without being able to reflect accurately on the fact that they do so. If these leaders continue to experience the personal costs of their self-sacrificial behaviours without a clear reason for such leadership choices, they may become discouraged from acting in the interests of others over extended periods of time, undermining the positive follower outcomes they could bring about. At the same time, overestimators are likely to be overly confident about

their leadership skills and put less effort into working with their followers, which could in turn decrease the effects of their leadership.

Inaccurate perceptions of their own style could mean that leaders need to become aware of their leadership style to appreciate the full range of effects they have on followers and the wider organisation. Negative effects of so-called 'unenlightened altruism' are currently being explored in the social science literature. Conceptually, D'Souza and Adams (2014) suggested that some of the actions of individuals who behave altruistically without fully recognising the consequences of helping may actually be harmful to others and the wider society. Examples of this effect include charitable donations to deprived communities that can undermine their independent functioning, making the pace of development unsustainable. The same could be applied to altruistic leaders, potentially disempowering their followers by stepping in to help. These observations point to the significance of leaders' awareness of the impact of their actions. In practice, both underestimators and overestimators could benefit from feedback on their performance to understand how their attitudes and behaviours are perceived. The new measure of altruistic leadership, validated on both follower and leader samples, could be used as a coaching tool, making the difference between follower ratings and self-ratings of altruistic leadership visible to leaders.

7.4 Study limitations

One of the key limitations of the current thesis is that it relies on self-reported accounts of altruistic leadership and its effects, from both leaders and their followers. Although methods based on self-reported data are commonly used in leadership and wider social science research as a cost- and time-effective way of collecting responses from large samples, there are a number of problems associated with the accuracy of individuals' responses. For instance, honesty of responses is a significant issue, when studying topics that may raise individuals' concerns with the image they are projecting when describing their attitudes and behaviours, or the potential consequences of truthful responses. Questions about altruistic motivation and behaviours are particularly likely to elicit such socially desirable responses, given the positive social value associated with altruism. As discussed above, it is possible that, depending on considerations of self-image and modesty, some leaders portrayed their attitudes and behaviours to be more or less altruistic than they actually were. Similarly, followers in the current research could have been concerned that their responses would become known to their leaders, and consequently avoided negative descriptions of their leaders.

Another important consideration is respondents' understanding of the issue and their ability to reflect on their beliefs and experiences to contribute accurate information to the research. Once again, this limitation of self-reported data is relevant to the current investigation of altruistic leadership. For example, the way individuals interpret the word 'altruism' in day-to-day life is likely to refer primarily to helping and self-sacrificial behaviours, rather than the intentions and expectations of altruistic leaders. In addition, as shown in this thesis, leaders and followers may find it difficult to identify their own leadership style and the leadership of others as altruistic, being

unsure of the true motives and intentions behind self-sacrificial behaviours. Both of these factors can impact on the accuracy of the self-reported accounts of altruistic leadership that underpin the findings of this research.

Additionally, self-report studies are often biased to the respondents' opinions and feelings at the time of survey completion, rather than being a considered reflection on leaders' performance over the course of time. The collection of opinions on altruistic leadership and follower outcomes data in the same questionnaire meant that both types of data could be affected by the followers' overall positive or negative impression of their leaders and their organisation on that day. The sequence of studies within this research aimed to triangulate various sources of data on altruistic leadership and assure participants of the confidentiality of their responses, so as to reduce the impact of bias associated with self-reported motivation and behaviours. This was partially achieved through combining qualitative and quantitative data, as well as leader and follower ratings.

The second limitation concerns the validity of the altruistic leadership instrument developed in the current thesis. Comparison of the altruistic leadership model, applied to leaders' self-ratings and followers' ratings of leaders, indicated good reliability in the followers' sample ($\alpha = 0.82$), but questionable reliability in the leader group ($\alpha = 0.65$) (George & Mallery 2003). This did not affect examination of the relationship between altruistic leadership and follower outcomes, nor the analysis of distinctiveness of altruistic leadership from servant and transformational leadership styles, as those were conducted on the follower sample. However, lower reliability of the model in the leader sample suggests that measurement of leaders' self-ratings with the current instrument could be imprecise. Further testing of the altruistic leadership scale on larger samples of leaders is required to understand whether the instrument is

reliable enough to capture the nuances of self-reported motivation and behaviours. Inclusion of a longer list of items as part of the scale may assist in the development of a more robust leader-centric model of altruistic leadership, possibly including additional dimensions beyond empathic concern and expectation to bear the net costs of sacrifice. Unfortunately, the current study was constrained in terms of the number of questionnaire items that could be included in the survey of leaders and followers without compromising the quality of responses.

7.5 Future research directions

Detailing the altruistic leadership construct opens up a number of avenues for further research. First, a more in-depth understanding of altruistic leadership should be pursued through further experimental studies testing the dimensions of altruistic leadership, similar to the way in which altruism is examined in social science research. For instance, these could be designed to control for participants' empathy orientation and availability of rewards as a precursor to helping (Cialdini et al. 1987). Another type of experiment which could be useful to understand the prevalence of self-interested and other-oriented motives is distribution games, where participants are typically asked to distribute sums of money between themselves and other players, similar to the prisoner's dilemma (Poundstone 1992).

Secondly, the new altruistic leadership instrument requires further testing and validation across a range of organisational contexts. One of the studies in this research was conducted on a sample representative of the UK working population, but the qualitative interviews covered a small number of leader–follower pairs, and the final study gathered quantitative data from a select – although relatively large – group of leaders and their followers in four organisations in the financial services sector in the

UK. This sampling approach limits the extent to which the findings can be extrapolated, so testing of the measure on different samples of leaders and followers in other economic sectors is recommended.

The quality of the instrument could also be improved by testing its ability to predict organisational outcomes beyond those reported by followers. Follower-level outcomes are an important indicator of the quality of leadership; however, they represent subjective judgements of leadership effectiveness at the individual level. Future studies could identify other sources of leadership effectiveness measures (such as individual and business unit performance data) to investigate the links between altruistic leadership and organisational outcomes more robustly.

Thirdly, improved understanding of the nature of altruistic leadership raises further questions about its origins and ways of developing altruistic leaders. For instance, researchers could examine why leaders act selflessly, distinguishing between the focus of leaders' self-sacrifice on the organisation, followers, or the wider society (Hu & Bentler 1999; Conger, Kanungo & Menon 2000; Fry et al. 2011; Walumbwa, Morrison & Christensen 2012). It is possible that the different foci of leaders' altruism arise from different types of leader values, and become more or less important at different stages in life. Future studies could also compare the role of moral values and empathy in the development of altruistic leaders, to understand whether teaching leaders to recognise the feelings of others and take responsibility for addressing those feelings would develop altruistic leadership.

Finally, the findings on the nature of altruistic leadership could also be compared with the evolving body of literature on love and compassion. This is another area of leadership literature which is becoming important in the context of an increased focus on interdependence between economies and communities, and a need for leaders that can relate to the needs of others (Fry 2003; Rynes et al. 2012). The concept of compassion draws on recognising the suffering of others, as well as bearing emotional costs associated with sharing the suffering of others (White 2008; Gallagher 2009). Both of these ideas are potentially related to the concept of altruistic self-sacrifice. For example, compassion may represent one of the values of altruistic leaders, acting as an antecedent of empathic concern driving the desire to help others in need. Alternatively, sharing of suffering may be an outcome of the experience of empathic concern, with compassion representing one of the forms of (emotional) self-sacrifice. It appears that the development of altruistic leadership theory could benefit from its comparison and integration with literature on compassion.

7.6 Conclusions

As more corporate scandals are exposed, there is a growing condemnation of the 'dark' side of leadership, in particular where individuals in positions of power appear to have pursued personal interest above public needs. With western capitalist economic systems blamed for rewarding competition and vigorous self-enrichment with no concern for others, there is a renewed emphasis on responsible business that creates positive outcomes for a range of stakeholders, beyond short-term financial value. Many commentators have called for the development of leaders who are not selfish, but who appreciate, support, enable and develop their followers, and want to give to others and to society.

Critically, it is not enough for leaders to benefit others for instrumental reasons, as a means of gaining advantages for themselves. The wider debate on transparency and authenticity points to the growing lack of trust that people, consumers and society are

prepared to invest in individuals and institutions that appear to act in the interests of others only to achieve better outcomes for themselves. Instead, leaders and organisations are expected to pursue the advancement of society and mankind as ultimate values, as success of business is dependent on the health of the communities in which it operates.

Altruism is possibly just one way of describing leaders who would otherwise be known as ethical, compassionate, or kind. Nevertheless, in the absence of a more accurate and comprehensive description of leaders who forgo personal interests to serve the needs of others, the concept of altruistic leadership provides an important perspective on how the values of these leaders may be expressed through empathic concern and acts of selfless sacrifice. More importantly, it shows that a proportion of leaders in today's workplaces are driven by a desire to help others around them, even if that means sacrificing their own interests on the way – and that this way of leading is highly effective.

References

- Ali, H. & Ali, H. (2011). Demographics and Spiritual Leadership: Empirical Evidence from Pakistan. *Business and Management Review*, 1(10), 36-42.
- Arjoon, S. (2008). Reconciling Situational Social Psychology with Virtue Ethics.

 International Journal of Management Reviews, 10(3), 221-243.
- Aronson, E. (2001). Integrating Leadership Styles and Ethical Perspectives. Canadian

 Journal of Administrative Sciences / Revue Canadienne des Sciences de

 l'Administration, 18(4), 244-256.
- Aronson, J. (1995). A Pragmatic View of Thematic Analysis. *The Qualitative Report*, 2(1), 1-3.
- Arrondel, L. & Masson, A. (2006). Altruism, Exchange or Indirect Reciprocity: What Do the Data on Family Transfers Show? *In:* Kolm, S.-C. & Ythier, J. M. (eds.) *Handbook of the Economics of Giving, Altruism and Reciprocity.* Amsterdam: North-Holland.
- Arvey, R. D., Rotundo, M., Johnson, W., Zhang, Z. & Mcgue, M. (2006). The Determinants of Leadership Role Occupancy: Genetic and Personality Factors.

 *Leadership Quarterly, 17(1), 1-20.
- Atwater, L., Waldman, D., Ostroff, C., Robie, C. & Johnson, K. M. (2005). Self-Other Agreement: Comparing Its Relationship with Performance in the US and Europe. *International Journal of Selection and Assessment*, 13(1), 25-40.
- Atwater, L. E., Ostroff, C., Yammarino, F. J. & Fleenor, J. W. (1998). Self-Other Agreement: Does It Really Matter? *Personnel Psychology*, 51(3), 577-598.

- Atwater, L. E. & Yammarino, F. J. (1992). Does Self-Other Agreement on Leadership Perceptions Moderate the Validity of Leadership and Performance Predictions? *Personnel Psychology*, 45(1), 141-164.
- Avolio, B. J. & Bass, B. M. (2004). *MLQ: Multifactor Leadership Questionnaire*. Menlo Park, CA: Mind Garden.
- Avolio, B. J., Bass, B. M. & Jung, D. I. (1995). Construct Validation and Norms for the Multifactor Leadership Questionnaire (MLQ-Form 5X). New York: Center for leadership studies, Binghamton University, State University of New York.
- Avolio, B. J. & Gardner, W. L. (2005). Authentic Leadership Development: Getting to the Root of Positive Forms of Leadership. *Leadership Quarterly*, 16(3), 315-338.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F. & May, D. R. (2004).
 Unlocking the Mask: A Look at the Process by Which Authentic Leaders
 Impact Follower Attitudes and Behaviors. *Leadership Quarterly*, 15(6), 801-823.
- Avolio, B. J., Kahai, S. & Dodge, G. E. (2001). E-Leadership: Implications for Theory, Research, and Practice. *Leadership Quarterly*, 11(4), 615-668.
- Avolio, B. J. & Locke, E. E. (2002). Contrasting Different Philosophies of Leader Motivation: Altruism Versus Egoism. *Leadership Quarterly*, 13(2), 169-191.
- Avolio, B. J., Walumbwa, F. O. & Weber, T. J. (2009). Leadership: Current Theories, Research, and Future Directions. *Annual Review of Psychology*, 60, 421-449.
- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.

- Barbuto, J. E., Gottfredson, R. K. & Searle, T. P. (2014). An Examination of Emotional Intelligence as an Antecedent of Servant Leadership. *Journal of Leadership & Organizational Studies*, 21(3), 315-323.
- Barbuto, J. E. & Wheeler, D. W. (2006). Scale Development and Construct Clarification of Servant Leadership. *Group & Organization Management*, 31(3), 300-326.
- Barling, J. (2013). The Science of Leadership: Lessons from Research for Organizational Leaders. New York: Oxford University Press.
- Barling, J., Slater, F. & Kevin Kelloway, E. (2000). Transformational Leadership and Emotional Intelligence: An Exploratory Study. *Leadership & Organization Development Journal*, 21(3), 157-161.
- Barling, J., Weber, T. & Kelloway, E. K. (1996). Effects of Transformational Leadership Training on Attitudinal and Financial Outcomes: A Field Experiment. *Journal of Applied Psychology*, 81(6), 827-832.
- Baruch, Y. & Holtom, B. C. (2008). Survey Response Rate Levels and Trends in Organizational Research. *Human Relations*, 61(8), 1139-1160.
- Bass, B. M. (1985). Leadership and Performance Beyond Expectations. New York: Free Press.
- Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share the Vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B. M. (1998). The Ethics of Transformational Leadership. *In:* Ciulla, J. B. (ed.) *Ethics, the Heart of Leadership.* Wesport, Conn.: Praeger.

- Bass, B. M. & Avolio, B. J. (1994). *Improving Organizational Effectiveness through**Transformational Lladership. Thousand Oaks, CA: Sage.
- Bass, B. M., Avolio, B. J., Jung, D. I. & Berson, Y. (2003). Predicting Unit Performance by Assessing Transformational and Transactional Leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Bass, B. M. & Steidlmeier, P. (1999). Ethics, Character, and Authentic Transformational Leadership Behavior. *Leadership Quarterly*, 10(2), 181-217.
- Bass, B. M. & Stogdill, R. M. (1990). Handbook of Leadership. New York: Free Press.
- Batson, C. D. (1991). *The Altruism Question: Toward a Social Psychological Answer*. Hillsdale, NJ: Erlbaum.
- Batson, C. D. (2010). Empathy-Induced Altruistic Motivation. *In:* Mikulincer, M. & Shaver, P. R. (eds.) *Prosocial Motives, Emotions, and Behavior: The Better Angels of Our Nature*. Washington: American Psychological Association.
- Batson, C. D. (2011). Altruism in Humans. New York: Oxford University Press.
- Batson, C. D. (2014). *The Altruism Question: Toward a Social-Psychological Answer*. Hove, UK: Psychology Press.
- Batson, C. D., Ahmad, N. & Lishner, D. A. (2011). Empathy and Altruism. *In:* Snyder,C. R. & Lopez, S. L. (eds.) *Handbook of Positive Psychology* Oxford: Oxford University Press.
- Batson, C. D., Bolen, M. H., Cross, J. A. & Neuringer-Benefiel, H. E. (1986). Where Is the Altruism in the Altruistic Personality? *Journal of Personality and Social Psychology*, 50(1), 212-220.

- Batson, C. D., Duncan, B. D., Ackerman, P., Buckley, T. & Birch, K. (1981). Is Empathic Emotion a Source of Altruistic Motivation? *Journal of Personality and Social Psychology*, 40(2), 290-302.
- Batson, C. D. & Powell, A. A. (2003). Altruism and Prosocial Behavior. *In:* Millon,T., Lerner, M. J. & Weiner, I. B. (eds.) *Handbook of Psychology*. Hoboken:John Wiley & Sons.
- Batson, C. D. & Shaw, L. L. (1991). Evidence for Altruism: Toward a Pluralism of Prosocial Motives. *Psychological Inquiry*, 2(2), 107-122.
- Bechger, T. M., Maris, G. & Hsiao, Y. P. (2010). Detecting Halo Effects in Performance-Based Examinations. *Applied Psychological Measurement*, 34(8), 607-619.
- Belligham, R. & Campanello, R. J. (2004). *HR Optimization: From Personnel Administration to Human and Organizational Capital Development*. Amherst, MA: HRD Press.
- Benson, M. J. & Campbell, J. P. (2007). To Be, or Not to Be, Linear: An Expanded Representation of Personality and Its Relationship to Leadership Performance.

 International Journal of Selection and Assessment, 15(2), 232-249.
- Bersoff, D. M. (1999). Why Good People Sometimes Do Bad Things: Motivated Reasoning and Unethical Behavior. *Personality and Social Psychology Bulletin*, 25(1), 28-39.
- Berson, Y. & Sosik, J. J. (2007). The Relationship between Self-Other Rating Agreement and Influence Tactics and Organizational Processes. *Group & Organization Management*, 32(6), 675-698.

- Bitner, M. J., Booms, B. H. & Tetreault, M. S. (1990). The Service Encounter:

 Diagnosing Favorable and Unfavorable Incidents. *Journal of Marketing*, (54),
 71-84.
- Blaikie, N. (2003). Analyzing Quantitative Data: From Description to Explanation.

 London: Sage.
- Blake, R. & Mouton, J. (1964). *The Managerial Grid: The Key to Leadership Excellence*. Houston: Gulf Publishing Company.
- Blake, R. R. & Mouton, J. S. (1984). *The New Managerial Grid III*. Houston: Gulf Publishing.
- Blake, R. R., Mouton, J. S. & Bidwell, A. C. (1962). Managerial Grid. *Advanced Management-Office Executive*.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New Brunswick, NJ: Transaction Pub.
- Bliese, P. D. (2000). Within-Group Agreement, Non-Independence, and Reliability: Implications for Data Aggregation and Analysis. *In:* Klein, K. J. & Kozlowski, S. W. (eds.) *Multilevel Theory, Research, and Methods in Organizations* San Francisco, CA: Jossey-Bass.
- Boehm, S. A. & Baumgaertner, M. K. (2014). Health-Focused Leadership. Prevention and Intervention as Enablers of Work Ability and Performance. *Academy of Management Proceedings*, 2014. Academy of Management, 15623.
- Bono, J. E. & Ilies, R. (2006). Charisma, Positive Emotions and Mood Contagion. *Leadership Quarterly*, 17(4), 317-334.

- Bono, J. E. & Judge, T. A. (2004). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, 89(5), 901-910.
- Boyatzis, R. E., Goleman, D. & Rhee, K. (2000). Clustering Competence in Emotional Intelligence: Insights from the Emotional Competence Inventory (ECI). *In:*Bar-On, R. & Parker, J. D. A. (eds.) *Handbook of Emotional Intelligence*. San Francisco, CA: Jossey-Bass.
- Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brown, B. B. (2003). Employees' Organizational Commitment and Their Perception of Supervisors' Relations-Oriented and Task-Oriented Leadership Behaviors.

 Virginia Polytechnic Institute and State University.
- Brown, M. E. & Trevino, L. K. (2006). Ethical Leadership: A Review and Future Directions. *Leadership Quarterly*, 17(6), 595-616.
- Brown, M. E., Treviño, L. K. & Harrison, D. A. (2005). Ethical Leadership: A Social Learning Perspective for Construct Development and Testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117-134.
- Bryman, A. (2003). Quantity and Quality in Social Research. New York: Routledge.
- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E. & Halpin, S. M. (2006).

 What Type of Leadership Behaviors Are Functional in Teams? A MetaAnalysis. *Leadership Quarterly*, 17(3), 288-307.
- Burns, J. M. (1978). Leadership. New York: Harper and Row Publishers.

- Burrell, G. & Morgan, G. (1979). Sociological Paradigms and Organisational Analysis. London: Heinemann.
- Campanelli, P. (1997). Testing Survey Questions: New Directions in Cognitive Interviewing. *Bulletin de Methodologie Sociologique*, 55(1), 5-17.
- Campbell, W. K., Goodie, A. S. & Foster, J. D. (2004). Narcissism, Confidence, and Risk Attitude. *Journal of Behavioral Decision Making*, 17(4), 297-311.
- Carless, S. A., Wearing, A. J. & Mann, L. (2000). A Short Measure of Transformational Leadership. *Journal of Business and Psychology*, 14(3), 389-405.
- Carlo, G., Pytlikzillig, L. M., Roesch, S. C. & Dienstbier, R. A. (2009). The Elusive Altruist: The Psychological Study of the Altruistic Personality. *Personality, Identity, and Character: Explorations in Moral Psychology*, 271-294.
- Carlyle, T. (1840). *On Heroes, Hero-Worship and the Heroic in History*. London: Chapman and Hall.
- Cassell, C. & Symon, G. (2004). Essential Guide to Qualitative Methods in Organizational Research. London: Sage.
- Charness, G. & Haruvy, E. (2002). Altruism, Equity, and Reciprocity in a Gift-Exchange Experiment: An Encompassing Approach. *Games and Economic Behavior*, 40(2), 203-231.
- Chatterjee, A. & Hambrick, D. C. (2007). It's All About Me: Narcissistic Chief Executive Officers and Their Effects on Company Strategy and Performance.

 **Administrative Science Quarterly, 52(3), 351-386.

- Chen, C.-Y. & Yang, C.-F. (2012). The Impact of Spiritual Leadership on Organizational Citizenship Behavior: A Multi-Sample Analysis. *Journal of Business Ethics*, 105(1), 107-114.
- Choi, J. (2006). A Motivational Theory of Charismatic Leadership: Envisioning, Empathy, and Empowerment. *Journal of Leadership & Organizational Studies*, 13(1), 24-43.
- Choi, Y. & Mai-Dalton, R. R. (1998). On the Leadership Function of Self-Sacrifice.

 Leadership Quarterly, 9(4), 475-501.
- Choi, Y. & Mai-Dalton, R. R. (1999). The Model of Followers' Responses to Self-Sacrificial Leadership: An Empirical Test. *Leadership Quarterly*, 10(3), 397-421.
- Cialdini, R. B., Baumann, D. J. & Kenrick, D. T. (1981). Insights from Sadness: A

 Three-Step Model of the Development of Altruism as Hedonism.

 Developmental Review, 1(3), 207-223.
- Cialdini, R. B. & Kenrick, D. T. (1976). Altruism as Hedonism: A Social Development Perspective on the Relationship of Negative Mood State and Helping. *Journal of Personality and Social Psychology*, 34(5), 907-914.
- Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J. & Beaman, A. L. (1987).

 Empathy-Based Helping: Is It Selflessly or Selfishly Motivated? *Journal of Personality and Social Psychology*, 52(4), 749-758.
- Ciulla, J. B. (2004). Ethics and Leadership Effectiveness. *In:* Antonakis, J., Cianciolo,A. T. & Sternberg, R. J. (eds.) *The Nature of Leadership*. Thousand Oaks, CA:Sage.

- Ciulla, J. B. (2007). Ethics and Effectiveness: The Fabric of Leadership. *GovNet eJournal*, 1(1), 71-81.
- Clark, M. S. & Mills, J. (1979). Interpersonal Attraction in Exchange and Communal Relationships. *Journal of Personality and Social Psychology*, 37(1), 12-24.
- Clark, V. L. P. & Creswell, J. W. (2011). *Designing and Conducting Mixed Methods**Research. Thousand Oaks, CA: Sage.
- Cogliser, C. C., Schriesheim, C. A., Scandura, T. A. & Gardner, W. L. (2009). Balance in Leader and Follower Perceptions of Leader-Member Exchange: Relationships with Performance and Work Attitudes. *Leadership Quarterly*, 20(3), 452-465.
- Cohen, J. (1988). Statistical Power Analysis: A Computer Program. New York: Routledge.
- Cohen, J., Cohen, P., West, S. G. & Aiken, L. S. (2013). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. New York: Routledge.
- Collard, D. (1975). Edgeworth's Propositions on Altruism. *The Economic Journal*, 85(338), 355-360.
- Collis, J. & Hussey, R. (2013). Business Research: A Practical Guide for Undergraduate and Postgraduate Students. London: Palgrave Macmillan.
- Comte, A. & Congreve, R. (1883). Catechism of Positive Religion. London: Trubner.
- Conger, J. A. (1989). The Charismatic Leader: Behind the Mystique of Exceptional Leadership. San Francisco, CA: Jossey-Bass.

- Conger, J. A. (1998a). The Dark Side of Leadership. *In:* Hickman, G. R. (ed.) *Leading Organizations: Perspectives for a New Era.* Thousand Oaks, CA: Sage.
- Conger, J. A. (1998b). Qualitative Research as the Cornerstone Methodology for Understanding Leadership. *Leadership Quarterly*, 9(1), 107-121.
- Conger, J. A. & Kanungo, R. N. (1987). Toward a Behavioral Theory of Charismatic

 Leadership in Organizational Settings. *Academy of Management Review*, 12(4),
 637-647.
- Conger, J. A. & Kanungo, R. N. (1988). Behavioral Dimensions of Charismatic Leadership. *In:* Conger, J. A. & Kanungo, R. N. (eds.) *Charismatic Leadership: The Elusive Factor in Organizational Effectiveness*. San Francisco, CA: Jossey-Bass.
- Conger, J. A. & Kanungo, R. N. (1994). Charismatic Leadership in Organizations:

 Perceived Behavioral Attributes and Their Measurement. *Journal of Organizational Behavior*, 15(5), 439-452.
- Conger, J. A. & Kanungo, R. N. (1998). *Charismatic Leadership in Organizations*.

 Thousand Oaks, CA: Sage.
- Conger, J. A., Kanungo, R. N. & Menon, S. T. (2000). Charismatic Leadership and Follower Effects. *Journal of Organizational Behavior*, 21(7), 747-767.
- Connolly, J. J., Kavanagh, E. J. & Viswesvaran, C. (2007). The Convergent Validity between Self and Observer Ratings of Personality: A Meta-Analytic Review.

 International Journal of Selection and Assessment, 15(1), 110-117.

- Conway, J. M. & Huffcutt, A. I. (1997). Psychometric Properties of Multisource Performance Ratings: A Meta-Analysis of Subordinate, Supervisor, Peer, and Self-Ratings. *Human Performance*, 10(4), 331-360.
- Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L. & Jennings, K. R. (1988). Employee Participation: Diverse Forms and Different Outcomes.

 **Academy of Management Review*, 13(1), 8-22.
- Creswell, J. W. (2003). Mixed Methods Procedures. *In:* Creswell, J. W. (ed.) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage.
- Cropanzano, R., Goldman, B. & Folger, R. (2005). Self-Interest: Defining and Understanding a Human Motive. *Journal of Organizational Behavior*, 26(8), 985-991.
- Crowne, D. P. & Marlowe, D. (1964). *The Approval Motive: Studies in Evaluative Dependence*. New York: Wiley
- D'Souza, J. F. & Adams, C. K. (2014). On Unenlightened Altruism. *Journal of Human Values*, 20(2), 183-191.
- Dansereau, F. (1996). A Dyadic Approach to Leadership: Creating and Nurturing This Approach under Fire. *Leadership Quarterly*, 6(4), 479-490.
- Dasborough, M. T. & Ashkanasy, N. M. (2002). Emotion and Attribution of Intentionality in Leader–Member Relationships. *Leadership Quarterly*, 13(5), 615-634.

- De Cremer, D. & Van Knippenberg, D. (2002). How Do Leaders Promote Cooperation? The Effects of Charisma and Procedural Fairness. *Journal of Applied Psychology*, 87(5), 858-866.
- De Cremer, D. & Van Knippenberg, D. (2004). Leader Self-Sacrifice and Leadership Effectiveness: The Moderating Role of Leader Self-Confidence.

 Organizational Behavior and Human Decision Processes, 95(2), 140-155.
- De Hoogh, A. H. B., Den Hartog, D. N. & Koopman, P. L. (2005). Linking the Big Five-Factors of Personality to Charismatic and Transactional Leadership: Perceived Dynamic Work Environment as a Moderator. *Journal of Organizational Behavior*, 26(7), 839-865.
- Deluga, R. J. (2001). American Presidential Machiavellianism: Implications for Charismatic Leadership and Rated Performance. *Leadership Quarterly*, 12(3), 339-363.
- DeMaio, T. J. & Rothgeb, J. M. (1996). Cognitive Interviewing Techniques: In the Lab and in the Field. *In:* Schwarz, N. & Sudman, S. (eds.) *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research.* San Francisco: Jossey-Bass.
- Derue, D. S., Nahrgang, J. D., Wellman, N. & Humphrey, S. E. (2011). Trait and Behavioral Theories of Leadership: An Integration and Meta-Analytic Test of Their Relative Validity. *Personnel Psychology*, 64(1), 7-52.
- Detert, J. R. & Burris, E. R. (2007). Leadership Behavior and Employee Voice: Is the Door Really Open? *Academy of Management Journal*, 50(4), 869-884.

- Dienesch, R. M. & Liden, R. C. (1986). Leader-Member Exchange Model of Leadership: A Critique and Further Development. *Academy of Management Review*, 11(3), 618-634.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C. & Hu, J. (2014).

 Leadership Theory and Research in the New Millennium: Current Theoretical

 Trends and Changing Perspectives. *Leadership Quarterly*, 25(1), 36-62.
- Doh, J. P. & Stumpf, S. A. (2005). *Handbook on Responsible Leadership and Governance in Global Business*. Cheltenham: Edward Elgar Publishing.
- Dolbier, C. L., Webster, J. A., Mccalister, K. T., Mallon, M. W. & Steinhardt, M. A. (2005). Reliability and Validity of a Single-Item Measure of Job Satisfaction.

 American Journal of Health Promotion, 19(3), 194-198.
- Downey, R. G. & King, C. V. (1998). Missing Data in Likert Ratings: A Comparison of Replacement Methods. *Journal of General Psychology*, 125(2), 175-191.
- Duarte, N. T., Goodson, J. R. & Klich, N. R. (1993). How Do I Like Thee? Let Me Appraise the Ways. *Journal of Organizational Behavior*, 14(3), 239-249.
- Dunteman, G. H. (1989). Principal Component Analysis (Quantitative Applications in the Social Sciences). Thousand Oaks, CA: Sage.
- Eckel, C. C. & Grossman, P. J. (1996). Altruism in Anonymous Dictator Games. *Games and Economic Behavior*, 16(2), 181-191.
- Eden, D. & Leviatan, U. (1975). Implicit Leadership Theory as a Determinant of the Factor Structure Underlying Supervisory Behavior Scales. *Journal of Applied Psychology*, 60(6), 736-741.

- Edvardsson, B. (1992). Service Breakdowns: A Study of Critical Incidents in an Airline. *International Journal of Service Industry Management*, 3(4), 17-29.
- Eisenberg, N. (1986). *Altruistic Emotion, Cognition, and Behavior*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Eisenberger, R., Huntington, R. H. & Sowa, S. (1986). Perceived Organisational Support. *Journal of Applied Psychology*, 71(31), 500-507.
- Fiedler, F. E. (1978). The Contingency Model and the Dynamics of the Leadership Process. *Advances in Experimental Social Psychology*, 11, 59-112.
- Field, A. (2009). Discovering Statistics Using SPSS. Thousand Oaks, CA: Sage.
- Fink, A. (2003). The Survey Handbook. Thousand Oaks, CA: Sage.
- Fisher, R. & Katz, J. E. (2008). Social-Desirability Bias and the Validity of Self-Reported Values. *Psychology & Marketing*, 17(2), 105-120.
- Flanagan, J. C. (1954). The Critical Incident Technique. *Psychological bulletin*, 51(4), 327-358.
- Fleetwood, S. & Ackroyd, S. (2004). *Critical Realist Applications in Organisation* and Management Studies. New York: Psychology Press.
- Fleishman, E. A. (1953). The Measurement of Leadership Attitudes in Industry. *Journal of Applied Psychology*, 37(3), 153-158.
- Fleishman, E. A. & Peters, D. R. (1962). Interpersonal Values, Leadership Attitudes, and Managerial "Success". *Personnel Psychology*, 15(2), 127-143.

- Fletcher, J. A. & Zwick, M. (2007). The Evolution of Altruism: Game Theory in Multilevel Selection and Inclusive Fitness. *Journal of Theoretical Biology*, 245(1), 26-36.
- Folger, R., Cropanzano, R., Greenberg, J. & Cropanzano, R. (2001). Fairness Theory:

 Justice as Accountability. *Advances in Organizational Justice*, 1, 1-55.
- Fornell, C. & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing* research, 18(3), 382-388.
- Friedland, N. (1990). Attribution of Control as a Determinant of Cooperation in Exchange Interactions. *Journal of Applied Social Psychology*, 20(4), 303-320.
- Fry, L. W. (2003). Toward a Theory of Spiritual Leadership. *Leadership Quarterly*, 14(6), 693-727.
- Fry, L. W., Hannah, S. T., Noel, M. & Walumbwa, F. O. (2011). Impact of Spiritual Leadership on Unit Performance. *Leadership Quarterly*, 22(2), 259-270.
- Fry, L. W. & Slocum, J. W. (2008). Maximizing the Triple Bottom Line through Spiritual Leadership. *Organizational Dynamics*, 37(1), 86-96.
- Gallagher, P. (2009). The Grounding of Forgiveness: Martha Nussbaum on Compassion and Mercy. *American Journal of Economics and Sociology*, 68(1), 231-252.
- Galton, F. (1869). Hereditary Genius. London: Macmillan and Company.
- Gardner, W. L., Avolio, B. J. & Walumbwa, F. O. (2005). Authentic Leadership Development: Emergent Trends and Future Directions. *In:* Gardner, W. L.,

- Avolio, B. J. & Walumbwa, F. O. (eds.) Authentic Leadership Theory and Practice: Origins, Effects, and Development. Oxford: Elsevier.
- Gardner, W. L., Cogliser, C. C., Davis, K. M. & Dickens, M. P. (2011). Authentic Leadership: A Review of the Literature and Research Agenda. *Leadership Quarterly*, 22(6), 1120-1145.
- Garland, R. (1991). The Mid-Point on a Rating Scale: Is It Desirable? *Marketing Bulletin*, 2(1), 66-70.
- George, D. & Mallery, M. (2003). *Using SPSS for Windows Step by Step: A Simple Guide and Reference*. Boston, MA: Allyn y Bacon.
- Gil, F., Alcover, C.-M., Peiró, J.-M., Gil, F., Rico, R., Alcover, C. M. & Barrasa, Á.
 (2005). Change-Oriented Leadership, Satisfaction and Performance in Work
 Groups: Effects of Team Climate and Group Potency. *Journal of Managerial Psychology*, 20(3/4), 312-328.
- Glaser, B. G. (1978). Theoretical Sensitivity: Advances in the Methodology of Grounded Theory. Mill Valley, CA: Sociology Press.
- Gouldner, A. W. (1960). The Norm of Reciprocity: A Preliminary Statement.

 *American Sociological Review, 25(2), 161-178.
- Graen, G. B. & Uhl-Bien, M. (1995). Relationship-Based Approach to Leadership:

 Development of Leader-Member Exchange (LMX) Theory of Leadership over

 25 Years: Applying a Multi-Level Multi-Domain Perspective. *Leadership Quarterly*, 6(2), 219-247.

- Grant, A. M. & Berry, J. W. (2011). The Necessity of Others Is the Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity. Academy of Management Journal, 54(1), 73-96.
- Greenberg, J. & Folger, R. (1983). Procedural Justice, Participation, and the Fair Process Effect in Groups and Organizations. New York: Springer.
- Greenleaf, R. K. (1973). *The Servant as Leader*. Cambridge, MA: Center for Applied Studies.
- Greenleaf, R. K. (1977). Servant Leadership. New York: Paulist Press.
- Gremler, D. D. (2004). The Critical Incident Technique in Service Research. *Journal* of Service Research, 7(1), 65-89.
- Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., Harms, P. D., Robins, R. W. & Yan, T. (2015). Gender Differences in Narcissism: A Meta-Analytic Review. *Psychological Bulletin*, 141(2), 261-310.
- Grove, S. J. & Fisk, R. P. (1997). The Impact of Other Customers on Service Experiences: A Critical Incident Examination of "Getting Along". *Journal of Retailing*, 73(1), 63-85.
- Grover, S. L., Hasel, M. C., Manville, C. & Serrano-Archimi, C. (2014). Follower Reactions to Leader Trust Violations: A Grounded Theory of Violation Types, Likelihood of Recovery, and Recovery Process. *European Management Journal*, 32(5), 689-702.

- Guba, E. G. & Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research.In: Denzin, N. K. & Lincoln, Y. S. (eds.) Handbook of Qualitative Research.London: Sage.
- Hallgren, K. A. (2012). Computing Inter-Rater Reliability for Observational Data: An Overview and Tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1), 23-34.
- Hamilton, W. D. (1964). The Genetical Evolution of Social Behaviour. *Journal of Theoretical Biology*, 7(1), 1-16.
- Hannah, S. T. & Avolio, B. J. (2011). Leader Character, Ethos, and Virtue: Individual and Collective Considerations. *Leadership Quarterly*, 22(5), 989-994.
- Harms, P. D. & Crede, M. (2010). Emotional Intelligence and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Leadership & Organizational Studies*, 17(1), 5-17.
- Hater, J. J. & Bass, B. M. (1988). Superiors' Evaluations and Subordinates' Perceptions of Transformational and Transactional Leadership. *Journal of Applied Psychology*, 73(4), 695-702.
- Hatfield, E., Cacioppo, J. T. & Rapson, R. L. (1994). *Emotional Contagion*.

 Cambridge: Cambridge University Press.
- Heinz, M., Juranek, S. & Rau, H. A. (2011). Do Women Behave More Reciprocally

 Than Men? Gender Differences in Real Effort Dictator Games. *Journal of Economic Behavior & Organization*, 83(1), 105-110.

- Hernandez, M., Eberly, M. B., Avolio, B. J. & Johnson, M. D. (2011). The Loci and Mechanisms of Leadership: Exploring a More Comprehensive View of Leadership Theory. *Leadership Quarterly*, 22(6), 1165-1185.
- Herriot, P., Manning, W. E. G. & Kidd, J. M. (1997). The Content of the Psychological Contract. *British Journal of Management*, 8(2), 151-162.
- Hersey, P. & Blanchard, K. H. (1969). Life Cycle Theory of Leadership. *Training & Development Journal*, 23(5), 26-34.
- Hersey, P. & Blanchard, K. H. (1982). Grid Principles and Situationalism: Both! A Response to Blake and Mouton. *Group & Organization Studies*, 7(2), 207-210.
- Hoffman, M. L. (1981). Is Altruism Part of Human Nature? *Journal of Personality* and Social Psychology, 40(1), 121-137.
- Hogan, R., Curphy, G. J. & Hogan, J. (1994). What We Know About Leadership: Effectiveness and Personality. *American Psychologist*, 49(6), 493-504.
- Homans, G. C. (1958). Social Behavior as Exchange. *American Journal of Sociology*, 63(6), 597-606.
- Hoogervorst, N., De Cremer, D. & van Dijke, M. (2010). Why Leaders Not Always

 Disapprove of Unethical Follower Behavior: It Depends on the Leader's SelfInterest and Accountability. *Journal of Business Ethics*, 95, 29-41.
- Hooper, D., Coughlan, J. & Mullen, M. (2008). Structural Equation Modelling:

 Guidelines for Determining Model Fit. *Electronic Journal of Business*Research Methods, 6(1), 53-60.

- Hornstein, H. A. (1978). Promotive Tension and Prosocial Behavior: A Lewinian Analysis. *In:* Wispe, L. (ed.) *Altruism, Sympathy, and Helping: Psychological and Sociological Principles*. New York: Academic Press.
- House, R. (1977). A 1976 Theory of Charismatic Leadership Effectiveness. *In:* Hunt, J. G. & Larson, L. L. (eds.) *Leadership: The Cutting Edge*. Carbondale, IL: Feffer and Simons.
- House, R. J. (1971). A Path-Goal Theory of Leader Effectiveness. *Administrative Science Quarterly*, 321-339.
- House, R. J. & Howell, J. M. (1992). Personality and Charismatic Leadership.

 Leadership Quarterly, 3(2), 81-108.
- House, R. J. & Shamir, B. (1993). Toward the Integration of Transformational,Charismatic, and Visionary Theories. *In:* Chemers, M. M. & Ayman, R. (eds.)*Leadership Theory and Research: Perspectives and Directions*. San Diego,CA: Academic Press.
- Howell, J. M. (1988). Two Faces of Charisma: Socialized and Personalized Leadership in Organizations. *In:* Conger, J. A. & Kanungo, R. N. (eds.) *Charismatic Leadership: The Elusive Factor in Organizational Effectiveness.*San Francisco, CA: Jossey-Bass.
- Howell, J. M. & Avolio, B. J. (1992). The Ethics of Charismatic Leadership: Submission or Liberation? *The Executive*, 6(2), 43-54.
- Howell, J. M. & Avolio, B. J. (1993). Transformational Leadership, Transactional Leadership, Locus of Control, and Support for Innovation: Key Predictors of

- Consolidated-Business-Unit Performance. *Journal of Applied Psychology*, 78(6), 891-902.
- Howell, J. M. & Shamir, B. (2005). The Role of Followers in the Charismatic Leadership Process: Relationships and Their Consequences. *Academy of Management Review*, 30(1), 96-112.
- Hu, J. & Liden, R. C. (2011). Antecedents of Team Potency and Team Effectiveness: An Examination of Goal and Process Clarity and Servant Leadership. *Journal of Applied Psychology*, 96(4), 851-862.
- Hu, L.-T. & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance

 Structure Analysis: Conventional Criteria Versus New Alternatives. Structural

 Equation Modeling: a Multidisciplinary Journal, 6(1), 1-55.
- Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M. & Weinberger,
 E. (2013). Servant Leaders Inspire Servant Followers: Antecedents and
 Outcomes for Employees and the Organization. *Leadership Quarterly*, 24(2),
 316-331.
- Ilies, R., Morgeson, F. P. & Nahrgang, J. D. (2005). Authentic Leadership and Eudaemonic Well-Being: Understanding Leader-Follower Outcomes. *Leadership Quarterly*, 16(3), 373-394.
- Jackson, P. R., Wall, T. D., Martin, R. & Davids, K. (1993). New Measures of Job Control, Cognitive Demand, and Production Responsibility. *Journal of Applied Psychology*, 78(5), 753-762.
- Jacobsen, C. & House, R. J. (2001). Dynamics of Charismatic Leadership: A Process Theory, Simulation Model, and Tests. *Leadership Quarterly*, 12(1), 75-112.

- James, L. R. (1982). Aggregation Bias in Estimates of Perceptual Agreement. *Journal of Applied Psychology*, 67(2), 219-229.
- James, L. R., Demaree, R. G. & Wolf, G. (1984). Estimating within-Group Interrater Reliability with and without Response Bias. *Journal of Applied Psychology*, 69(1), 85-98.
- James, L. R., Demaree, R. G. & Wolf, G. (1993). rwg: An Assessment of within-Group Interrater Agreement. *Journal of Applied Psychology*, 78(2), 306-309.
- Jennings, E. E. (1960). An Anatomy of Leadership: Princes, Heroes and Supermen.

 New York: Harper.
- Jensen, M. C. (1994). Self-Interest, Altruism, Incentives, and Agency Theory. *Journal of Applied Corporate Finance*, 7(2), 40-45.
- Jeon, K. S., Passmore, D. L., Lee, C. & Hunsaker, W. (2013). Spiritual Leadership: A
 Validation Study in a Korean Context. *Journal of Management, Spirituality & Religion*, 10(4), 342-357.
- Johnson, P. & Gill, J. (1997). Research Methods for Managers. London: Sage.
- Jones-Lee, M. W. (1991). Altruism and the Value of Other People's Safety. *Journal of Risk and Uncertainty*, 4(2), 213-219.
- Jordan, P. J. & Lawrence, S. A. (2009). Emotional Intelligence in Teams:

 Development and Initial Validation of the Short Version of the Workgroup

 Emotional Intelligence Profile (WEIP-S). *Journal of Management & Organization*, 15(04), 452-469.

- Joseph, D. L. & Newman, D. A. (2010). Emotional Intelligence: An Integrative Meta-Analysis and Cascading Model. *Journal of Applied Psychology*, 95(1), 54-78.
- Joseph, J. (2015). Self-Interest and Altruism: Pluralism as a Basis for Leadership in Business. *Business and Management Studies*, 1(2), 106-114.
- Judge, T. A. & Bono, J. E. (2000). Five-Factor Model of Personality and Transformational Leadership. *Journal of Applied Psychology*, 85(5), 751-765.
- Judge, T. A., Bono, J. E., Ilies, R. & Gerhardt, M. W. (2002). Personality and Leadership: A Qualitative and Quantitative Review. *Journal of Applied Psychology*, 87(4), 765-780.
- Judge, T. A. & Piccolo, R. F. (2004). Transformational and Transactional Leadership:
 A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology*, 89(5), 755-768.
- Judge, T. A., Piccolo, R. F. & Ilies, R. (2004). The Forgotten Ones? The Validity of Consideration and Initiating Structure in Leadership Research. *Journal of Applied Psychology*, 89(1), 36-51.
- Judge, T. A., Piccolo, R. F. & Kosalka, T. (2009). The Bright and Dark Sides of Leader Traits: A Review and Theoretical Extension of the Leader Trait Paradigm. *Leadership Quarterly*, 20(6), 855-875.
- Judge, T. A., Thoresen, C. J., Bono, J. E. & Patton, G. K. (2001). The job satisfaction—job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407.

- Kahai, S. S., Sosik, J. J. & Avolio, B. J. (1997). Effects of Leadership Style andProblem Structure on Work Group Process and Outcomes in an ElectronicMeeting System Environment. *Personnel Psychology*, 50(1), 121-146.
- Kahneman, D., Knetsch, J. L. & Thaler, R. H. (1986). Fairness and the Assumptions of Economics. *Journal of Business*, 59(4), 285-300.
- Kanungo, R. N. (2001). Ethical Values of Transactional and Transformational Leaders.

 Canadian Journal of Administrative Sciences-Revue Canadienne Des Sciences

 De l'Administration, 18(4), 257-265.
- Kanungo, R. N. & Conger, J. A. (1993). Promoting Altruism as a Corporate Goal.

 *Academy of Management Executive, 7(3), 37-48.
- Kanungo, R. N. & Mendonca, M. (1996). *Ethical Dimensions of Leadership*.

 Thousand Oaks, CA: Sage.
- Kark, R. & Van Dijk, D. (2007). Motivation to Lead, Motivation to Follow: The Role of the Self-Regulatory Focus in Leadership Processes. *Academy of Management Review*, 32(2), 500-528.
- Katz, D. (1950). *Productivity, Supervision and Morale in an Office Situation*. Ann Arbor, Mich.: Institute for Social Research, University of Michigan.
- Kaulio, M. A. (2008). Project Leadership in Multi-Project Settings: Findings from a Critical Incident Study. *International Journal of Project Management*, 26(4), 338-347.

- Kellett, J. B., Humphrey, R. H. & Sleeth, R. G. (2002). Empathy and Complex Task Performance: Two Routes to Leadership. *Leadership Quarterly*, 13(5), 523-544.
- Kenny, D. A. & Zaccaro, S. J. (1983). An Estimate of Variance Due to Traits in Leadership. *Journal of Applied Psychology*, 68(4), 678-685.
- Kirkpatrick, S. A. & Locke, E. A. (1996). Direct and Indirect Effects of Three Core

 Charismatic Leadership Components on Performance and Attitudes. *Journal*of Applied Psychology, 81(1), 36-51.
- Klein, K. J. & Kozlowski, S. W. J. (2000). From Micro to Meso: Critical Steps in Conceptualizing and Conducting Multilevel Research. *Organizational Research Methods*, 3(3), 211-236.
- Kluckhohn, C. (1951). Values and Value-Orientations in the Theory of Action: An Exploration in Definition and Classification. *In:* Parsons, T. & Shils, E. A. (eds.) *Toward a General Theory of Action*. Cambridge, MA: Harvard University Press.
- Kniveton, B. H. (2004). The Influences and Motivations on Which Students Base

 Their Choice of Career. *Research in Education*, 72(1), 47-59.
- Koch, A., Strobel, A., Kici, G. & Westhoff, K. (2009). Quality of the Critical Incident Technique in Practice: Interrater Reliability and Users' Acceptance under Real Conditions. *Psychology Science Quarterly*, 51(1), 3-15.
- Kochanska, G., Koenig, J. L., Barry, R. A., Kim, S. & Yoon, J. E. (2010). Children's Conscience During Toddler and Preschool Years, Moral Self, and a Competent,

- Adaptive Developmental Trajectory. *Developmental Psychology*, 46(5), 1320-1332.
- Kohlberg, L. (1963). Moral Development and Identification. *In:* Stevenson, H. W. (ed.) *Child Psychology: The 62nd Yearbook of the National Society for the Study of Education.* Chicago: University Chicago Press.
- Kohlberg, L. (1984). *The Psychology of Moral Development: The Nature and Validity of Moral Stages*. New York: HarperCollins.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurements*, 30, 607-610.
- Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kulshreshtha, P. (2005). Business Ethics Versus Economic Incentives: Contemporary Issues and Dilemmas. *Journal of Business Ethics*, 60(4), 393-410.
- Ladkin, D. (2010). *Rethinking Leadership: a New Look at Old Leadership Questions*.

 Cheltenham: Edward Elgar Publishing.
- Laub, J. A. (1999). Assessing the Servant Organization: Development of the Servant

 Organizational Leadership Assessment (SOLA) Instrument. Florida Atlantic

 University; 0119.
- Lawton, A. & Paez, I. (2014). Developing a Framework for Ethical Leadership. *Journal of Business Ethics*, 130(3), 1-11.
- Leana, C. R., Locke, E. A. & Schweiger, D. M. (1990). Fact and Fiction in Analyzing Research on Participative Decision Making: A Critique of Cotton, Vollrath,

- Froggatt, Lengnick-Hall, and Jennings. *Academy of Management Review*, 15(1), 137-146.
- LeBreton, J. M. & Senter, J. L. (2007). Answers to 20 Questions About Interrater Reliability and Interrater Agreement. *Organizational Research Methods*, 11(4), 815-852.
- Lewin, K., Lippitt, R. & White, R. K. (1939). Patterns of Aggressive Behavior in Experimentally Created "Social Climates". *Journal of Social Psychology*, 10(2), 269-299.
- Liden, R. C., Wayne, S. J., Zhao, H. & Henderson, D. (2008). Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment. *Leadership Quarterly*, 19(2), 161-177.
- Lord, R. G. & Brown, D. J. (2003). *Leadership Processes and Follower Self-Identity*. Philadelphia: Psychology Press.
- Lord, R. G., Foti, R. J. & De Vader, C. L. (1984). A Test of Leadership Categorization
 Theory: Internal Structure, Information Processing, and Leadership
 Perceptions. Organizational Behavior and Human Performance, 34(3), 343-378.
- Lowe, K. B., Kroeck, K. G. & Sivasubramaniam, N. (1996). Effectiveness Correlates of Transformational and Transactional Leadership: A Meta-Analytic Review of the MLQ Literature. *Leadership Quarterly*, 7(3), 385-425.
- Luthans, F. (1988). Successful Vs. Effective Real Managers. *The Academy of Management Executive*, 2(2), 127-132.

- Luthans, F. & Avolio, B. J. (2003). Authentic Leadership Development. *In:* Cameron, K. S., Dutton, J. E. & Quinn, R. E. (eds.) *Positive Organizational Scholarship:*Foundations of a New Discipline. San Francisco, CA: Barrett-Koehler.
- Madjar, N., Oldham, G. R. & Pratt, M. G. (2002). There's No Place Like Home? The Contributions of Work and Nonwork Creativity Support to Employees' Creative Performance. *Academy of Management Journal*, 45(4), 757-767.
- Madsen, E. A., Tunney, R. J., Fieldman, G., Plotkin, H. C., Dunbar, R. I. M., Richardson, J. M. & Mcfarland, D. (2007). Kinship and Altruism: A Cross-Cultural Experimental Study. *British Journal of Psychology*, 98, 339-359.
- Mallen, F., Chiva, R., Vidal, J. A., Guinot, J., Ziderman, A. & Lange, T. (2015). Are Altruistic Leaders Worthy? The Role of Organizational Learning Capability. *International Journal of Manpower*, 36(3), 271-295.
- Maner, J. K. & Mead, N. L. (2010). The Essential Tension between Leadership and Power: When Leaders Sacrifice Group Goals for the Sake of Self-Interest. *Journal of Personality and Social Psychology*, 99(3), 482-497.
- Manfreda, K. L., Bosnjak, M., Berzelak, J., Haas, I., Vehovar, V. & Berzelak, N. (2008). Web Surveys Versus Other Survey Modes: A Meta-Analysis Comparing Response Rates. *Journal of the Market Research Society*, 50(1), 79-104.
- Mann, R. D. (1959). A Review of the Relationships between Personality and Performance in Small Groups. *Psychological Bulletin*, 56(4), 241-270.
- Maslow, A. (1965). Eupsychian Management. Homewood, IL: Dorsey.

- Mayer, D. M., Aquino, K., Greenbaum, R. L. & Kuenzi, M. (2012). Who Displays Ethical Leadership, and Why Does It Matter? An Examination of Antecedents and Consequences of Ethical Leadership. *Academy of Management Journal*, 55(1), 151-171.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M. & Salvador, R. B. (2009). How

 Low Does Ethical Leadership Flow? Test of a Trickle-Down Model.

 Organizational Behavior and Human Decision Processes, 108(1), 1-13.
- McAdams, D. P. & De St Aubin, E. (1992). A Theory of Generativity and Its Assessment through Self-Report, Behavioral Acts, and Narrative Themes in Autobiography. *Journal of Personality and Social Psychology*, 62(6), 1003-1015.
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59.
- McClelland, D. C. (1970). The Two Faces of Power. *Journal of International Affairs*, 24(1), 29-47.
- Meindl, J. R. (1995). The Romance of Leadership as a Follower-Centric Theory: A Social Constructionist Approach. *Leadership Quarterly*, 6(3), 329-341.
- Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D. & Jackson, D. N. (1989).

 Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of applied Psychology*, 74(1), 152-156.
- Midgley, M. (2010). The Solitary Self: Darwin and the Selfish Gene. Durham: Acumen.

- Milinski, M., Semmann, D. & Krambeck, H.-J. (2002). Reputation Helps Solve the 'Tragedy of the Commons'. *Nature*, 415(6870), 424-426.
- Monroe, K. R. (1996). *The Heart of Altruism: Perceptions of a Common Humanity*.

 Cambridge: Cambridge University Press.
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K. & Schmitt, N. (2007). Are We Getting Fooled Again? Coming to Terms with Limitations in the Use of Personality Tests for Personnel Selection. *Personnel Psychology*, 60(4), 1029-1049.
- Moshavi, D., Brown, F. W. & Dodd, N. G. (2003). Leader Self-Awareness and Its Relationship to Subordinate Attitudes and Performance. *Leadership & Organization Development Journal*, 24(7), 407-418.
- Mumford, M. D. & Fried, Y. (2014). Give Them What They Want or Give Them What They Need? Ideology in the Study of Leadership. *Journal of Organizational Behavior*, 35(5), 622-634.
- Murphy, K. R., Jako, R. A. & Anhalt, R. L. (1993). Nature and Consequences of Halo Error: A Critical Analysis. *Journal of Applied Psychology*, 78(2), 218-225.
- Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A. & Chonko, L. B. (2009).

 The Virtuous Influence of Ethical Leadership Behavior: Evidence from the Field. *Journal of Business Ethics*, 90(2), 157-170.
- Nevicka, B., De Hoogh, A. H. B., Van Vianen, A. E. M., Beersma, B. & Mcilwain, D. (2011). All I Need Is a Stage to Shine: Narcissists' Leader Emergence and Performance. *Leadership Quarterly*, 22(5), 910-925.

- Newman, A., Kiazad, K., Miao, Q. & Cooper, B. (2014). Examining the Cognitive and Affective Trust-Based Mechanisms Underlying the Relationship between Ethical Leadership and Organisational Citizenship: A Case of the Head Leading the Heart? *Journal of Business Ethics*, 123(1), 113-123.
- Nielsen, R., Marrone, J. A. & Slay, H. S. (2010). A New Look at Humility: Exploring the Humility Concept and Its Role in Socialized Charismatic Leadership. *Journal of Leadership & Organizational Studies*, 17(1), 33-43.
- Nunally, J. C. & Bernstein, I. H. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- O'Connor, J., Mumford, M. D., Clifton, T. C., Gessner, T. L. & Connelly, M. S. (1996).

 Charismatic Leaders and Destructiveness: An Historiometric Study.

 Leadership Quarterly, 6(4), 529-555.
- Office for National Statistics (2011). 2011 Census. General Report for England and Wales. London: Office for National Statistics.
- Oppenheim, A. N. (2000). Questionnaire Design, Interviewing and Attitude

 Measurement. London: Continuum.
- Padilla, A., Hogan, R. & Kaiser, R. B. (2007). The Toxic Triangle: Destructive Leaders, Susceptible Followers, and Conducive Environments. *Leadership Quarterly*, 18(3), 176-194.
- Pallant, J. (2007). SPSS Survival Manual: A Step-by-Step Guide to Data Analysis

 Using SPSS Version 15. Maidenhead, Berkshire, England: McGraw-Hill

 Education.

- Parker, S., K. & Axtell, C. M. (2001). Seeing Another Viewpoint: Antecedents and Outcomes of Employee Perspective Taking. *Academy of Management Journal*, 44(6), 1085-1100.
- Parris, D. L. & Peachey, J. W. (2013). A Systematic Literature Review of Servant Leadership Theory in Organizational Contexts. *Journal of Business Ethics*, 113(3), 377-393.
- Parry, K. & Proctor-Thomson, S. (2002). Perceived Integrity of Transformational Leaders in Organisational Settings. *Journal of Business Ethics*, 35(2), 75-96.
- Patterson, K. A. (2003). Servant Leadership: A Theoretical Model. Regent University.
- Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis,
 S., Robinson, D. L. & Wallace, A. M. (2005). Validating the Organizational
 Climate Measure: Links to Managerial Practices, Productivity and Innovation.
 Journal of Organizational Behavior, 26(4), 379-408.
- Patton, M. Q. (2005). *Qualitative Research*. Hoboken: Wiley Online Library.
- Pawar, B. S. (2008). Two Approaches to Workplace Spirituality Facilitation: A Comparison and Implications. *Leadership & Organization Development Journal*, 29(6), 544-567.
- Peirce, C. S. (1997). Pragmatism as a Principle and Method of Right Thinking: The 1903 Harvard Lectures on Pragmatism. New York: Suny Press.
- Peterson, C. & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. Oxford: Oxford University Press.

- Peterson, R. S., Smith, D. B., Martorana, P. V. & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics:

 One Mechanism by Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5), 795-808.
- Piaget, J. (1997). Language and Thought of the Child: Selected Works. New York: Taylor & Francis.
- Pierro, A., Raven, B. H., Amato, C. & Belanger, J. J. (2013). Bases of Social Power, Leadership Styles, and Organizational Commitment. *International Journal of Psychology*, 48(6), 1122-1134.
- Piliavin, J. A., Dovidio, J. F., Gaertner, S. L. & Clark Iii, R. D. (1981). *Emergency Intervention*. New York: Academic Press.
- Podsakoff, P. M., Ahearne, M. & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82(2), 262-270.
- Podsakoff, P. M., Mackenzie, S. B., Lee, J. Y. & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Podsakoff, P. M., Mackenzie, S. B., Moorman, R. H. & Fetter, R. (1990).

 Transformational Leader Behaviors and Their Effects on Followers' Trust in

 Leader, Satisfaction, and Organizational Citizenship Behaviors. *Leadership*Quarterly, 1(2), 107-142.
- Porter, M. E. (1981). The Contributions of Industrial Organization to Strategic Management. *Academy of Management Review*, 6(4), 609-620.

- Poundstone, W. (1992). Prisoner's Dilemma: John Von Neuman, Game Theory, and the Puzzle of the Bomb. New York: Doubleday.
- Price, T. L. (2003). The Ethics of Authentic Transformational Leadership. *Leadership Quarterly*, 14(1), 67-81.
- Prime, J. & Salib, E. (2014). *Inclusive Leadership: The View from Six Countries*. New York: Catalyst.
- Rabe-Hesketh, S. & Everitt, B. (2003). *Handbook of Statistical Analyses Using STATA*.

 Boca Raton, FL: Chapman & Hall/CRC.
- Read, M. & Marsh, D. (2002). Combining Qualitative and Quantitative Methods.

 Theory and methods in political science, 2, 231-248.
- Rocha, H. O. & Ghoshal, S. (2006). Beyond Self-Interest Revisited. *Journal of Management Studies*, 43(3), 585-619.
- Rogers, C. & Farsons, R. (1955). Active Listening. Chicago: University of Chicago.
- Rosenthal, S. A. & Pittinsky, T. L. (2006). Narcissistic Leadership. *Leadership Quarterly*, 17(6), 617-633.
- Rosete, D. & Ciarrochi, J. (2005). Emotional Intelligence and Its Relationship to Workplace Performance Outcomes of Leadership Effectiveness. *Leadership & Organization Development Journal*, 26(5), 388-399.
- Ross, D. & Brown, L. (2009). *The Nicomachean Ethics*. Oxford: Oxford University Press.
- Roth, P. L. (1994). Missing Data: A Conceptual Review for Applied Psychologists.

 *Personnel Psychology, 47(3), 537-560.

- Rush, M. C., Thomas, J. C. & Lord, R. G. (1977). Implicit Leadership Theory: A Potential Threat to the Internal Validity of Leader Behavior Questionnaires.
 Organizational Behavior and Human Performance, 20(1), 93-110.
- Russell, R. F. & Gregory Stone, A. (2002). A Review of Servant Leadership

 Attributes: Developing a Practical Model. *Leadership & Organization*Development Journal, 23(3), 145-157.
- Rynes, S. L., Bartunek, J. M., Dutton, J. E. & Margolis, J. D. (2012). Care and Compassion through an Organizational Lens: Opening up New Possibilities.

 *Academy of Management Review, 37(4), 503-523.
- Sandhurst (2012). *Developing Leaders a Sandhurst Guide*. Camberley, Surrey: The Royal Military Academy Sandhurst.
- Satorra, A. & Bentler, P. M. (1994). Corrections to Test Statistics and Standard Errors in Covariance Structure Analysis. *In:* Von Eye, A. & Clogg, C. C. (eds.) *Latent Variables Analysis: Applications for Developmental Research*. Thousand Oaks, CA: Sage.
- Schalk, R. & Van Rijckevorsel, A. (2007). Factors Influencing Absenteeism and Intention to Leave in a Call Centre. *New Technology, Work and Employment*, 22(3), 260-274.
- Scholl, R. W. (1981). Differentiating Organizational Commitment from Expectancy as a Motivating Force. *Academy of Management Review*, 6(4), 589-599.
- Schwartz, S. H. (1994). Are There Universal Aspects in the Structure And Contents of Human Values? *Journal of Social Issues*, 50(4), 19-45.

- Schwartz, S. H. (2006). Basic Human Values: Theory, Measurement, and Applications. *Revue Française de Sociologie*, 47(4), 249-288.
- Seltzer, J. & Bass, B. M. (1990). Transformational Leadership: Beyond Initiation and Consideration. *Journal of Management*, 16(4), 693-703.
- Sendjaya, S. (2007). Conceptualizing and Measuring Spiritual Leadership in Organizations. *International Journal of Business and Information*, 2(1), 104-126.
- Sendjaya, S., Sarros, J. C. & Santora, J. C. (2008). Defining and Measuring Servant Leadership Behaviour in Organizations. *Journal of Management Studies*, 45(2), 402-424.
- Settoon, R. P., Bennett, N. & Liden, R. C. (1996). Social Exchange in Organizations:

 Perceived Organizational Support, Leader-Member Exchange, and Employee

 Reciprocity. *Journal of Applied Psychology*, 81(3), 219-227.
- Shamir, B. (1995). Social Distance and Charisma: Theoretical Notes and an Exploratory Study. *Leadership Quarterly*, 6(1), 19-47.
- Shamir, B. & Eilam, G. (2005). "What's Your Story?" A Life-Stories Approach to Authentic Leadership Development. *Leadership Quarterly*, 16(3), 395-417.
- Shamir, B., House, R. J. & Arthur, M. B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. *Organization Science*, 4(4), 577-594.

- Shamir, B. & Howell, J. M. (1999). Organizational and Contextual Influences on the Emergence and Effectiveness of Charismatic Leadership. *Leadership Quarterly*, 10(2), 257-283.
- Shamir, B., Zakay, E., Breinin, E. & Popper, M. (1998). Correlates of Charismatic

 Leader Behavior in Military Units: Subordinates' Attitudes, Unit

 Characteristics, and Superiors' Appraisals of Leader Performance. *Academy of Management Journal*, 41(4), 387-409.
- Shrout, P. E. & Fleiss, J. L. (1979). Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychological Bulletin*, 86(2), 420-428.
- Siegel, S. M. & Kaemmerer, W. F. (1978). Measuring the Perceived Support for Innovation in Organizations. *Journal of Applied Psychology*, 63(5), 553-562.
- Sime, J. D. (1983). Affiliative Behaviour During Escape to Building Exits. *Journal of Environmental Psychology*, 3(1), 21-41.
- Singer, E. (2002). The Use of Incentives to Reduce Nonresponse in Household Surveys. *In:* Groves, R.M., Dillman, D. A., Eltinge, D.A. & Little, R. J. A. (eds.) *Survey Nonresponse*. New York: Wiley.
- Singh, N. & Krishnan, V. R. (2008). Self-Sacrifice and Transformational Leadership:

 Mediating Role of Altruism. *Leadership & Organization Development Journal*,
 29(3), 261-274.
- Smollan, R. K. (2006). Minds, Hearts and Deeds: Cognitive, Affective and Behavioural Responses to Change. *Journal of Change Management*, 6(2), 143-158.

- Sober, E. & Wilson, D. S. (1999). *Unto Others: The Evolution and Psychology of Unselfish Behavior*. Cambridge, MA: Harvard University Press.
- Solomonson, A. L. & Lance, C. E. (1997). Examination of the Relationship between True Halo and Halo Error in Performance Ratings. *Journal of Applied Psychology*, 82(5), 665-674.
- Sosik, J. J. (2000). The Role of Personal Meaning in Charismatic Leadership. *Journal* of Leadership & Organizational Studies, 7(2), 60-74.
- Sosik, J. J. (2001). Self-Other Agreement on Charismatic Leadership Relationships with Work Attitudes and Managerial Performance. *Group & Organization Management*, 26(4), 484-511.
- Sosik, J. J., Avolio, B. J. & Jung, D. I. (2002). Beneath the Mask: Examining the Relationship of Self-Presentation Attributes and Impression Management to Charismatic Leadership. *Leadership Quarterly*, 13(3), 217-242.
- Sosik, J. J. & Megerian, L. E. (1999). Understanding Leader Emotional Intelligence and Performance the Role of Self-Other Agreement on Transformational Leadership Perceptions. *Group & Organization Management*, 24(3), 367-390.
- Spears, L. C. (1995). Reflections on Leadership: How Robert K. Greenleaf's Theory of Servant-Leadership Influenced Today's Top Management Thinkers. New York: Wiley.
- Spears, L. C. (1998). Insights on Leadership: Service, Stewardship, Spirit, and Servant-Leadership. New York: John Wiley & Sons.
- Spears, L. C. (2004). Practicing Servant-Leadership. Leader to Leader, 34, 7-11.

- Srivastava, A., Bartol, K. M. & Locke, E. A. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, and Performance. *Academy of Management Journal*, 49(6), 1239-1251.
- Stang, D. J. (1973). Effect of Interaction Rate on Ratings of Leadership and Liking. *Journal of Personality and Social Psychology*, 27(3), 405-408.
- Stevens, J. P. (2012). Applied Multivariate Statistics for the Social Sciences. New York: Routledge.
- Stogdill, R. M. (1948). Personal Factors Associated with Leadership: A Survey of the Literature. *Journal of Psychology*, 25(1), 35-71.
- Stogdill, R. M. & Coons, A. E. (1957). *Leader Behavior: Its Description and Measurement*. Columbus, OH: Ohio State University, Bureau of Business Research.
- Stone, G. A., Russell, R. F. & Patterson, K. (2004). Transformational Versus Servant Leadership: A Difference in Leader Focus. *Leadership & Organization Development Journal*, 25(4), 349-361.
- Su, R., Rounds, J. & Armstrong, P. I. (2009). Men and Things, Women and People: A Meta-Analysis of Sex Differences in Interests. *Psychological Bulletin*, 135(6), 859-884.
- Tajfel, H. & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflict. In: Austin, W. G. & Worchel, S. (eds.) Psychology of Intergroup Relations. Monterey, CA: Brooks/Cole.

- Teddlie, C. & Tashakkori, A. (2009). Foundations of Mixed Methods Research:

 Integrating Quantitative and Qualitative Approaches in the Social and

 Behavioral Sciences. Thousand Oaks, CA: Sage.
- Tinsley, H. E. A. & Kass, R. A. (1979). The Latent Structure of the Need Satisfying Properties of Leisure Activities. *Journal of Leisure Research*, 11(4), 278-291.
- Toi, M. & Batson, C. D. (1982). More Evidence That Empathy Is a Source of Altruistic Motivation. *Journal of Personality and Social Psychology*, 43(2), 281-292.
- Townsend, K. (2007). Recruitment, Training and Turnover: Another Call Centre Paradox. *Personnel Review*, 36(3), 476-490.
- Trevino, L. K., Brown, M. & Hartman, L. P. (2003). A Qualitative Investigation of Perceived Executive Ethical Leadership: Perceptions from inside and Outside the Executive Suite. *Human Relations*, 56(1), 5-37.
- Trevino, L. K. & Brown, M. E. (2005). The Role of Leaders in Influencing Unethical Behavior in the Workplace. *In:* Kidwell, R. E. & Martin, C. L. (eds.) *Managing Organizational Deviance*. Thousand Oaks, CA: Sage.
- Trevino, L. K., Hartman, L. P. & Brown, M. (2000). Moral Person and Moral Manager: How Executives Develop a Reputation for Ethical Leadership. *California Management Review*, 42(4), 128-142.
- Triandis, H. C. (1993). Collectivism and Individualism as Cultural Syndromes. *Cross-Cultural Research*, 27(3-4), 155-180.
- Trivers, R. L. (1971). The Evolution of Reciprocal Altruism. *Quarterly Review of Biology*, 46(1), 35-57.

- Turillo, C. J., Folger, R., Lavelle, J. J., Umphress, E. E. & Gee, J. O. (2002). Is Virtue Its Own Reward? Self-Sacrificial Decisions for the Sake of Fairness.

 Organizational Behavior and Human Decision Processes, 89(1), 839-865.
- Turner, N., Barling, J., Epitropaki, O., Butcher, V. & Milner, C. (2002).

 Transformational Leadership and Moral Reasoning. *Journal of Applied Psychology*, 87(2), 304-311.
- Urquhart, C., Light, A., Thomas, R., Barker, A., Yeoman, A., Cooper, J., Armstrong, C., Fenton, R., Lonsdale, R. & Spink, S. N. (2003). Critical Incident Technique and Explicitation Interviewing in Studies of Information Behavior. *Library & Information Science Research*, 25(1), 63-88.
- van Dierendonck, D. (2011). Servant Leadership: A Review and Synthesis. *Journal of Management*, 37(4), 1228-1261.
- van Dierendonck, D. & Nuijten, I. (2011). The Servant Leadership Survey:

 Development and Validation of a Multidimensional Measure. *Journal of Business and Psychology*, 26(3), 249-267.
- van Knippenberg, B. & Van Knippenberg, D. (2005). Leader Self-Sacrifice and Leadership Effectiveness: The Moderating Role of Leader Prototypicality. *Journal of Applied Psychology*, 90(1), 25-37.
- van Knippenberg, D. & Hogg, M. A. (2003). A Social Identity Model of Leadership Effectiveness in Organizations. *Research in Organizational Behavior*, 25, 243-295.

- van Knippenberg, D. & Sitkin, S. B. (2013). A Critical Assessment of Charismatic—

 Transformational Leadership Research: Back to the Drawing Board? *Academy of Management Annals*, 7(1), 1-60.
- Vazire, S. & Carlson, E. N. (2011). Others Sometimes Know Us Better Than We Know Ourselves. *Current Directions in Psychological Science*, 20(2), 104-108.
- Wagner, S. L. & Rush, M. C. (2000). Altruistic Organizational Citizenship Behavior: Context, Disposition, and Age. *Journal of Social Psychology*, 140(3), 379-391.
- Waldman, D. A., Bass, B. M. & Yammarino, F. J. (1990). Adding to Contingent-Reward Behavior the Augmenting Effect of Charismatic Leadership. *Group & Organization Management*, 15(4), 381-394.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S. & Peterson, S. J. (2008). Authentic Leadership: Development and Validation of a Theory-Based Measure. *Journal of Management*, 34(1), 89-126.
- Walumbwa, F. O., Hartnell, C. A. & Oke, A. (2010). Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes, and Organizational Citizenship Behavior: A Cross-Level Investigation. *Journal of Applied Psychology*, 95(3), 517-529.
- Walumbwa, F. O., Morrison, E. W. & Christensen, A. L. (2012). Ethical Leadership and Group in-Role Performance: The Mediating Roles of Group Conscientiousness and Group Voice. *Leadership Quarterly*, 23(5), 953-964.
- Walumbwa, F. O. & Schaubroeck, J. (2009). Leader Personality Traits and Employee

 Voice Behavior: Mediating Roles of Ethical Leadership and Work Group

 Psychological Safety. *Journal of Applied Psychology*, 94(5), 1275-1286.

- Wang, G., Oh, I.-S., Courtright, S. H. & Colbert, A. E. (2011). Transformational Leadership and Performance across Criteria and Levels: A Meta-Analytic Review of 25 Years of Research. *Group & Organization Management*, 36(2), 223-270.
- Wang, X.-H. F. & Howell, J. M. (2012). A Multilevel Study of Transformational Leadership, Identification, and Follower Outcomes. *Leadership Quarterly*, 23(5), 775-790.
- Wanous, J. P., Reichers, A. E. & Hudy, M. J. (1997). Overall Job Satisfaction: How Good Are Single-Item Measures? *Journal of Applied Psychology*, 82(2), 247-252.
- Weber, M. (1947). *The Theory of Social and Economic Organizations*. New York: Free Press.
- Weiss, H. M. & Adler, S. (1981). Cognitive Complexity and the Structure of Implicit Leadership Theories. *Journal of Applied Psychology*, 66(1), 69-78.
- White, R. J. (2008). Radical Virtues: Moral Wisdom and the Ethics of Contemporary Life. Lanham, MD: Rowman & Littlefield.
- Williamson, O. E. (1989). Transaction Cost Economics. *In:* Richard, S. & Robert, W. (eds.) *Handbook of Industrial Organization*. New York: Elsevier.
- Wilson, D. S. & Sober, E. (1994). Reintroducing Group Selection to the Human Behavioral Sciences. *Behavioral and Brain Sciences*, 17(04), 585-608.

- Wolff, S. B., Pescosolido, A. T. & Druskat, V. U. (2002). Emotional Intelligence as the Basis of Leadership Emergence in Self-Managing Teams. *Leadership Quarterly*, 13(5), 505-522.
- Woloshynowych, M., Rogers, S., Taylor-Adams, S. & Vincent, C. (2005). The Investigation and Analysis of Critical Incidents and Adverse Events in Healthcare. *Health Tecnology Assessment*, 9(19), 1-143.
- Wong, C. S. & Law, K. S. (2002). The Effects of Leader and Follower Emotional Intelligence on Performance and Attitude: An Exploratory Study. *Leadership Quarterly*, 13(3), 243-274.
- Wood, M. (2005). The fallacy of misplaced leadership. *Journal of Management Studies*, 42(6), 1101-1121.
- Wright, T. A. & Quick, J. C. (2011). The Role of Character in Ethical Leadership Research. *Leadership Quarterly*, 22(5), 975-978.
- Yammarino, F. J. & Atwater, L. E. (1993). Understanding Self-Perception Accuracy:

 Implications for Human Resource Management. *Human Resource Management*, 32(2-3), 231-247.
- Yammarino, F. J. & Atwater, L. E. (1997). Do Managers See Themselves as Other See Them? Implications of Self-Other Rating Agreement for Human Resources Management. *Organizational Dynamics*, 25(4), 35-44.
- Yorges, S. L., Weiss, H. M. & Strickland, O. J. (1999). The Effect of Leader Outcomes on Influence, Attributions, and Perceptions of Charisma. *Journal of Applied Psychology*, 84(3), 428-436.

- Yukl, G. (1999). An Evaluative Essay on Current Conceptions of Effective Leadership.

 European Journal of Work and Organizational Psychology, 8(1), 33-48.
- Yukl, G., Gordon, A. & Taber, T. (2002). A Hierarchical Taxonomy of Leadership Behavior: Integrating a Half Century of Behavior Research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32.
- Yukl, G., O'donnell, M. & Taber, T. (2009). Influence of Leader Behaviors on the Leader-Member Exchange Relationship. *Journal of Managerial Psychology*, 24(4), 289-299.
- Yukl, G. A. (2006). *Leadership in Organizations*. Upper Saddle River, NJ: Pearson, Prentice Hall.
- Zaccaro, S. J. (2007). Trait-Based Perspectives of Leadership. *American Psychologist*, 62(1), 6-16.
- Zaccaro, S. J., Foti, R. J. & Kenny, D. A. (1991). Self-Monitoring and Trait-Based Variance in Leadership: An Investigation of Leader Flexibility across Multiple Group Situations. *Journal of Applied Psychology*, 76(2), 308-315.
- Zhang, H., Kwong Kwan, H., Everett, A. M. & Jian, Z. (2012). Servant Leadership, Organizational Identification, and Work-Family Enrichment: The Moderating Role of Work Climate for Sharing Family Concerns. *Human Resource Management*, 51(5), 747-767.
- Zhang, X. & Bartol, K. M. (2010). Linking Empowering Leadership and Employee

 Creativity: The Influence of Psychological Empowerment, Intrinsic

 Motivation, and Creative Process Engagement. Academy of Management

 Journal, 53(1), 107-128.

Appendices

Appendix 1. Online information and consent form used in Study 1

Welcome to the CIPD survey on people management and development, which has been designed to give individuals the opportunity to have their say on what matters to them at work.

Easy to complete

The survey is easy to complete and will take approximately 15 minutes. The survey will close on 26th July 2013. Each survey will be analysed independently and we'll not see individual responses, so please answer all questions openly and freely.

If you have any questions about the survey, please contact Liz Dalton on 020 8612 6384 or l.dalton@cipd.co.uk. If you need technical support please email public@yougov.com

For your security and peace of mind, CIPD and its subsidiaries will not supply your details to any organisation for marketing purposes. By submitting this response you confirm that you agree to the use of your information as set out in our privacy policy and agree to our website terms and conditions of use.

Thank you in advance for your contribution.

Appendix 2. Questionnaire used in Study 1

Part 1. Screening questions

- 1. Which of the following best describes your working status?
 - Employed full time (30 or more hours a week)
 - Employed part time
 - Self-employed
 - Full time student
 - Retired
 - Unemployed
 - Not working
 - Other
- 2. What level of management responsibility do you hold in your current position?
 - Owner/ Proprietor
 - Partner
 - Chairman
 - Chief Executive
 - Managing Director
 - Non Executive Director
 - Other board level manager/ director
 - Other senior manager or director below board level
 - Middle manager
 - Junior manager/ team leader/ supervisor
 - Executive/ clerical/ other worker with no managerial responsibility
 - Other
 - None of these
- 3. And how many, if any, people do you have directly reporting into you?
 - More than 10
 - Between 6 and 10
 - 4 or 5
 - 2 or 3
 - •
 - Not applicable I don't have anyone reporting into me

- 4. How long have you had responsibilities for managing people directly in your CURRENT ORGANISATION?
 - Up to 6 months
 - More than 6 months up to a year
 - More than a year up to 2 years
 - More than 2 years up to 5 years
 - More than 5 years up to 10 years
 - More than 10 years
- 5. Do you have a manager, supervisor, boss or someone you report to as part of your job?
 - Yes
 - Sometimes
 - No

Part 2. Background questions

- 1. In which of the following industries do you currently work?
 - Agriculture and hunting (including forestry and fishing)
 - Animals
 - Mining and quarrying
 - Manufacturing
 - Recycling
 - Electricity gas and water supply /oil and gas
 - Construction and associated trades
 - Wholesale trade (including repair of motor vehicles, personal & household goods)
 - Retail
 - Hospitality (including accommodation restaurants and fast-food)
 - Post
 - Telecommunications
 - Transport (including logistics and distribution)
 - Travel and Tourism
 - Banking
 - Finance
 - Insurance
 - Estate Agencies/ Real Estate and renting (including personal & household goods)
 - Computers/ IT/ and related activities
 - Research and development (scientific services)

- PR/ Advertising/ Marketing
- Creative art and design
- Media
- Publishing printing and journalism
- Legal
- Pharmaceutical
- Local Government/ Civil Service
- Public administration/ services and defence
- Education
- Health and Social Work
- Sewage and refuse disposal
- Charity/ voluntary and activities of membership organisation
- Recreational cultural and sporting activities
- Other service industry
- Business services
- Other
- 2. Which if any of the following sectors do you work in/ does the company or organisation that you work for operate in?
 - Private sector firm or company (e.g. limited companies and PLCs)
 - Nationalised industry or public corporation (e.g. post office, BBC)
 - Other public sector employer (e.g. central government, civil service, NHS, police, armed forces)
 - Charity/ voluntary sector (e.g. charitable companies, churches, trade unions)
 - Other
- 3. Including yourself approximately how many full-time employees are employed by your organisation in total in the UK?
 - 1 person (just me)
 - 2 to 4
 - 5 to 9
 - 10 to 19
 - 20 to 49
 - 50 to 99
 - 100 to 199
 - 200 to 249
 - 250 to 499
 - 500 or more
 - Don't know

4. Including yourself approximately how many full-time employees are employed by your organisation in total in the UK? (*Open ended*)

Part 3. Questions about managing others (Leaders only)

1. To what extent do you agree or disagree with the following statements?

I can describe accurately the way others in the team are feeling.

- Strongly agree
- Agree
- No strong feelings either way
- Disagree
- Strongly disagree
- Don't know
- 2. To what extent do you agree or disagree with the following statements?

I tend to put the needs of my team members above my own.

- Strongly agree
- Agree
- No strong feelings either way
- Disagree
- Strongly disagree
- Don't know
- 3. You said that you tend to put the needs of your team above your own. Why is this? Please select the top three reasons from the list below.
 - That way my team members are likely to respond with extra effort.
 - My team will think better of me.
 - It's part of my job.
 - It's part of organisational culture.
 - I am the kind of person who is likely to put others first.
 - Other
- 4. You said that you don't tend to put the needs of your team above your own. Why is this? Please select the top three reasons from the list below.
 - It's not part of organisational culture.
 - It's not part of my job
 - There are no incentives to put my team's needs above my own.
 - That's simply not effective.

- I have to look out for myself first
- Other
- 5. How often do you face situations where you have to put the interests of the organisation (e.g. achieving an objective) above the interests and/or wellbeing of your team members?
 - Every day
 - Often
 - Sometimes
 - Rarely
 - Never
- 6. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond.
 - Make it clear to the employee that failure to meet objectives will result in penalties
 - Promise the employee a reward/bonus
 - Show the employee that they are letting you down
 - Promise the employee informal rewards (time off etc)
 - Use the fact that you are the boss, and tell them to get on with the job
 - Show that you will be working hard yourself to meet the objectives
 - Remind them of the times you supported them, hoping that they will help you in return
 - Tell your staff how much you depend on them
 - Hope that they will stay because they admire and respect you
 - Hope that they will stay because they know you wouldn't ask if you absolutely didn't have to
 - Try to understand what the reasons for resistance are
 - Other
- 7. Can you provide an example of when you placed your staff needs above your own? Please be as detailed as possible. (*Open ended*)

Part 4. Questions about being managed

1. How would you rate your line manager against the following characteristics? (FOLLOWERS only)

My line manager is...

	Strongly agree	Agree	No strong feelings	Disagree	Strongly disagree	Don't know
			either way			
Hardworking						
Responsible						
Intelligent						
Knowledgeable						
Independent						
Honest						
Caring						
Considerate						
Selfish						
Trustworthy						

2. To what extent do you agree or disagree with the following statements about your manager's behaviours? (leaders and followers)

	Strongly	Agree	No strong	Disagree	Strongly	Don't
	agree		feelings		disagree	know
			either			
			way			
Provides emotional support when I need it						
Frequently uses their authority to get their						
own way						

Puts the needs of the			
team above his/her			
own.			
Balances the needs of			
the organisation with			
the needs of individual			
employees.			
Is genuinely concerned			
about my wellbeing			
Recognises that			
providing emotional			
support to the team is			
part of their job.			
· v			

- 3. Imagine a situation, where your manager is asking you work extra hours to meet a deadline. Of the following, what are the top three reasons that would make you more willing to stay? (followers only)
 - My line manager made it clear that failure to meet objectives will result in penalties
 - There will be a reward/bonus
 - I wouldn't want to let my line manager down.
 - I don't want to compromise future opportunities for reward/promotion
 - I know he/she will appreciate my effort
 - I have no choice, he/she is the boss
 - He/she is working hard too, and I should help
 - He/she supported me before, and I should help now
 - He/she depend on me to get this done
 - I admire and respect him/her
 - I know he/she wouldn't ask if he/she absolutely didn't have to
 - He/she said that's the only way to get the job done.
 - I would stay because of my work ethic.
 - Other
 - I wouldn't stay no matter what
- 4. Can you provide an example of when your manager placed their needs above your own? (Open-ended) (followers only)

Part 5. Leadership outcomes (followers only)

1. To what extent do you agree or disagree with the following statement?

I am motivated by my organisation's core purpose

- Strongly agree
- Agree
- No strong feelings either way
- Disagree
- Strongly disagree
- Don't know
- 2. Overall, how satisfied or dissatisfied would you say you are with your current job?
 - Very satisfied
 - Satisfied
 - Neither satisfied nor dissatisfied
 - Dissatisfied
 - Very dissatisfied
 - Don't know

Appendix 3. Study 1 detailed findings

Table A3.1. I can describe accurately the way others in the team are feeling. To what extent do you agree or disagree with the statement? (% of leaders agreeing/strongly agreeing vs disagreeing/strongly disagreeing)

	N	Net: Agree	Net: Disagree
All	805	73%	3%
Male	495	72%	3%
Female	310	76%	3%
18-24	28	85%	0%
25-34	109	74%	3%
35-44	178	74%	5%
45-54	229	67%	4%
55+	260	76%	3%
Private	564	72%	4%
Public	171	77%	2%
Voluntary	63	74%	5%
Micro	122	71%	4%
Small	110	72%	4%
Medium	117	81%	4%
Large	442	73%	3%
Junior manager	206	69%	1%
Middle manager	276	75%	4%
Senior manager	292	76%	4%

Table A3.2. I tend put the needs of my team members above my own. To what extent do you agree or disagree with the following statements? (% of leaders agreeing/strongly agreeing vs disagreeing/strongly disagreeing)

	N	Net: Agree	Net: Disagree
All	805	58%	8%
Male	495	56%	9%
Female	310	63%	8%
18-24	28	55%	0%
25-34	109	53%	12%
35-44	178	61%	6%
45-54	229	60%	7%
55+	260	58%	11%
Private	564	56%	9%
Public	171	59%	10%
Voluntary	63	84%	2%
Micro	122	55%	8%
Small	110	52%	9%
Medium	117	54%	5%
Large	442	62%	9%
Junior	206	61%	7%
manager			
Middle	276	68%	7%
manager			
Senior manager	292	50%	8%

Table A3.3. To what extent do you agree or disagree with the following statements?

(% of leaders agreeing/strongly agreeing), by number of years spent managing people in the current organization

		I can describe accurately	I tend put the needs of my
	N	the way others in the	team members above my
		team are feeling	own
Up to 6 months	54	55%	65%
More than 6 months up	66	68%	76%
to a year	00	00/0	7070
More than a year up to	106	55%	75%
2 years	100	3370	7370
More than 2 years up	182	66%	78%
to 5 years	102	0070	7670
More than 5 years up	182	60%	71%
to 10 years	102	. 0070	
More than 10 years	215	50%	72%

Table A3.4. You said that you tend to put the needs of your team above your own.

Why is this? Please select the top three reasons from the list below. (% of leaders selecting the option), by organisation size and management level

	Organis	sation siz	e	Management level			
	Micro	Small	Medium	Large	Junior manager	Middle manager	Senior manager
N	67	57	63	278	126	190	146
That way my team members are likely to respond with extra effort.	51%	50%	51%	54%	61%	48%	53%
My team will think better of me.	12%	20%	23%	22%	26%	20%	18%
It's part of my job.	35%	38%	46%	42%	40%	38%	43%
It's part of organisational culture.	23%	23%	25%	21%	15%	19%	29%
I am the kind of person who is likely to put others first.	70%	62%	50%	58%	62%	56%	63%
Other	6%	3%	5%	6%	4%	5%	6%

Table A3.5. You said that you tend to put the needs of your team above your own. Why is this? Please select the top three reasons from the list below. (% of leaders selecting the option), by gender and age

	All	Gender		Age				
		Male	Female	18-	25-	35-	45-	55+
				24	34	44	54	
N	473	275	198	18	58	108	137	151
That way my team	53%	51%	55%	52%	50%	54%	50%	56%
members are likely to								
respond with extra								
effort.								
My team will think	21%	25%	15%	23%	29%	22%	23%	14%
better of me.								
It's part of my job.	41%	42%	39%	26%	38%	44%	36%	46%
It's part of	21%	25%	17%	40%	17%	19%	20%	24%
organisational								
culture.								
I am the kind of	59%	60%	58%	51%	53%	58%	61%	62%
person who is likely								
to put others first.								
Other	5%	4%	8%	0%	2%	8%	7%	3%

Table A3.6. You said that you tend to put the needs of your team above your own.

Why is this? Please select the top three reasons from the list below. (% of leaders selecting the option), by industry sector

	Industry sector				
	Private	Public	Voluntary		
N	317	101	53		
That way my team members are likely to respond with extra effort.	54%	48%	53%		
My team will think better of me.	24%	15%	12%		
It's part of my job.	42%	46%	26%		
It's part of organisational culture.	21%	18%	33%		
I am the kind of person who is likely to put	60%	55%	61%		
others first.					
Other	5%	5%	7%		

Table A3.7. You said that you tend to put the needs of your team above your own. Why is this? Please select the top three reasons from the list below. (% of leaders selecting the option), by number of years spent managing people in the current organisation.

	Up to 6	More	More	More	More	More
	months	than 6	than a	than 2	than 5	than 10
		months	year up	years up	years up	years
		up to a	to 2	to 5	to 10	
		year	years	years	years	
N	20	4.5	50	102	100	107
N	30	45	58	123	109	107
That way my team	37%	57%	50%	52%	51%	60%
members are likely						
to respond with						
extra effort.						
My team will think	16%	23%	24%	21%	22%	17%
better of me.						
T.2	4.407	200/	550/	200/	2.40/	470/
It's part of my job.	44%	28%	55%	38%	34%	47%
It's part of	16%	29%	12%	17%	20%	31%
organisational						
culture.						
I am the kind of	53%	55%	48%	66%	62%	58%
person who is						
likely to put others						
first.						
Other	10%	3%	6%	5%	4%	6%

Table A3.8. You said that you don't tend to put the needs of your team above your own. Why is this? Please select the top three reasons from the list below. (% of leaders selecting the option), by gender and industry sector

	All	Gender		Industry	Industry sector		
		Male	Female	Private	Public	Voluntary	
N	67	43	24	48	17	1	
It's not part of organisational culture.	19%	23%	12%	23%	9%	-	
It's not part of my job	18%	21%	12%	21%	9%	-	
There are no incentives to put my team's needs above my own.	23%	33%	6%	23%	27%	-	
That's simply not effective.	40%	29%	58%	38%	46%	-	
I have to look out for myself first	32%	38%	22%	39%	18%	-	
Other	14%	16%	10%	11%	18%	-	
Don't know	6%	4%	8%	4%	9%	-	

Table A3.9. How often do you face situations where you have to put the interests of the organisation (e.g. achieving an objective) above the interests and/or wellbeing of your team members? (% of leaders selecting the option), by gender

	All	Male	Female
N	805	495	310
Every day	7%	8%	6%
Often	21%	19%	25%
Sometimes	42%	43%	39%
Rarely	24%	24%	24%
Never	6%	6%	6%

Table A3.10. How often do you face situations where you have to put the interests of the organisation (e.g. achieving an objective) above the interests and/or wellbeing of your team members? (% of leaders selecting the option), by organisation size and industry sector

	Organisa	ation size			Industry	sector	
	Micro	Small	Medium	Large	Private	Public	Voluntary
N	122	110	117	442	564	171	63
Every day	4%	4%	8%	8%	8%	7%	1%
Often	12%	16%	22%	25%	20%	21%	29%
Sometimes	38%	46%	44%	41%	40%	49%	37%
Rarely	33%	31%	25%	20%	26%	16%	32%
Never	12%	3%	1%	6%	6%	7%	2%

Table A3.11. How often do you face situations where you have to put the interests of the organisation (e.g. achieving an objective) above the interests and/or wellbeing of your team members? (% of leaders selecting the option), by management level

	Senior manager	Middle manager	Junior
			manager/supervisor
N	292	276	206
Every day	5%	12%	4%
Often	21%	27%	16%
Sometimes	42%	39%	45%
Rarely	25%	19%	29%
Never	6%	4%	6%

Table A3.12. How would you rate your line manager against the following characteristics? (% of followers agreeing/strongly agreeing vs disagreeing/strongly disagreeing), by industry sector

	All		Industry sect	or	
	Net:	Net:	Private	Public	Voluntary
	Agree	Disagree	(Net: Agree)	(Net: Agree)	(Net: Agree)
N	1015	1015	735	217	45
Caring	55%	20%	53%	63%	63%
Considerate	55%	21%	52%	67%	58%
Selfish	23%	55%	25%	14%	25%
Hardworking	66%	13%	65%	66%	79%
Responsible	72%	10%	72%	76%	74%
Intelligent	65%	11%	64%	70%	72%
Knowledgeable	70%	9%	69%	74%	75%
Independent	57%	17%	61%	46%	52%
Honest	66%	14%	66%	69%	72%
Trustworthy	61%	15%	61%	65%	66%

Table A3.13. How would you rate your line manager against the following characteristics? (% of followers agreeing/strongly agreeing), by gender and age

	Gender		Age				
	Male	Female	18-24	25-34	35-44	45-54	55+
N	494	521	52	144	213	267	339
Caring	50%	60%	65%	55%	56%	54%	54%
Considerate	52%	58%	59%	55%	56%	58%	52%
Selfish	23%	22%	24%	32%	19%	20%	23%
Hardworking	62%	69%	81%	56%	73%	65%	63%
Responsible	71%	73%	82%	67%	77%	75%	67%
Intelligent	65%	65%	76%	66%	67%	69%	58%
Knowledgeable	66%	73%	85%	70%	73%	70%	66%
Independent	49%	64%	84%	63%	60%	56%	50%
Honest	62%	70%	76%	64%	67%	67%	65%
Trustworthy	58%	64%	76%	60%	65%	58%	59%

Table A3.14. To what extent do you agree or disagree with the following statements about your manager's behaviours? (% of FOLLOWERS agreeing/strongly agreeing vs disagreeing/strongly disagreeing), by industry sector

	All		Industry sec	ctor	
	Net:	Net:	Private	Public	Voluntary
	Agree	Disagree	(Net: Agree)	(Net: Agree)	(Net: Agree)
N	1015	1015	735	217	45
Provides emotional support	36%	26%	34%	42%	48%
when I need it					
Frequently uses their authority to get their own way	28%	45%	29%	21%	34%
Puts the needs of the team	28%	31%	26%	33%	36%
above his/her own.	2070	3170	2070	5570	5070
Balances the needs of the organisation with the needs of	43%	25%	41%	52%	48%
individual employees.					
Is genuinely concerned about	47%	23%	44%	57%	63%
my wellbeing					
Recognises that providing emotional support to the team	39%	27%	36%	47%	49%
is part of their job.					

Table A3.15. To what extent do you agree or disagree with the following statements about your manager's behaviours? (% of LEADERS agreeing/strongly agreeing vs disagreeing/strongly disagreeing), by industry sector

	All		Industry see	ctor	
	Net:	Net:	Private	Public	Voluntary
	Agree	Disagree	(Net: Agree)	(Net: Agree)	Net: Agree)
N	600	600	403	144	49
Provides emotional support when I need it	38%	30%	34%	45%	54%
Frequently uses their authority to get their own way	39%	38%	44%	28%	39%
Puts the needs of the team above his/her own.	30%	37%	28%	42%	19%
Balances the needs of the organisation with the needs of individual employees.	39%	29%	37%	47%	44%
Is genuinely concerned about my wellbeing	46%	23%	41%	59%	50%
Recognises that providing emotional support to the team is part of their job.	43%	31%	38%	52%	62%

Table A3.16. To what extent do you agree or disagree with the following statements about your manager's behaviours? (% of followers agreeing/strongly agreeing), by gender and age

	Gender		Age				
	Male	Female	18-24	25-34	35-44	45-54	55+
N	494	521	52	144	213	267	339
Provides emotional support when I need it	29%	43%	33%	43%	39%	34%	34%
Frequently uses their authority to get their own way	32%	24%	16%	25%	33%	27%	28%
Puts the needs of the team above his/her own.	28%	27%	48%	22%	32%	26%	25%
Balances the needs of the organisation with the needs of individual employees.	42%	44%	55%	43%	48%	39%	42%
Is genuinely concerned about my wellbeing	45%	49%	57%	53%	47%	45%	44%
Recognises that providing emotional support to the team is part of their job.	32%	45%	34%	38%	45%	41%	34%

Table A3.17. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option), by gender and industry sector

	All	Gende	r	Industry	sector	
		Male	Female	Private	sector Public 171 65% 59% 21% 28% 28% 12% 10%	Voluntary
N	805	495	310	564	171	63
Show that you will be working hard yourself to meet the objectives	60%	56%	68%	57%	65%	78%
Try to understand what the reasons for resistance are	54%	51%	58%	51%	59%	72%
Hope that they will stay because they know you wouldn't ask if you absolutely didn't have to	28%	27%	30%	29%	21%	40%
Tell your staff how much you depend on them	26%	25%	27%	24%	28%	33%
Promise the employee informal rewards (time off etc)	25%	24%	26%	24%	28%	26%
Remind them of the times you supported them, hoping that they will help you in return	14%	16%	11%	15%	12%	7%
Hope that they will stay because they admire and respect you	12%	13%	10%	12%	10%	14%
Use the fact that you are the boss, and tell them to get on with the job	6%	8%	4%	6%	8%	1%

Show the employee that they are letting you down	6%	8%	3%	7%	4%	2%
Promise the employee a reward/bonus	6%	7%	4%	8%	3%	0%
Make it clear to the employee that failure to meet objectives will result in penalties	6%	5%	7%	7%	3%	1%
Other	3%	3%	3%	3%	2%	11%
N/A – I wouldn't try to convince them to work late	6%	6%	6%	5%	9%	3%

Table A3.18. Imagine a situation where you have to make a team member work extra hours to meet a deadline, but you are facing resistance and lack of motivation. What are you most likely to do? Please select three options from the following that most closely fit how you would respond. (% of leaders selecting the option), by number of years spent managing people in the current organisation

	Up to 6	More	More	More	More	More
	months	than 6	than a	than 2	than 5	than 10
		months	year up	years up	years up	years
		up to a	to 2	to 5	to 10	
		year	years	years	years	
N	54	66	106	182	182	215
Show that you will be working hard yourself to meet the objectives	55%	55%	57%	61%	63%	62%
Try to understand what the reasons for resistance are	65%	53%	53%	54%	53%	52%
Hope that they will stay because they know you wouldn't ask if you absolutely	35%	14%	27%	29%	25%	34%
didn't have to						
Tell your staff how much you depend on them	26%	34%	25%	21%	22%	30%
Promise the employee informal rewards (time off etc)	15%	19%	23%	28%	29%	24%
Remind them of the times you supported them, hoping that they will help you	7%	5%	15%	17%	16%	14%
in return						

Hope that they will stay because they admire and respect you	15%	20%	9%	15%	7%	11%
Use the fact that you are the boss, and tell them to get on with the job	3%	6%	4%	8%	7%	7%
Show the employee that they are letting you down	3%	4%	13%	3%	8%	6%
Promise the employee a reward/bonus	9%	7%	7%	2%	11%	4%
Make it clear to the employee that failure to meet objectives will result in penalties	-	6%	10%	4%	6%	7%
Other	-	3%	3%	3%	4%	3%
N/A - I wouldn't try to convince them to work late	3%	8%	2%	8%	6%	6%

Table A3.19. Imagine a situation, where your manager is asking you work extra hours to meet a deadline. Of the following, what are the top three reasons that would make you more willing to stay? (% of followers selection the option), by gender and industry sector

	All	Gender		Industry sector		
		Male	Female	Private	Public	Voluntary
N	1015	494	521	735	217	45
I would stay because of my work ethic.	49%	47%	51%	48%	52%	62%
I know he/she wouldn't ask if he/she absolutely didn't have to	35%	31%	38%	34%	38%	44%
I know he/she will appreciate my effort	27%	25%	30%	28%	27%	34%
There will be a reward/bonus	23%	25%	21%	25%	17%	18%
He/she depends on me to get this done	20%	18%	22%	23%	14%	10%
I wouldn't want to let my line manager down.	15%	16%	14%	15%	16%	12%
He/she is working hard too, and I should help	13%	10%	16%	13%	10%	37%
He/she supported me before, and I should help now	13%	14%	11%	11%	17%	21%
I don't want to compromise future opportunities for reward/promotion	11%	8%	13%	11%	9%	8%
I admire and respect him/her	9%	10%	8%	10%	9%	8%

I have no choice, he/she is the boss	8%	7%	9%	9%	5%	9%
He/she said that's the only way to get the job done.	7%	9%	6%	7%	8%	7%
My line manager made it clear that failure to meet objectives will result in penalties	4%	4%	4%	4%	2%	8%
Other	4%	6%	3%	4%	4%	8%
I wouldn't stay no matter what	4%	7%	2%	4%	7%	0%

Table A3.20. Motivation and job satisfaction scores, by leadership attributes and behaviours (% agreeing/strongly agreeing, or satisfied/very satisfied)

	I am motiva organisation's purpose (N= 404)	s cored y j	Overall, how lissatisfied we with ob? N=506)	•
	agreeing/stron gly agreeing that leader demonstrates behaviour	disagreeing/str ongly disagreeing that leader	agreeing/stron gly agreeing that leader demonstrates behaviour	
Caring	76%	7%	78%	4%
Considerate	74%	10%	77%	6%
Selfish	11%	72%	9%	77%
Provides emotional support when I need it	50%	13%	51%	9%
Frequently uses their authority to get their own way		59%	15%	60%
Puts the needs of the team above his/her own.	42%	18%	39%	13%
Balances the needs of the organisation with the needs of individual employees.		11%	64%	7%
Is genuinely concerned about my wellbeing	66%	10%	67%	6%
Recognises that providing emotional support to the team is part of their job.		14%	56%	10%

Table A3.21. Pearson *r* for correlations between follower-reported leaders' attributes and behaviours and followers outcomes

	To what extent do you	Overall, how satisfied or
	-	dissatisfied would you
		_
		say you are with your
	am motivated by my	current job?
	organisation's core	
	purpose	
Caring (N=999)	.46**	.53**
Considerate (N=1004)	.43**	.50**
Selfish (N=993)	36**	44**
Provides emotional support	.40**	.51**
when I need it (N=949)		
Frequently uses their authority	34**	41**
to get their own way (N=984)		
Puts the needs of the team above	.42**	.44**
his/her own (N=966)		
Balances the needs of the	.48**	.53**
organisation with the needs of		
individual employees (N=992)		
Is genuinely concerned about	.44**	.51**
my wellbeing (N=991)		
Recognises that providing	.41**	.50**
emotional support to the team is		
part of their job (N=977)		

Table A3.22. Results of thematic analysis of examples of leaders putting the interests of their teams above their own

Category	Frequency
Giving priority to staff interests and giving up personal time/private	190
arrangements (e.g. allowing staff to go on a break, holiday,	
emergency leave/ covering to enable them to attend to personal	
commitments etc)	
Taking on team member's workload to achieve a target (e.g. doing	139
work that they could not cope with/covering workload)	
Spending time with staff to develop and support them, sacrificing	23
own priorities	
Sacrificing pay, using own money to pay for staff needs	16
Foregoing promotion, training opportunities in favour of staff	13
Taking on criticism from superiors, responsibility for mistakes	9
Negotiating with senior managers on behalf of staff	5
Respecting interests of others, even if in disagreement	4
Other	1

Table A3.23. Results of thematic analysis of examples of leaders putting their own interests above those of the team

Category	Frequency
Failing to support (e.g. being unavailable when help is required, not pulling their weight)	54
Failing to take into account individuals' needs (e.g. not allowing time off for personal circumstances)	50
Abusing power to serve personal interests (e.g. selecting time for holidays)	43
Prioritising the business need	24
Taking credit for work of others	23
Going back on promises	13
Blaming others to protect own status	11
Avoiding difficult conversations	10

Appendix 4. Advert inviting to participate in Study 2

People Management Magazine

June 2013

Where have all the effective leaders gone?

The CIPD is starting an exciting new research programme to help organisations bridge

the gap between knowing about leadership and actually seeing it transform

organisational cultures in practice.

Development of leadership capability presents a continuous challenge for HR.

Existing research answers a lot of questions on what good leadership looks like, but

does not give us sufficient practical guidance on how to break the barriers to better

leadership at all management levels. Over the next year we will be cracking the

leadership capability code, investigating where individuals draw resources for their

leadership capability, how leaders emerge in teams, and whether effective leadership

is in the eye of the beholder.

In the first instance the CIPD is keen to collect real-life examples of leaders who give

up their time or resources to help someone else at work. If you are a great leader – or

work with one – please get in touch.

300

Appendix 5. Information sheet used in Study 2

Information Form

What is altruistic leadership?

Name of Researcher: Ksenia Zheltoukhova

Dear Participant

My name is Ksenia Zheltoukhova and I am currently a student at Lancaster University

studying for PhD in Management. As part of this award I am collecting interview data

to specify elements of altruistic leadership, as experienced by the leaders and their

followers.

Information about the Project

For the purpose of this study we will analyse recollections of incidents where leaders

helped others without expecting a tangible or intangible reward.

I will ask you to recollect recent examples where you sacrificed personal resources in

order to achieve a group goal, or where you experienced such behaviour on the part of

their leader.

In the interview we will ask you to describe the situation where a leader sacrificed

their resources to help others, and will ask you what happened in that episode.

Participation and Confidentiality

Everything said here remains confidential. Nothing that will be said here today will be

attributed to an individual. The findings will be fed into my PhD research programme

as a whole.

301

You have a right to withdraw from participation at any time.

Any information collected from this project will be destroyed after the project has

been assessed and the marks confirmed.

Further Questions and Contact Details

If you have any questions or would like further details regarding the project please

contact me:

Ksenia Zheltoukhova

k.zheltoukhova@lancaster.ac.uk

079 04044987

If you have further questions or would prefer to contact a member of staff at the

University please contact my Project Supervisor:

Name: Prof Michael West

Charles Carter Building

Lancaster University

Bailrigg

Lancaster

LA14YX

Email: m.a.west@lancaster.ac.uk

Telephone: +44 1524 510907

302

Appendix 6. Consent form used in Study 2

Consent Form

What is altruistic leadership?

Name of Researcher: Ksenia Zheltoukhova

Please initial box

1.	. I confirm that I have read and understand the information sheet dated 14 May								
2013 1	for the above study. I have had	d the opportunity to co	nsider the information, ask						
questi	ons and have had these answe	red satisfactorily.							
2.	I understand that my particip	pation is voluntary and	that I am free to withdraw	_					
at any time, without giving any reason.									
3. I un	3. I understand that any information given by me may be used in future reports, articles								
or pre	sentations by the research tear	n.							
4. I un	derstand that my name will no	ot appear in any reports	s, articles or presentations.						
5.	I agree to take part in the abo	ove study.							
Name	of Participant	Date	Signature						
Resea	Researcher Date Signature								

When completed, please return in the envelope provided (if applicable). One copy will be given to the participant and the original to be kept in the file of the researcher at: CIPD, 151 The Broadway, London SW19 1JQ

Appendix 7. Study 2 respondent profile

Pair	Initiated by	Leader's gender and role	Follower's gender and role	Leader's relationship to the follower	Organisation size and sector	Number of
			Tole	ale follower	sector	incidents submitted
1.	Follower	Female, head of a business function	Male, team leader	Line manager (maternity cover)	Large, international, health and safety consultancy	4
2.	Leader	Female, distributor	Female, distributor	Sponsor and mentor	Large, UK-based, network marketing	3
3.	Leader	Female, head of a business function	Female, team leader	Line manager	Large, UK-based, charity	3
4.	Leader	Male, self-employed consultant	Female, recruiter	Former line manager	Large, international, youth education and development	3
5.	Follower	Male, police officer	Male, police officer	Line manager	Large, UK-based, police	3
			Female, police community support officer	Senior manager		
6.	Leader	Male, police officer	Male, police officer	Senior manager	Large, UK-based, police	2
			Male, police officer	Line manager	Large, UK-based, police	-

7.	Follower	Male, Head of a business function	Female, Head of department	Line manager	Large, UK-based, communications	3
8.	Leader	Male, head of a local office	Male, service delivery manager	Line manager	Large, UK-based, charity	1
			Female, service delivery manager	Line manager	_	
9.	Leader	Female, team leader	Female, team member	Former line manager	Large, UK-based, charity	2
10.	Follower	Male, head of a business function	Male, service delivery manager	Senior manager	Large, UK-based, transport	3
11.	Follower	Male, consultant	Male, service delivery manager	Line manager	Large, UK-based, transport	2
12.	Leader	Male, director	Female, team leader	Senior manager	Large, international, expat relocation services	2
13.	Leader	Male, CEO	Male, head of a business function	Line manager	Medium, manufacturing	2
14.	Follower	Male, CEO	Female, team member	Line manager	Micro (start-up), social enterprise	1
15.	Leader	Male, head of department	Female, team leader	Line manager	Small, educational software	1

Appendix 8. Leader interview protocol used in Study 2

As part of this research we would like to collect examples of altruistic leaders - those at all levels of organisations who sometimes give up their time and resources to help others at work.

This is an opportunity for you to share with us your views and experience of working in your organisation. Everything said here remains confidential. Nothing that will be said here today will be attributed to an individual. The findings will be fed into my PhD research programme as a whole.

If you have no objections, I would like to record the session to ensure the accuracy of my notes, but I won't be able to attribute anything that you say during the following 60 minutes.

- 1. Please describe what you do, how long you have been in your role. How many direct reports do you have? What is the team like?
- 2. As part of the interview I would like to discuss 2-3 examples when you gave up your time and resources to help others at work. For example, when you are leading a project or something went wrong.
- 3. Please describe the event briefly. What preceded the event? What was the situation leading up to it?
 - a) How did you find out about this situation?
 - b) What were you doing? What were others doing? Why this situation emerged?
 - c) When did the act of giving up occurred? How did you come up with that decision? Was it made explicit?

4. What did you do?

- a) Why? What was your motivation? Looking back, was there another way to act?
- b) What did you have to give up? Time? Resources? Emotionally?
- c) Did you know it would cost you some?
- d) Did you tell your follower about the cost? Why or why not?
- e) Why is it a leadership behaviour? Would you want to see it in people that you consider leaders?
- f) How did you feel about it? Before the event? After the event?
- 5. What was the outcome of your actions?
 - a) What was effective/ineffective about your actions? What impact did it have?
 - b) What were the costs/ benefits for others? Who else was impacted? Who else?
 - c) What has changed as a result of this episode?
 - d) What were the outcomes for the team/ org goals?

Thank you for your participation.

Appendix 9. Follower interview protocol used in Study 2

As part of this research we would like to collect examples of altruistic leaders - those at all levels of organisations who sometimes give up their time and resources to help others at work.

This is an opportunity for you to share with us your views and experience of working in your organisation. Everything said here remains confidential. Nothing that will be said here today will be attributed to an individual. The findings will be fed into my PhD research programme as a whole.

If you have no objections, I would like to record the session to ensure the accuracy of my notes, but I won't be able to attribute anything that you say during the following 60 minutes.

- 1. Please describe what you do, how long you have been in your role. How many direct reports do you have? What is the team like?
- 2. As part of the interview I would like to discuss 2-3 examples when your leader gave up their time and resources to help others at work. Please describe the event. What was your involvement?
- 3. What preceded the event? What was the situation leading up to it?
 - a) How did you find out about this situation?
 - b) What were you doing? What were others doing? Why this situation emerged?
 - c) When did the act of giving up occurred? Was it made explicit?
 - d) What were your feelings/thoughts?

- 4. What did the leader do?
 - a) Why do you think they behaved like that?
 - b) How do you know they empathised with you?
 - c) Do you know if there was a cost involved?
 - d) Why is it a leadership behaviour?
 - e) How did you feel about it? Before the event? After the event?
- 5. What was the outcome of the leader's actions?
 - a) What was effective/ineffective about their actions?
 - b) What were the costs/ benefits for others? Was there any emotional cost involved? Who else was impacted? Who else?
 - c) What has changed as a result of this episode?
 - d) What were the outcomes for the team/ org goals? You identified this behaviour as one of a leader, why?

Thank you for your participation.

Appendix 10. E-mail invitation to Study 3 (leaders)

Dear <Name>

Your organisation is participating in a research project looking at management of mental health and wellbeing in the banking sector.

This is your chance to complete a short survey, looking to establish how mental health and wellbeing is managed in the area of your work.

There are no right or wrong answers, as we would like to find out what's really going on in your organisation. By completing the survey you will help us provide recommendations on how mental health and wellbeing should be managed and supported by your employer and in the wider banking sector in the UK.

This survey is administered by Chartered Institute of Personnel and Development (CIPD), professional body for HR and people development, on behalf of Bank Workers Charity, the only charity supporting all bank workers and their families, and MIND, the mental health charity.

All the responses that you submit in the survey today will remain confidential, and will only be accessed by the researchers at CIPD. We will not feed individual responses back to your employer in any circumstances. We are hoping that the answers you submit are as honest and open as possible.

You have the right to withdraw from participation at any time without any consequences to your employment.

The survey will take 7-10 minutes to complete. To access the survey you will need your unique access code. When you click through the link please enter <code>.

Access the survey here: <survey link>

Thank you in advance for your participation. Please note that your direct reports will also be receiving a similar survey. Please allow them time to complete it.

Best

Ksenia

Appendix 11. E-mail invitation to Study 3 (followers)

Dear < Name>

Your organisation is participating in a research project looking at management of mental health and wellbeing in the banking sector.

This is your chance to complete a short survey, looking to establish how mental health and wellbeing is managed in the area of your work.

There are no right or wrong answers, as we would like to find out what's really going on in your organisation. By completing the survey you will help us provide recommendations on how mental health and wellbeing should be managed and supported by your employer and in the wider banking sector in the UK.

Some of the questions in the survey ask about your 'manager'. When completing those sections please think about your immediate manager/supervisor/team leader – someone who you report to at work. Our records indicate that this person is <name>.

This survey is administered by Chartered Institute of Personnel and Development (CIPD), professional body for HR and people development, on behalf of Bank Workers Charity, the only charity supporting all bank workers and their families, and MIND, the mental health charity.

All the responses that you submit in the survey today will remain confidential, and will only be accessed by the researchers at CIPD. We will not feed individual responses back to your employer in any circumstances. We are hoping that the answers you submit are as honest and open as possible.

You have the right to withdraw from participation at any time without any consequences to your employment.

The survey will take 10-15 minutes to complete. To access the survey you will need your unique access code. When you click through the link please enter <code>.

Access the survey here: <survey link>

Thank you in advance for your participation.

Best

Ksenia

Appendix 12. Information sheet and online consent used for Study 3

Welcome to the CIPD survey on managing mental health and wellbeing in the workplace.

This is an opportunity for you to share your views and help us inform the findings of our wider action to improve mental health and wellbeing in the financial sector. We are hoping that the answers you submit are as honest and open as possible.

Please be reminded that all the responses that you submit in the survey today will remain anonymous and confidential, and will only be accessed by the researchers at CIPD. At no point in time we will collect data that will enable us to identify you as individual.

Your decision to participate or decline participation in this study is completely voluntary and you have the right to terminate your participation at any time without penalty. You may skip any questions you do not wish to answer. If you want do not wish to complete this survey just close your browser. Additionally, if after you completed the survey you decide that you would like your data withdrawn from the study, you will have 2 weeks to let us know about it. In such case the data you submitted will be destroyed and not used. If you contact us after this point the data will remain in the study.

Please note that some of the questions on leadership and management (page 7 of the current survey) will be used for a research leading towards a PhD in Management at Lancaster University. The aggregate (anonymous) results of the study may be presented in educational settings and at professional conferences, and the results might be published in a professional journal in the field of psychology.

If you have any concerns about your mental well-being, or if you feel distressed by any questions or issues raised in this survey, please contact Bank Workers Charity confidential helpline: 0800 0234 834.

If you have any questions or concerns about this study, please contact Paul Sparrow on p.sparrow@lancs.ac.uk, or Vanessa Robinson on v.robinson@cipd.co.uk

By clicking the submit button to enter the survey you confirm that you have read and understand the above information and indicate your willingness voluntarily to take part in the study.

Appendix 13. Leader questionnaire used in Study $\bf 3$

1. What was your age on your last birthday?

2.	What is your gender?
	• Male
	• Female
	• Rather not say
3.	What is your ethnicity?
	White British
	 Any other white background
	 Mixed – White and Black Caribbean
	 Mixed – White and Black African
	 Mixed – White and Asian
	Any other mixed background
	Asian or Asian British
	Black or Black British
	• Other
	 Prefer not to say
	• Don't know
4.	How many people report directly to you?
5.	Is contact with your direct reports limited due to the nature of work,
	for example physical distance or shift working?
	• Yes
	• No

6. How many years have you ...

	years have you		
	worked in your	worked in	been
	current	your current	managing
	organisation?	role?	people in your
			career?
Up to 6 months			
More than 6			
months up to a			
year			
More than a			
year up to 2			
years			
More than 2			
years up to 5			
years			
7			
More than 5			
years up to 10			
years			
More than 10			
years			

Part 2. Your leadership style

1. To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I let my direct reports do their jobs the way they want.					
I expect my direct reports to get on with work on					

their own and approach me only if there is an issue.			
I pitch in to support extra workload.			
I accept personal costs beyond my role to help my team members (e.g. stay behind to help, pitch in with workloads).			
I would not compromise my status to support a team member.			
I share the praise I receive with the team.			
I would only help a team member if there was value in it for me.			
I would help a team member as long as it doesn't interfere with my personal interests.			
I make sure to ask my direct reports how they feel.			
I am more likely to go beyond the call of duty for the colleagues I like.			
I am the kind of person who looks after my team, even if that means foregoing my own interests.			
I tend to agree to help others before I consider the implications it would have on me.			

Appendix 14. Follower questionnaire used in Study 3

Part 1. About you

1.	What was your age on your last	birthday?

- 2. What is your gender?
 - Male
 - Female
 - Rather not say
- 3. What is your ethnicity?
 - White British
 - Any other white background
 - Mixed White and Black Caribbean
 - Mixed White and Black African
 - Mixed White and Asian
 - Any other mixed background
 - Asian or Asian British
 - Black or Black British
 - Other
 - Prefer not to say
 - Don't know

Part 2. Your manager

By 'line manager' we mean your team leader or supervisor, who formally manages you at work, and conducts your performance appraisals.

1. To what extent do you agree or disagree with the following statements about your manager? *Please mark only one answer per line*.

My manager	Strongl y agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
makes sure to ask me how I					
feel					
lets me do my job the way I					
want.					
expects me to get on with					
work on my own and approach					
him/her only if there is an issue.					
pitches in to support extra					
workload.					
accepts personal costs beyond					
his/her role to help me (e.g. stay					
behind to help, pitch in with					
workloads).					
would not compromise					
his/her status to support me.					
would share the praise they					
receive with me and my team.					
only helps me if there is value					
in it for him/her.					
helps me as long as it doesn't					
interfere with his/her personal					
interests.					
is likely to go beyond the call					
of duty only for the colleagues					
he/she likes.					
tends to agree to help others					
before considering the					
implications it would have on					
him/her.					
is the kind of person who					
looks after the team, even if that					
means foregoing his/her own					
interests.					
can't bear a team member					
being treated unfairly or taken					
advantage of.					

Part 3. Your manager (continued)

1. To what extent do you agree or disagree with the following statements about your manager?

My manager	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
does everything he/she					
can to serve me.					
puts my best interests					
ahead of his/her own.					
is one I would turn to if I					
had a personal trauma.					
is good at anticipating the					
consequences of decisions.					
has great awareness of					
what is going on.					
offers compelling reasons					
to get me to do things.					
encourages me to dream					
"big dreams" about the					
organisation.					
believes that the					
organization needs to play a					
moral role in society.					
encourages me to have a					
community spirit in the					
workplace.					

2. To what extent do you agree or disagree with the following statements about your manager?

My manager	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
communicates clear and positive vision of the future.					
treats staff as individuals, supports and encourages their development.					
gives encouragement and recognition to staff.					
fosters trust, involvement and cooperation among team members.					
encourages thinking about problems in new ways and questions assumptions.					
is clear about his/her values and practices what he/she preaches.					
instils pride and respect in others and inspires me by being highly competent.					

Part 4. Your manager as a leader

1. To what extent do you agree or disagree with the following statements about your manager?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
My manager is an effective leader.					
I am satisfied with the quality of relationship with my manager.					
I feel committed to my manager because of what he/she does for me.					
My manager and I see the things in similar ways.					
My manager and I think alike when analysing and/or solving a problem.					
I get along well with my manager.					
I feel understood and appreciated by my manager.					
My manager inspires me.					

Part 5. Your job

1. To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I look forward to going to work on Monday morning.					
I am overall satisfied with this organisation.					
I am overall satisfied with my job.					
I feel positive most of the time I am at work.					
I feel positive most of the time I'm not at work.					
I feel used up at the end of the workday.					
I just want to be left to do my job.					

Part 6. Your organisation

1. To what extent do you agree or disagree with the following statements?

	Strongly	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The nature of the work					
requires working at an					
unreasonably high pace.					
This organisation					
supports individuals'					
work-life balance.					
The senior leaders of this					
organisation are visible					
and accessible.					
The leaders of this					
organisation show clearly					
how individual work					
contributes to the					
organisational vision.					
Performance					
management in this					
organisation is impartial					
and supportive.					
Organisational changes are carried out without					
consulting with staff.					
Communication in this					
organisation is open and					
transparent.					
This workplace is a					
mutually supportive					
environment,					
encouraging					
collaboration.					
I feel isolated due to the					
nature of my work.					
I feel isolated because of					
my views and values.					

Appendix 15. Study 3 detailed findings

Table A15.1. Number of missing data points

	Leaders		Followers		
	Frequency	%	Frequency	%	
.00	175	95.1	433	81.4	
1.00	7	3.8	70	13.2	
2.00			13	2.4	
3.00			4	.8	
4.00			3	.6	
5.00			2	.4	
6.00					
7.00			3	.6	
8.00	1	.5	1	.2	
9.00	1	.5	2	.4	
10.00					
11.00			1	.2	
Total	184	100.0	532	100.0	

Table A15.2. Tests of sample homogeneity between the four banks

LEADERS						
	Sum	of	df	Mean Square	F	Sig.
	Squares					
	(between					
	groups)					
AL	.06		3	.02	.240	.868
FOLLOWI	ERS				<u> </u>	
AL	11.57		3	3.86	12.46	.000
TL	24.53		3	8.18	13.14	.000
SL	13.06		3	4.35	8.07	.000
LE	27.59		3	9.20	11.68	.000
JS	1.57		3	0.52	1.09	.354
OC	7.82		3	2.61	5.35	.001
SC	5.56		3	1.85	3.38	.018

Table A15.3. Post-hoc tests (followers), by organisation

						95% Conf	fidence
			Mean			Interval	
Dependent			Differen			Lower	Upper
Variable	(I) Bank	(J) Bank	ce (I-J)	Std. Error	Sig.	Bound	Bound
AL	1	2	0.01	0.07	1.00	-0.16	0.18
		3	.34*	0.08	0.00	0.15	0.54
		4	-0.02	0.07	0.99	-0.19	0.15
	2	1	-0.01	0.07	1.00	-0.18	0.16
		3	.34*	0.07	0.00	0.15	0.52
		4	-0.02	0.06	0.98	-0.18	0.14
	3	1	34*	0.08	0.00	-0.54	-0.15
		2	34*	0.07	0.00	-0.52	-0.15
		4	34*	0.07	0.00	-0.54	-0.18
	4	1	0.02	0.07	0.99	-0.15	0.19
		2	0.02	0.06	0.98	-0.14	0.18
		3	.34*	0.07	0.00	0.18	0.54
TL	1	2	0.10	0.09	0.70	-0.13	0.32
		3	.48*	0.11	0.00	0.20	0.77
		4	-0.07	0.09	0.83	-0.30	0.15
	2	1	-0.10	0.09	0.70	-0.32	0.13
		3	.39*	0.11	0.00	0.11	0.67
		4	-0.17	0.08	0.19	-0.39	0.05
	3	1	48*	0.11	0.00	-0.77	-0.20
		2	39 [*]	0.11	0.00	-0.67	-0.11
		4	56*	0.11	0.00	-0.83	-0.28
	4	1	0.07	0.09	0.83	-0.15	0.30
		2	0.17	0.08	0.19	-0.05	0.39
		3	.56*	0.11	0.00	0.28	0.83
SL	1	2	0.20	0.09	0.09	-0.02	0.42
		3	.34*	0.10	0.00	0.08	0.60
		4	-0.05	0.09	0.95	-0.28	0.18
	2	1	-0.20	0.09	0.09	-0.42	0.02
		3	0.14	0.09	0.43	-0.10	0.38
		4	25*	0.08	0.01	-0.45	-0.04
	3	1	34*	0.10	0.00	-0.60	-0.08
		2	-0.14	0.09	0.43	-0.38	0.10
		4	39*	0.09	0.00	-0.63	-0.14
	4	1	0.05	0.09	0.95	-0.18	0.28
		2	.25*	0.08	0.01	0.04	0.45
		3	.39*	0.09	0.00	0.14	0.63

(continued on the next page)

IF	1	12	0.15	0.10	0.42	Λ 1 1	0.41
LE 1	1	3	0.15	0.10	0.42	-0.11	0.41
	4	.47*	0.13	0.00	0.14	0.80	
	2		-0.13	0.10	0.57	-0.40	0.13
	2	1	-0.15	0.10	0.42	-0.41	0.11
		3	.32*	0.12	0.04	0.01	0.62
	2	4	28*	0.09	0.01	-0.52	-0.05
	3	1	47*	0.13	0.00	-0.80	-0.14
		2	32*	0.12	0.04	-0.62	-0.01
		4	60*	0.12	0.00	-0.91	-0.29
	4	1	0.13	0.10	0.57	-0.13	0.40
		2	.28*	0.09	0.01	0.05	0.52
		3	.60*	0.12	0.00	0.29	0.91
JS	1	2	-0.14	0.09	0.36	-0.36	0.08
		3	-0.02	0.09	1.00	-0.26	0.22
		4	-0.09	0.08	0.69	-0.31	0.13
	2	1	0.14	0.09	0.36	-0.08	0.36
		3	0.12	0.09	0.52	-0.10	0.34
		4	0.05	0.08	0.93	-0.15	0.25
	3	1	0.02	0.09	1.00	-0.22	0.26
		2	-0.12	0.09	0.52	-0.34	0.10
		4	-0.07	0.08	0.84	-0.29	0.15
	4	1	0.09	0.08	0.69	-0.13	0.31
		2	-0.05	0.08	0.93	-0.25	0.15
		3	0.07	0.08	0.84	-0.15	0.29
OC	1	2	-0.12	0.08	0.47	-0.33	0.10
		3	0.24	0.09	0.05	0.00	0.48
		4	0.03	0.08	0.99	-0.19	0.24
	2	1	0.12	0.08	0.47	-0.10	0.33
		3	.36*	0.09	0.00	0.13	0.59
		4	0.15	0.08	0.25	-0.06	0.35
	3	1	-0.24	0.09	0.05	-0.48	0.00
		2	36*	0.09	0.00	-0.59	-0.13
		4	-0.22	0.09	0.08	-0.45	0.02
	4	1	-0.03	0.08	0.99	-0.24	0.19
		2	-0.15	0.08	0.25	-0.35	0.06
		3	0.22	0.09	0.08	-0.02	0.45
SC	1	2	-0.12	0.09	0.51	-0.36	0.11
		3	0.19	0.10	0.22	-0.06	0.44
		4	0.03	0.09	0.98	-0.19	0.26
	2	1	0.12	0.09	0.51	-0.11	0.36
		3	.31*	0.10	0.01	0.06	0.56
		4	0.16	0.09	0.29	-0.07	0.38
	3	1	-0.19	0.10	0.22	-0.44	0.06
		2	31*	0.10	0.01	-0.56	-0.06
		4	-0.16	0.09	0.36	-0.40	0.09
	4	1	-0.10	0.09	0.98	-0.46	0.09
		2	-0.03	0.09	0.38	-0.28	0.19
		3	0.16	0.09	0.29	-0.38	0.40
	1	3	0.10	0.09	0.30	-0.09	0.40

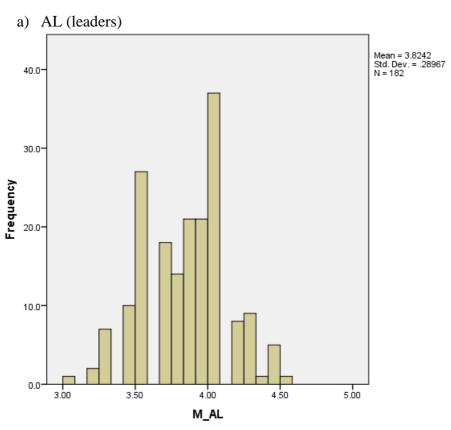
Table A15.4. Tests of normality

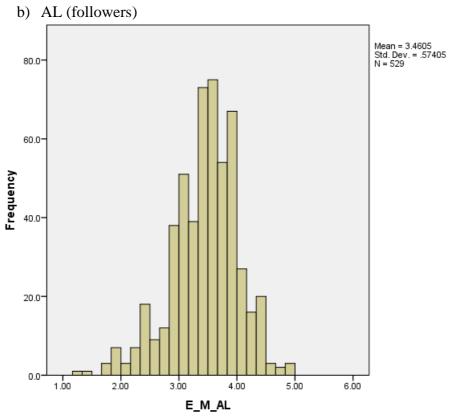
LEADERS	}						
	N	Mean	SD	α	Skewness	Kurtosis	K-S Z
AL	182	3.82	.29	.579	121	267	1.059
(all items)							
FOLLOW	ERS	<u> </u>		<u> </u>			
AL	529	3.46	.57	.838	565	.826	1.62**
(all items)							
TL	531	3.81	.82	.947	859	1.029	2.55***
SL	530	3.51	.75	.914	358	.263	0.99
LE	528	3.80	.91	.965	810	.477	2.45***
JS	531	3.18	.69	.804	349	.028	1.89**
OC	511	3.05	.71	.809	382	.032	1.87*
SC	512	3.42	.75	.871	578	.524	2.51***

Table A15.5. Tests of normality (followers), by organisation

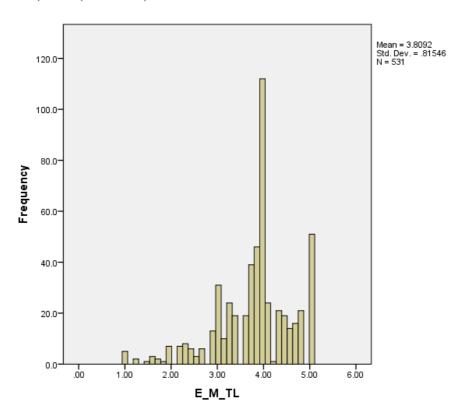
	AL	TL	SL	LE	JS	OC	SC
Bank 1 (K-S Z)	.52	1.06	.59	1.14	1.10	.89	1.33
Bank 2 (K-S Z)	1.21	2.06***	1.15	1.70**	1.56*	1.35	1.40*
Bank 3 (K-S Z)	.93	1.61*	1.26	1.36*	1.10	1.18	1.13
Bank 4 (K-S Z)	1.22	1.59*	1.07	1.64**	1.37*	1.43*	1.54*

Figure A15.1. Histograms of data distribution

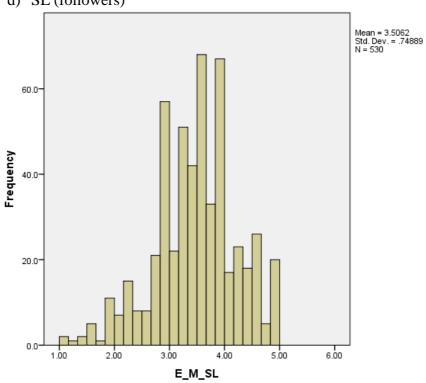




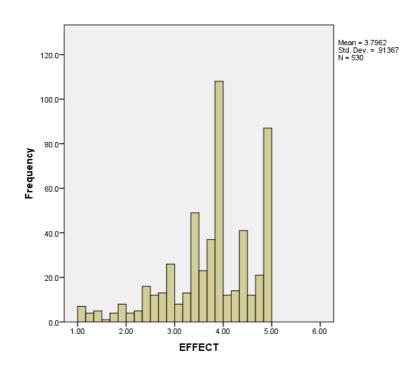
c) TL (followers)



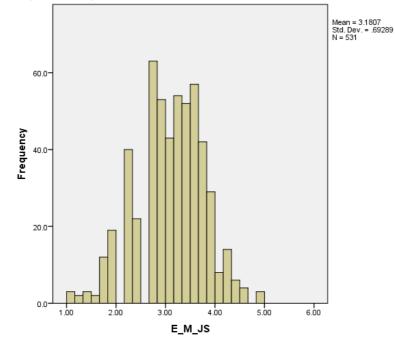
d) SL (followers)



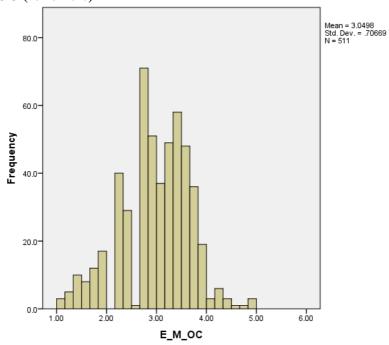
e) LE (followers)







g) OC (followers)



h) SC (followers)

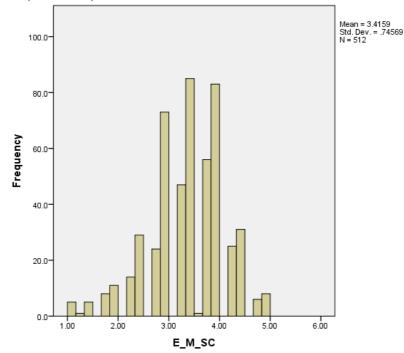


Table A15.6. Principal component analysis: eigenvalues

Component	Initial Eigenvalues			Extraction Sums of Squared				
				Loadings				
	Total	% of	Cumulative	Total	% of	Cumulative		
		Variance	%		Variance	%		
1	5.03	38.68	38.68	5.03	38.68	38.68		
2	1.44	11.10	49.78	1.44	11.10	49.78		
3	1.18	9.08	58.86	1.18	9.08	58.86		
4	1.01	7.80	66.66	1.01	7.80	66.66		
5	0.68	5.21	71.87					
6	0.62	4.78	76.65					
7	0.55	4.26	80.91					
8	0.52	3.97	84.89					
9	0.49	3.79	88.67					
10	0.44	3.39	92.07					
11	0.42	3.23	95.30					
12	0.36	2.73	98.03					
13	0.26	1.97	100.00					

Table A15.7. Principal component analysis: communalities

	Initial	Extraction
My manager makes sure to ask me how I feel.	1.00	0.61
My manager lets me do my job the way I want.	1.00	0.74
My manager expects me to get on with work on my own and approach him/her only if there is an issue.	1.00	0.75
My manager pitches in to support extra workload.	1.00	0.62
My manager accepts personal costs beyond his/her role to help me (e.g. stay behind to help, pitch in with workloads).	1.00	0.63
My manager would not compromise his/her status to support me.	1.00	0.82
My manager would share the praise they receive with me and my team.	1.00	0.50
My manager only helps me if there is value in it for him/her.	1.00	0.73
My manager helps me as long as it doesn't interfere with his/her personal interests.	1.00	0.72
My manager is likely to go beyond the call of duty only for the colleagues he/she likes.	1.00	0.69
My manager tends to agree to help others before considering the implications it would have on him/her.	1.00	0.69
My manager is the kind of person who looks after the team, even if that means foregoing his/her own interests.	1.00	0.56
My manager can't bear a team member being treated unfairly or taken advantage of.	1.00	0.61

Table A15.8. Principal component analysis: component matrix before rotation

	Compon	Component		
	1	2	3	4
My manager makes sure to ask me how I feel.	0.71	0.02	0.11	-0.32
My manager lets me do my job the way I want.	0.34	0.73	-0.04	0.31
My manager expects me to get on with work on my own and approach him/her only if there is an	-0.10	0.85	0.08	0.13
issue.	-0.10	0.65	0.08	0.13
My manager pitches in to support extra workload.	0.72	-0.02	0.29	-0.11
My manager accepts personal costs beyond his/her role to help me (e.g. stay behind to help, pitch	0.68	-0.08	0.39	-0.08
in with workloads).	0.08	-0.08	0.39	-0.08
My manager would not compromise his/her status to support me.	0.35	-0.31	-0.12	0.77
My manager would share the praise they receive with me and my team.	0.67	0.18	-0.04	-0.14
My manager only helps me if there is value in it for him/her.	0.77	-0.06	-0.35	0.13
My manager helps me as long as it doesn't interfere with his/her personal interests.	0.76	-0.04	-0.37	0.09
My manager is likely to go beyond the call of duty only for the colleagues he/she likes.	0.52	-0.01	-0.61	-0.21
My manager is the kind of person who looks after the team, even if that means foregoing his/her	0.78	0.09	0.27	-0.02
own interests.	0.78	0.09	0.27	-0.02
My manager tends to agree to help others before considering the implications it would have on	0.47	-0.21	0.46	0.30
him/her.	0.47	-U.Z1	0.40	0.30
My manager can't bear a team member being treated unfairly or taken advantage of.	0.77	-0.01	-0.03	-0.13

Table A15.9. Principal component analysis: component matrix after Varimax rotation

Note: loadings less than .4 are supressed

	Compo	Component	
	1	2	3
My manager accepts personal costs beyond his/her role to help me (e.g. stay behind to help, pitch in	0.77		
with workloads).	0.77		
My manager is the kind of person who looks after the team, even if that means foregoing his/her	0.75		
own interests.	0.73		
My manager pitches in to support extra workload.	0.74		
My manager tends to agree to help others before considering the implications it would have on	0.67		
him/her.	0.07		
My manager makes sure to ask me how I feel.	0.59		
My manager can't bear a team member being treated unfairly or taken advantage of.	0.56	0.53	
My manager is likely to go beyond the call of duty only for the colleagues he/she likes.		0.80	
My manager helps me as long as it doesn't interfere with his/her personal interests.		0.78	
My manager only helps me if there is value in it for him/her.		0.77	
My manager would share the praise they receive with me and my team.	0.46	0.47	
My manager would not compromise his/her status to support me.			
My manager expects me to get on with work on my own and approach him/her only if there is an			0.94
issue.			0.84
My manager lets me do my job the way I want.			0.75

Table A15.10. Principal component analysis: pattern matrix after Direct oblimin rotation

Note: loadings less than .4 are supressed

	Component		
	1	2	3
My manager accepts personal costs beyond his/her role to help me (e.g. stay behind to help, pitch in with workloads).	0.80		
My manager is the kind of person who looks after the team, even if that means foregoing his/her own interests.	0.75		
My manager pitches in to support extra workload.	0.74		
My manager tends to agree to help others before considering the implications it would have on him/her.	0.73		
My manager makes sure to ask me how I feel.	0.55		
My manager can't bear a team member being treated unfairly or taken advantage of.	0.48		-0.42
My manager would share the praise they receive with me and my team.			
My manager expects me to get on with work on my own and approach him/her only if there is an issue.		0.84	
My manager lets me do my job the way I want.		0.75	
My manager is likely to go beyond the call of duty only for the colleagues he/she likes.			-0.87
My manager helps me as long as it doesn't interfere with his/her personal interests.			-0.76
My manager only helps me if there is value in it for him/her.			-0.75
My manager would not compromise his/her status to support me.			

Table A15.11. Principal component analysis: structure matrix after Direct oblimin rotation

Note: loadings less than .4 are supressed.

	Compo	Component	
	1	2	3
My manager is the kind of person who looks after the team, even if that means foregoing his/her own interests.	0.81		-0.47
My manager accepts personal costs beyond his/her role to help me (e.g. stay behind to help, pitch in with workloads).	0.79		
My manager pitches in to support extra workload.	0.78		-0.42
My manager makes sure to ask me how I feel.	0.67		-0.51
My manager can't bear a team member being treated unfairly or taken advantage of.	0.67		-0.64
My manager tends to agree to help others before considering the implications it would have on him/her.	0.64		
My manager expects me to get on with work on my own and approach him/her only if there is an ssue.		0.83	
My manager lets me do my job the way I want.		0.76	
My manager only helps me if there is value in it for him/her.	0.52		-0.83
My manager is likely to go beyond the call of duty only for the colleagues he/she likes.	0.50		-0.83
My manager would not compromise his/her status to support me.			-0.78
My manager would share the praise they receive with me and my team.	0.55		-0.56
My manager helps me as long as it doesn't interfere with his/her personal interests.			

Table A15.12. Principal component analysis: component correlation matrix after Direct oblimin rotation

Component	1	2	3
1	1.00	.01	45
2	.01	1.00	06
3	45	06	1.00

Table A15.13. Confirmatory factor analysis: goodness-of-fit indices

Note: group-level chi-squared are not reported because of constraints between groups

	Managers	Employees
N	87	257
SRMR	0.17	0.06
CD	0.90	0.97

Table A15.14. Confirmatory factor analysis: goodness-of-fit indices, by group

	Managers	Employees
X^2 (df) SB	83.37***(26)	80.86***(26)
RMSEA SB	0.16	0.09
CFI SB	0.58	0.94
TLI SB	0.42	0.92
CD	0.94	0.97

Table A15.15. Confirmatory factor analysis: standardized coefficients

	Standardized	Group	Coef.	Std. Err.	Z	P> z	[95% Co	nf. Interval]
Empathic	My manager accepts personal costs beyond his/her	Managers	0.48	0.06	8.12	0.00	0.37	0.60
helping	role to help me (e.g. stay behind to help, pitch in with workloads).	Employees	0.76	0.03	25.09	0.00	0.70	0.82
	My manager is the kind of person who looks after	Managers	0.50	0.06	9.10	0.00	0.39	0.61
	the team, even if that means foregoing his/her own interests.	Employees	0.82	0.03	30.58	0.00	0.77	0.87
	My manager pitches in to support extra workload.	Managers	0.49	0.06	8.54	0.00	0.38	0.60
		Employees	0.75	0.03	23.33	0.00	0.69	0.81
	My manager tends to agree to help others before	Managers	0.15	0.04	4.13	0.00	0.08	0.22
	considering the implications it would have on him/her.	Employees	0.31	0.06	5.58	0.00	0.20	0.42
	My manager makes sure to ask me how I feel.	Managers	0.62	0.07	8.58	0.00	0.48	0.76
		Employees	0.75	0.03	24.25	0.00	0.69	0.81
	My manager can't bear a team member being treated	Managers	0.55	0.07	7.91	0.00	0.41	0.68
	unfairly or taken advantage of.	Employees	0.72	0.03	21.33	0.00	0.65	0.78
Expectation	My manager only helps me if there is value in it for	Managers	0.76	0.06	12.75	0.00	0.64	0.87
to bear the	him/her.	Employees	0.83	0.03	27.75	0.00	0.77	0.89
costs of self-	My manager helps me as long as it doesn't interfere	Managers	0.73	0.06	11.32	0.00	0.60	0.86
sacrifice	with his/her personal interests.	Employees	0.86	0.03	29.16	0.00	0.81	0.92
	My manager is likely to go beyond the call of duty	Managers	0.48	0.06	8.12	0.00	0.37	0.60
	only for the colleagues he/she likes.	Employees	0.76	0.03	25.09	0.00	0.70	0.82
	c helping' and 'Expectation to bear the costs of self-	Managers	0.47	0.13	3.52	0.00	0.21	0.73
sacrifice'		Employees	0.67	0.05	14.81	0.00	0.59	0.76

Table A15.16. Subscale means, standard deviations and Cronbach's alpha, ICC (1), ICC (2), and interrater reliability index (rWG(J)) for the final two factors, and the Altruistic leadership scale

Scale	Leaders (N=184)			Followers (N=532)			
	Mean (SD)	α	ICC (1)	Mean	α	ICC (2)	rWG
				(SD)			(J)
Expectation to bear	4.17(.66)	.64	.22***	3.69(.88)	.80	.80***	.68
the costs of self-							
sacrifice							
Empathic helping	4.07(.42)	.61	.15***	3.47(.76)	.83	.83***	.78
Altruistic	4.10(.39)	.65	.13***	3.54(.71)	.86	.86***	.82
leadership							

Table A15.17. % of leaders with different levels of interrater reliability index $(rWG(J)) \label{eq:control}$

rWG(J) value	Expectation to bear	Empathic helping	Altruistic
	the costs of self-		leadership
	sacrifice		
0.9 and above	25.9%	42.9%	43.8%
0.7-0.89	69.7%	78.6%	80.4%
0.5-0.69	80.4%	92.0%	92.9%
% of single rater scores	47.9%	47.9%	47.9%

Table A15.18. Mean ratings of leaders, by follower age group

age bar	nds	Empathic helping	Altruistic leadership
	Mean	3.78	3.77
18-24	N	65	65
	Std. Deviation	.69	.64
	Mean	3.43	3.51
25-34	N	189	189
	Std. Deviation	.72	.70
	Mean	3.51	3.60
35-44	N	139	139
	Std. Deviation	.70	.65
	Mean	3.51	3.57
45-54	N	95	95
	Std. Deviation	.84	.75
	Mean	3.08	3.24
55+	N	27	27
	Std. Deviation	.78	.78

Table A15.19. Post-hoc tests for differences in means on 'Empathic helping' and Altruistic leadership, by follower age group

Key:

1-18-24 year-olds

2-25-34 year-olds

3 – 35-44 year-olds

4 – 45-54 year-olds

5 - 55 + year-olds

Dependen	(I) age	(J) age	Mean	Std. Error	Sig.	95% C	onfidence
t Variable	bands	bands	Differen			Interval	
			ce (I-J)			Lower	Upper
						Bound	Bound
		2	.34*	0.10	0.01	0.07	0.62
	1	3	0.27	0.10	0.08	-0.02	0.56
	1	4	0.27	0.12	0.19	-0.07	0.60
		5	.70*	0.17	0.00	0.21	1.19
		1	34*	0.10	0.01	-0.62	-0.07
	2	3	-0.08	0.08	0.88	-0.29	0.14
		4	-0.08	0.10	0.94	-0.36	0.20
		5	0.35	0.16	0.20	-0.11	0.81
	3	1	-0.27	0.10	0.08	-0.56	0.02
Empathic		2	0.08	0.08	0.88	-0.14	0.29
helping		4	0.00	0.10	1.00	-0.29	0.29
		5	0.43	0.16	0.08	-0.04	0.89
		1	-0.27	0.12	0.19	-0.60	0.07
	4	2	0.08	0.10	0.94	-0.20	0.36
	4	3	0.00	0.10	1.00	-0.29	0.29
		5	0.43	0.17	0.11	-0.06	0.92
		1	70*	0.17	0.00	-1.19	-0.21
	~	2	-0.35	0.16	0.20	-0.81	0.11
	5	3	-0.43	0.16	0.08	-0.89	0.04
		4	-0.43	0.17	0.11	-0.92	0.06

		2	.27*	0.09	0.04	0.01	0.53
	1	3	0.18	0.10	0.36	-0.09	0.45
	1	4	0.21	0.11	0.33	-0.10	0.51
		5	.53*	0.17	0.02	0.05	1.01
		1	27*	0.09	0.04	-0.53	-0.01
		3	-0.09	0.08	0.75	-0.30	0.12
	2	4	-0.06	0.09	0.97	-0.31	0.20
		5	0.26	0.16	0.47	-0.19	0.72
	3	1	-0.18	0.10	0.36	-0.45	0.09
Altruistic		2	0.09	0.08	0.75	-0.12	0.30
leadership		4	0.03	0.10	1.00	-0.23	0.29
		5	0.35	0.16	0.20	-0.11	0.81
		1	-0.21	0.11	0.33	-0.51	0.10
	4	2	0.06	0.09	0.97	-0.20	0.31
	4	3	-0.03	0.10	1.00	-0.29	0.23
		5	0.32	0.17	0.32	-0.16	0.80
		1	53*	0.17	0.02	-1.01	-0.05
	5	2	-0.26	0.16	0.47	-0.72	0.19
		3	-0.35	0.16	0.20	-0.81	0.11
		4	-0.32	0.17	0.32	-0.80	0.16

Table A15.20. Correlation between components of altruistic leadership and measures of transformational and servant leadership (followers' sample)

		TL	SL
Expectation to bear the costs	Pearson Correlation	.64**	.56**
of self-sacrifice	Sig. (1-tailed)	.000	.000
	N	529	528
Empathic helping	Pearson Correlation	.82**	.83**
	Sig. (1-tailed)	.000	.000
	N	529	528
	Pearson Correlation	.84**	.82**
Altruistic leadership	Sig. (1-tailed)	.000	.000
	N	529	528

Table A15.21. Leader groups, based on leader/follower agreement

Group	% of sample	Mean Altruistic leadership score		
		Self-ratings	Follower-ratings	
Underestimators	15.1	3.70	4.17	
In-agreement/good	37.8	4.01	3.79	
In-agreement/poor	31.9	4.26	3.43	
Overestimators	15.1	4.34	2.55	

Table A15.22. Post-hoc tests for Altruistic leadership means across the four groups of leaders

Key:

 $Group \ 1-Underestimators$

Group 2 – In-agreement/good

Group 3 – In-agreement/poor

Group 4 – Overestimators

Dependent	(I)	(J)	Mean	Std.	Sig.	95%	Confidence
Variable	groups	groups	Difference	Error		Interval	
			(I-J)			Lower	Upper
						Bound	Bound
		2	31 [*]	0.08	0.00	-0.52	-0.10
	1	3	56 [*]	0.08	0.00	-0.77	-0.35
		4	64*	0.12	0.00	-0.97	-0.30
	2	1	.31*	0.08	0.00	0.10	0.52
		3	25*	0.07	0.01	-0.44	-0.06
C-16		4	33*	0.12	0.05	-0.65	0.00
Self-ratings		1	.56*	0.08	0.00	0.35	0.77
	3	2	.25*	0.07	0.01	0.06	0.44
		4	-0.08	0.12	0.92	-0.40	0.25
	4	1	.64*	0.12	0.00	0.30	0.97
		2	.33*	0.12	0.05	0.00	0.65
		3	0.08	0.12	0.92	-0.25	0.40

		2	.37*	0.10	0.00	0.11	0.64
	1	3	.74*	0.10	0.00	0.47	1.01
		4	1.62*	0.15	0.00	1.21	2.02
		1	37*	0.10	0.00	-0.64	-0.11
	2	3	.36*	0.07	0.00	0.17	0.56
Follower		4	1.24*	0.13	0.00	0.87	1.61
ratings		1	74*	0.10	0.00	-1.01	-0.47
	3	2	36 [*]	0.07	0.00	-0.56	-0.17
		4	.88*	0.14	0.00	0.50	1.25
		1	-1.62 [*]	0.15	0.00	-2.02	-1.21
	4	2	-1.24*	0.13	0.00	-1.61	-0.87
		3	88*	0.14	0.00	-1.25	-0.50

Table A15.23. Kruskal-Wallis test results for leadership outcomes, across four groups of leaders

Group		TL	SL	LE	JS	OC	SC
Underestimators	Mean	4.29	3.89	4.29	3.53	3.55	4.03
	N	18	18	18	18	15	15
	SD	.41	.51	.51	.60	.70	.62
In-agreement/good	Mean	4.12	3.80	4.14	3.26	3.10	3.57
	N	45	45	45	45	40	40
	SD	.40	.40	.37	.47	.54	.49
In-agreement/poor	Mean	3.73	3.39	3.72	3.18	3.09	3.49
	N	38	38	38	38	36	36
	SD	.45	.42	.49	.49	.48	.38

Overestimators	Mean	2.65	2.56	2.50	2.54	2.55	2.81
	N	18	18	18	18	18	18
	SD	.78	.65	.85	.50	.67	.72
Kruskal-Wallis test	Chi-Square	54.90	52.70	53.55	26.45	16.49	27.63
	df	3	3	3	3	3	3
	Asymp. Sig.	.000	.000	.000	.000	.001	.000

Table A15.24. Post-hoc tests for leadership outcomes means across the four groups of leaders

Key:

 $Group\ 1-Underestimators$

Group 2 – In-agreement/good

Group 3 – In-agreement/poor

Group 4 – Overestimators

	(I)	(J)	Mean	Std. Error	Sig.	95%	Confidence
	groups	groups	Difference			Interval	
			(I-J)			Lower	Upper
						Bound	Bound
		2	0.17	0.11	0.48	-0.14	0.47
	1	3	.56*	0.12	0.00	0.23	0.89
		4	1.64*	0.21	0.00	1.08	2.21
	2	1	-0.17	0.11	0.48	-0.47	0.14
		3	.39*	0.09	0.00	0.14	0.64
TT		4	1.48*	0.19	0.00	0.94	2.02
TL		1	56*	0.12	0.00	-0.89	-0.23
	3	2	39*	0.09	0.00	-0.64	-0.14
		4	1.09*	0.20	0.00	0.54	1.63
	4	1	-1.64*	0.21	0.00	-2.21	-1.08
		2	-1.48*	0.19	0.00	-2.02	-0.94
		3	-1.01*	0.20	0.00	-1.63	-0.54

SL 1		1					1	I
SL 4			2	0.09	0.13	0.92	-0.28	0.45
SL 1		1			0.14	0.01	0.12	0.87
$ \text{SL} \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			4	1.33*	0.19	0.00	0.80	1.86
SL 4			1		0.13	0.92	-0.45	0.28
SLE 1		2	3		0.09	0.00	0.17	0.65
LE 1	CI		4		0.16	0.00	0.79	1.70
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SL		1		0.14	0.01	-0.87	-0.12
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3	2	41*	0.09	0.00	-0.65	-0.17
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			4		0.17	0.00	0.37	1.30
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1	-1.33*	0.19	0.00	-1.86	-0.80
$ \text{LE} \\ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		4	2		0.16	0.00	-1.70	-0.79
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			3	83*	0.17	0.00	-1.30	-0.37
$ \text{LE} \\ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			2	0.15	0.13	0.66	-0.21	0.52
LE $\begin{bmatrix} 1 & -0.15 & 0.13 & 0.66 & -0.52 & 0.21 \\ 3 & .42^* & 0.10 & 0.00 & 0.16 & 0.67 \\ 4 & 1.64^* & 0.21 & 0.00 & 1.06 & 2.22 \\ \hline 1 &57^* & 0.14 & 0.00 & -0.96 & -0.18 \\ 3 & 2 &42^* & 0.10 & 0.00 & -0.67 & -0.16 \\ 4 & 1.22^* & 0.21 & 0.00 & 0.62 & 1.81 \\ \hline 1 & -1.79^* & 0.23 & 0.00 & -2.42 & -1.15 \\ 4 & 2 & -1.64^* & 0.21 & 0.00 & -2.22 & -1.06 \\ \hline 3 & -1.22^* & 0.21 & 0.00 & -1.81 & -0.62 \\ \hline 2 & 0.27 & 0.16 & 0.33 & -0.16 & 0.70 \\ \hline 3 & 0.35 & 0.16 & 0.16 & -0.09 & 0.79 \\ \hline 4 & .99^* & 0.18 & 0.00 & 0.50 & 1.49 \\ \hline 2 & 3 & 0.08 & 0.11 & 0.89 & -0.20 & 0.36 \\ \hline 4 & .72^* & 0.14 & 0.00 & 0.35 & 1.09 \\ \hline 3 & -0.35 & 0.16 & 0.16 & -0.79 & 0.09 \\ \hline 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 & -0.99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 &99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .64^* & 0.14 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .72^* & 0.14 & 0.0$		1	3	.57*	0.14	0.00	0.18	0.96
LE $\begin{bmatrix} 1 & -0.15 & 0.13 & 0.66 & -0.52 & 0.21 \\ 3 & .42^* & 0.10 & 0.00 & 0.16 & 0.67 \\ 4 & 1.64^* & 0.21 & 0.00 & 1.06 & 2.22 \\ \hline 1 &57^* & 0.14 & 0.00 & -0.96 & -0.18 \\ 3 & 2 &42^* & 0.10 & 0.00 & -0.67 & -0.16 \\ 4 & 1.22^* & 0.21 & 0.00 & 0.62 & 1.81 \\ \hline 1 & -1.79^* & 0.23 & 0.00 & -2.42 & -1.15 \\ 4 & 2 & -1.64^* & 0.21 & 0.00 & -2.22 & -1.06 \\ \hline 3 & -1.22^* & 0.21 & 0.00 & -1.81 & -0.62 \\ \hline 2 & 0.27 & 0.16 & 0.33 & -0.16 & 0.70 \\ \hline 3 & 0.35 & 0.16 & 0.16 & -0.09 & 0.79 \\ \hline 4 & .99^* & 0.18 & 0.00 & 0.50 & 1.49 \\ \hline 2 & 3 & 0.08 & 0.11 & 0.89 & -0.20 & 0.36 \\ \hline 4 & .72^* & 0.14 & 0.00 & 0.35 & 1.09 \\ \hline 3 & -0.35 & 0.16 & 0.16 & -0.79 & 0.09 \\ \hline 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 & -0.99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 &99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .64^* & 0.14 & 0.00 & -1.49 & -0.50 \\ \hline 4 & .72^* & 0.14 & 0.0$			4	1.79*	0.23	0.00	1.15	2.42
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1		0.13	0.66	-0.52	0.21
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		2	3	.42*	0.10	0.00	0.16	0.67
1	I.F.		4	1.64*	0.21	0.00	1.06	2.22
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LE		1	57*	0.14	0.00	-0.96	-0.18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3	2	42*	0.10	0.00	-0.67	-0.16
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			4	1.22*	0.21	0.00	0.62	1.81
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1	-1.79 [*]	0.23	0.00	-2.42	-1.15
		4	2		0.21	0.00	-2.22	-1.06
$JS = \begin{bmatrix} 1 & 3 & 0.35 & 0.16 & 0.16 & -0.09 & 0.79 \\ 4 & .99^* & 0.18 & 0.00 & 0.50 & 1.49 \\ 1 & -0.27 & 0.16 & 0.33 & -0.70 & 0.16 \\ 2 & 3 & 0.08 & 0.11 & 0.89 & -0.20 & 0.36 \\ 4 & .72^* & 0.14 & 0.00 & 0.35 & 1.09 \\ 1 & -0.35 & 0.16 & 0.16 & -0.79 & 0.09 \\ 2 & -0.08 & 0.11 & 0.89 & -0.36 & 0.20 \\ 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ 1 &99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ 4 & 2 &72^* & 0.14 & 0.00 & -1.09 & -0.35 \end{bmatrix}$			3		0.21	0.00	-1.81	-0.62
$JS = \begin{array}{ c c c c c c c c } \hline 4 & .99^* & 0.18 & 0.00 & 0.50 & 1.49 \\ \hline 1 & -0.27 & 0.16 & 0.33 & -0.70 & 0.16 \\ \hline 2 & 3 & 0.08 & 0.11 & 0.89 & -0.20 & 0.36 \\ \hline 4 & .72^* & 0.14 & 0.00 & 0.35 & 1.09 \\ \hline 1 & -0.35 & 0.16 & 0.16 & -0.79 & 0.09 \\ \hline 2 & -0.08 & 0.11 & 0.89 & -0.36 & 0.20 \\ \hline 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 &99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ \hline 4 & 2 &72^* & 0.14 & 0.00 & -1.09 & -0.35 \\ \hline \end{array}$			2	0.27	0.16	0.33	-0.16	0.70
$JS = \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1	3	0.35	0.16	0.16	-0.09	0.79
$JS = \begin{bmatrix} 1 & -0.27 & 0.16 & 0.33 & -0.70 & 0.16 \\ 3 & 0.08 & 0.11 & 0.89 & -0.20 & 0.36 \\ 4 & .72^* & 0.14 & 0.00 & 0.35 & 1.09 \\ \hline 1 & -0.35 & 0.16 & 0.16 & -0.79 & 0.09 \\ 2 & -0.08 & 0.11 & 0.89 & -0.36 & 0.20 \\ 4 & .64^* & 0.14 & 0.00 & 0.26 & 1.03 \\ \hline 1 &99^* & 0.18 & 0.00 & -1.49 & -0.50 \\ 2 &72^* & 0.14 & 0.00 & -1.09 & -0.35 \\ \end{bmatrix}$			4	.99*	0.18	0.00	0.50	1.49
JS 4 .72* 0.14 0.00 0.35 1.09 1 -0.35 0.16 0.16 -0.79 0.09 2 -0.08 0.11 0.89 -0.36 0.20 4 .64* 0.14 0.00 0.26 1.03 199* 0.18 0.00 -1.49 -0.50 4 272* 0.14 0.00 -1.09 -0.35			1					
JS 4 .72* 0.14 0.00 0.35 1.09 1 -0.35 0.16 0.16 -0.79 0.09 2 -0.08 0.11 0.89 -0.36 0.20 4 .64* 0.14 0.00 0.26 1.03 199* 0.18 0.00 -1.49 -0.50 4 272* 0.14 0.00 -1.09 -0.35		2	3	0.08	0.11	0.89	-0.20	0.36
1 -0.35 0.16 0.16 -0.79 0.09 2 -0.08 0.11 0.89 -0.36 0.20 4 .64* 0.14 0.00 0.26 1.03 199* 0.18 0.00 -1.49 -0.50 272* 0.14 0.00 -1.09 -0.35	TG		4	.72*	0.14	0.00		
3 2 -0.08 0.11 0.89 -0.36 0.20 4 .64* 0.14 0.00 0.26 1.03 1 99* 0.18 0.00 -1.49 -0.50 4 2 72* 0.14 0.00 -1.09 -0.35	JS		1		0.16	0.16	-0.79	0.09
199* 0.18 0.00 -1.49 -0.50 272* 0.14 0.00 -1.09 -0.35		3	2	-0.08	0.11	0.89	-0.36	0.20
199* 0.18 0.00 -1.49 -0.50 272* 0.14 0.00 -1.09 -0.35			4	.64*	0.14	0.00	0.26	1.03
4 272* 0.14 0.00 -1.09 -0.35			1		1	0.00		
		4	2			0.00		-0.35
			3	64*	0.14	0.00	-1.03	-0.26

		2	0.45	0.20	0.14	-0.10	1.01
	1	3	0.46	0.20	0.12	-0.09	1.02
		4	1.00*	0.24	0.00	0.34	1.65
		1	-0.45	0.20	0.14	-1.01	0.10
	2	3	0.01	0.12	1.00	-0.30	0.31
OC		4	.54*	0.18	0.03	0.05	1.04
		1	-0.46	0.20	0.12	-1.02	0.09
	3	2	-0.01	0.12	1.00	-0.31	0.30
		4	.54*	0.18	0.03	0.05	1.02
	4	1	-1.00*	0.24	0.00	-1.65	-0.34
		2	54*	0.18	0.03	-1.04	-0.05
		3	54*	0.18	0.03	-1.02	-0.05
	1	2	0.46	0.18	0.08	-0.04	0.95
		3	.54*	0.17	0.02	0.06	1.03
		4	1.22*	0.23	0.00	0.59	1.85
		1	-0.46	0.18	0.08	-0.95	0.04
	2	3	0.08	0.10	0.83	-0.18	0.35
SC		4	.76*	0.19	0.00	0.25	1.27
SC		1	54*	0.17	0.02	-1.03	-0.06
	3	2	-0.08	0.10	0.83	-0.35	0.18
		4	.67*	0.18	0.01	0.17	1.18
		1	-1.22*	0.23	0.00	-1.85	-0.59
	4	2	76 [*]	0.19	0.00	-1.27	-0.25
		3	67 [*]	0.18	0.01	-1.18	-0.17