



CULTURE SURVEY

COUNTY DURHAM AND DARLINGTON FIRE AND RESCUE SERVICE

REPORT

August 2018

Dr Les Graham

Natalie Brown

Marisa Plater

Durham University Business School

CONTENTS

1	Introduction	1
2	Methods.....	2
3	Discussion of the Key Measures	3
	3.1 Perceived Organisational Support.....	3
	3.2 Procedural Justice (Fairness).....	3
	3.3 Organisational Identification.....	3
	3.4 Supportive Leadership.....	4
	3.5 Authoritarian Leadership	4
	3.6 Discomfort with Leadership Style	4
	3.7 Leadership Effectiveness	4
	3.8 Respect for Leader.....	5
	3.9 Leader Prosocial Motivation and Self-Serving Motivation	5
	3.10 Trust in Leader.....	5
	3.11 Behavioural Integrity.....	6
	3.12 Job Satisfaction.....	6
	3.13 Engagement.....	6
	3.14 Challenge and Hindrance Stressors.....	6
	3.15 Emotional Energy	7
	3.16 Ego Depletion	7
	3.17 Experienced Co-Worker Undermining Behaviour.....	7
	3.18 Extra-Mile Behaviour (Organisation).....	8
	3.19 Innovation Behaviour	8
	3.20 Voice Behaviour.....	8
	3.21 Improvement Behaviour	8
4	Changes in Key Measures	9
	4.1 Introduction.....	9
	4.2 Findings.....	9
5	Descriptive Results.....	11
	5.1 Introduction.....	11
	5.2 Discussion of Average Scores for Key Measures.....	11
6	Relationships between Key Measures.....	15
	6.1 Introduction to Analysis of Relationships between Key Measures.....	15
	6.2 The Impact of Fairness Perceptions	15
	6.3 The Impact of Leadership Styles	16
	6.4 The Cost of Hindrance Stressors	19
	6.5 Factors that Affect Innovation Behaviour	20

1 INTRODUCTION

County Durham and Darlington Fire and Rescue Service (CDDFRS) and Durham University Business School have agreed to collaborate on a research project to study the impact of workplace factors on employees and how this affects service delivery for the public. This is the second survey to be conducted, following the previous survey in 2016. The research project was conducted by independent researchers from Durham University Business School in collaboration with personnel from CDDFRS.

The aims of this study were *firstly*, to study how key measures from the previous survey had changed, and *secondly*, to investigate factors having the largest impact on key measures to assist in the identification of priorities for action.

The study has been conducted in accordance with CDDFRS policy and Durham University ethical guidelines for research. Participation in the survey was voluntary, and anonymity and confidentiality for all participants is assured.

2 METHODS

The survey was designed using proven academic scales for each of the measures.¹ Paper surveys were circulated to employees of CDDFRS. Responses were collected over a four week period, from the end of April to the end of May 2018.

The response rate achieved for the main survey was very positive; in total, 366 responses were returned (65.5% response rate). A very good response rate was also obtained for the co-worker survey; 319 responses (57.1% response rate). These are excellent response rates in comparison with that achieved in other collaborative research. Of note is that the overall response rate is higher than that achieved in the previous survey (58.6% in 2016).

To enable longitudinal analysis of data, respondents were asked to formulate an anonymous identification code; 74.2% of respondents were prepared to do this.

¹ The measures have either been developed by the research team, or are based on or adapted from peer reviewed academic scales which have been selected and tested in this context. The research team are available to discuss the measures further, as appropriate.

3 DISCUSSION OF THE KEY MEASURES

To assist in understanding the results and findings in this report, the key measures included in the survey are briefly discussed below.

3.1 Perceived Organisational Support

Perceived organisational support refers to individuals' beliefs regarding the degree to which the organisation values their contributions and cares about their well-being. It also refers to a feeling of assurance that the organisation will provide support when individuals face particularly difficult or challenging circumstances when carrying out their duties. When individuals feel valued, their socioemotional needs of respect, being cared for and receiving approval will be met, and they will reciprocate with higher levels of discretionary effort and felt obligation. Perceived organisational support is more strongly related to social exchange rather than economic exchange because it is most affected by discretionary actions by the organisation rather than as a result of external constraints, such as government regulations. Perceptions of positive support from the organisation affect an individual's relationship with the organisation, and have an important impact on individuals' well-being and commitment towards the organisation.

3.2 Procedural Justice (Fairness)

Procedural justice concerns the fairness of the ways and processes used to determine the distribution of outcomes among individuals. We can think of it as individuals' perceptions of the procedural fairness of decisions made across the organisation. Procedural justice plays a key role in determining whether or not individuals link their social identity to an organisation, which in turn impacts whether individuals engage in discretionary effort for the organisation.

3.3 Organisational Identification

Organisational identification refers to the extent to which individuals feel strong ties and a sense of belonging with the organisation, and considers if they are proud to work for their organisation. When individuals identify with their organisation, they are more likely to have

a positive social identity with the organisation and in turn experience increased motivation to be loyal to the organisation, its values, rules and leadership.

3.4 Supportive Leadership

Supportive leadership stresses the importance of personal integrity and serving others, such as employees and communities. It focuses on the development of people to their fullest potential through an understanding of each person's different characteristics, strengths and interests. Supportive leaders serve as role-models, build trust and provide feedback and resources to their people. It is argued that supportive leadership combats negative outcomes associated with the promotion of self-interest which underlies many incidents of unethical behaviour.

3.5 Authoritarian Leadership

Authoritarian leadership is when the leader behaves in a commanding fashion and exerts high levels of discipline over people. The supervisor makes the decisions and expects their people to follow their instructions, and otherwise sanctions them. They emphasise the need for 'best' performance, and express displeasure with their people when they do not achieve this.

3.6 Discomfort with Leadership Style

Discomfort with leadership style is a form of role stress and focuses on how individuals feel after interactions with their supervisor. The measure looks at the extent to which individuals feel concerned, bothered and uneasy after meeting with their leader; feelings of discomfort which are believed to last beyond the moment of interaction.

3.7 Leadership Effectiveness

Leadership effectiveness examines the extent to which individuals believe their supervisor is the right person for the job, is exceptional in their role, and makes them feel content with their supervision.

3.8 Respect for Leader

Professional respect for the supervisor examines individuals' respect and admiration for their supervisors' professionalism, knowledge, and competence in their role, and is part of an individuals' evaluation of the quality of the supervisor-employee relationship. Supervisor-employee relationship quality has been found to influence individuals' attitudes and perceptions of the organisational environment, and is increasingly being examined as a process that impacts on key individual outcomes. Individuals who consider themselves to have high quality supervisor-employee relationships tend to perform at a higher level, assume greater responsibility and contribute more than those in low-quality supervisor-employee relationships.

3.9 Leader Prosocial Motivation and Self-Serving Motivation

Individuals with strong prosocial values are motivated by a core desire to help others, which influences their actions and decisions. For this measure, we ask whether individuals feel their supervisor has concern for others' well-being, want to help members of the public, and want to make a positive difference to the lives of others. In contrast, we measure supervisor self-serving motivation, we ask whether individuals believe their supervisor is mainly concerned about their own welfare, wants to look after themselves and is concerned about their own personal interests.

3.10 Trust in Leader

Trust can be thought of as the willingness to be vulnerable to another party when that party cannot be controlled or monitored. Prior research shows that when employees trust their leaders, they tend to perform better, display more extra-mile behaviours, have greater organisational commitment, experience greater job satisfaction, and have less intent to leave the organisation. In addition, there are strong links between leader behavioural integrity and trust, as leader behavioural integrity may provide employees with a sense of certainty and confidence regarding the actions and behaviours of their leader.

3.11 Behavioural Integrity

Behavioural integrity is the perceived alignment between words and deeds; in this study we examine leader integrity, individual integrity and organisation integrity. Behavioural integrity entails both the perceived fit between espoused and enacted values, and perceived promise-keeping; it can be considered as the extent to which an individual perceives a party to “walk the talk”.

3.12 Job Satisfaction

Job satisfaction is simply defined as how content an individual is with his or her job. In this study, we measured a single dimension of affective job satisfaction to represent an overall emotional feeling individuals have about their job.

3.13 Engagement

Engagement is a measure of an individual's personal expression of their self-in-role. Someone is engaged in their work when they are able to express their authentic self and are willing to invest their personal emotional, cognitive and physical energies into their work and job roles. To do this requires them to feel that the work has meaning, that they feel safe and that they have the required resources. Improved engagement can lead to higher individual performance, enhanced well-being and reduced staff turnover.

3.14 Challenge and Hindrance Stressors

Challenge stressors reflect individuals' perceptions of work-related demands, such as workload, time pressures, and levels of responsibility. Individuals who experience challenge stressors, although they may find them stressful, will view them as an opportunity for personal gain, such as growth and personal development or achievement of important outcomes.

Hindrance stressors also refer to work-related demands; however, individuals view these demands as constraints that hinder their performance and achievements at work. This impacts strongly on their well-being and reduces their engagement in discretionary behaviours. Examples of such constraints include role ambiguity, red tape and workplace

politics, which do not provide individuals with the opportunity for personal gain and prevent achievement of valued goals.

3.15 Emotional Energy

Emotional energy is central to individuals' well-being and can be considered as the amount of emotional and mental energy individuals have available to them to meet the daily demands and challenges they face in their roles. Low levels of emotional energy are manifested by both physical fatigue and a sense of feeling psychologically and emotionally 'drained' at work. Prior research has found that low emotional energy levels are related to reduced organisational commitment, lower productivity and performance, reduced engagement, ill-health, decreased physical and mental well-being, increased absenteeism and turnover intentions, and lower levels of persistence in the face of difficulties.

3.16 Ego Depletion

Ego depletion relates to the cognitive resources available to an individual to self-regulate their behaviour. A reduction in available resources can result in individuals adopting a selfish mind-set, experiencing a loss of empathy, and being unable to morally self-sanction. When a high level of ego depletion is present, individuals have less cognitive resources available to them to allow engagement in complex reasoning. This makes them less able to evaluate how others should be treated, and less aware of the implications of their actions.

3.17 Experienced Co-Worker Undermining Behaviour

Experienced co-worker undermining behaviour measures the extent to which individuals believe they have been undermined by co-workers in the organisation. It is related to other forms of mistreatment such as bullying, harassment and physical aggression. Undermining behaviours can be regarded as more subtle low-intensity forms of aggression with consequences that are often not immediately obvious. This makes it difficult for perpetrators to be detected and sanctioned. Undermining behaviours include being criticised, ignored, belittled, talked down to, been given the 'silent treatment' and having rumours spread about them. Sadly, it is frequently the victims of this form of mistreatment that then engage in similar mistreatment of others. Undermining behaviour has been found in prior studies to be damaging to employees and organisations.

3.18 Extra-Mile Behaviour (Organisation)

Well-functioning organisations not only need people who are reliable in the way they carry out their specific roles and job requirements, but who also engage in innovative and spontaneous activity that goes beyond their role requirements; going the extra-mile. This study examined extra-mile behaviours (EMBs) targeted at the organisation, as reported by co-workers.

3.19 Innovation Behaviour

Innovation behaviour encompasses individuals' ability to generate and implement new and creative ideas, find new technologies and techniques to improve work systems, and to support and champion others' creative ideas.

3.20 Voice Behaviour

Voice behaviour refers to employees communicating their ideas, suggestions, concerns and information about any work-related issues. The purpose of this discretionary communication is to make improvements for the organisation, such as aiding team performance and enhancing service to the public.

3.21 Improvement Behaviour

Improvement behaviour is a set of proactive actions aimed at implementing positive, constructive change through finding solutions to organisational problems, making small changes to working procedures and the introduction of new working methods. It is based on personal initiative and conscious decision-making, rather than a formal requirement, and is therefore thought of as an extra-role behaviour.

4 CHANGES IN KEY MEASURES

4.1 Introduction

The changes between the last survey, conducted 18 months previously (October 2016), and this survey (April 2018) were assessed through consideration of all responses.

Analyses to investigate whether there are any significant differences between matched scores have also been conducted and, where appropriate, the effect sizes of any differences have been calculated and are discussed below. Effect sizes can be considered as being small, medium or large. In this study we calculated values of Eta-squared and followed the guidelines proposed by Cohen (1988) for interpretation of .01 relating to a small effect, .06 to a medium effect and .14 to a large effect (Pallant, 2012). A small effect size suggests there is a real world impact, but is something likely only found through careful study. A large effect size is more substantial and indicates something that we need to take notice of. It suggests the difference between the two sets of scores is substantial and/or consistent enough that it could be found between the two populations quite easily. A medium effect, while noteworthy, is not as important as a large effect size.

4.2 Findings

Table 1 presents the changes in key measures since the previous survey for all respondents. A very positive finding is that perceived organisational support and fairness both improved with a medium effect size since the previous survey. Job satisfaction has improved with a small-medium effect size, whilst very encouragingly engagement and voice behaviour have a large significant improvement since the previous survey. Similar positive findings can be seen through the large reduction of ego depletion and medium reduction in experienced co-worker undermining behaviour.

In the total sample, both improvement behaviour and emotional energy showed a slight improvement; however in the matched sample the analysis suggested that these measures were not quite significant, implying that while improving, they are still not significantly different from the level of 2016.

Table 1: Changes in Key Measures, All Respondents

Measure	2016 (Average)	2018 (Average)
Perceived Organisational Support	4.13	4.50
Procedural Justice (Fairness)	3.64	3.86
Job Satisfaction	5.45	5.76
Engagement	5.47	5.82
Voice Behaviour	5.47	5.64
Improvement Behaviour	4.73	4.86
Emotional Energy	4.97	5.42
Ego Depletion	2.63	2.03
Experienced Co-Worker Undermining (1-6 scale)	2.65	2.22

Notes:

1. All measures used a 1 to 7 scale, except where stated.
2. The scales used in 2018 to measure emotional energy and ego depletion are a slightly adapted version of the scales used in 2016. This is due to development of the scales. The analyses testing significance take these differences into account.

5 DESCRIPTIVE RESULTS

5.1 Introduction

The descriptive statistics for measures for all respondents are presented in Table 2. The average scores for operational and non-operational staff are presented in Table 3.

Analyses to investigate whether there are any differences between scores for operational and non-operational staff have been conducted, and where appropriate the effect sizes of any differences have been calculated. For an explanation of effect size calculation and interpretation, please see Section 4.1 above. Discussion of the scores and differences are presented below.

5.2 Discussion of Average Scores for Key Measures

As previously discussed, perceptions of organisational support and fairness have significantly increased since the previous survey; for both measures non-operational staff reported higher average scores than operational staff. An encouraging result is that operational staff report a high average level for organisational identification, and non-operational staff report a very high average level.

Supportive leadership is reported at a high average level across the service. This suggests that individuals perceive their immediate supervisor as being competent, as having personal integrity and a focus on serving communities, and caring about their people's development and well-being. Moreover, on average, operational staff score moderate levels of authoritarian leadership, whilst non-operational staff score low. Encouragingly, discomfort with leadership style is reported at a low average level for operational staff, and very low for non-operational staff. The contrasting impacts of supportive leadership and authoritarian leadership are discussed in Section 6.3.

On average, leadership effectiveness and trust in leader are reported as high, whilst respect for leader is reported as very high across CDDFRS. These findings suggest that individuals are comfortable with their immediate supervisor, respect them, and generally perceive them to be competent leaders who they can trust. On average, leader prosocial motivation is reported as very high, whilst leader self-serving motivation is reported as moderately low.

Table 2: Average Scores for Key Measures, All Respondents

Measure	All Respondents (Average)
Perceived Organisational Support	4.50
Procedural Justice (Fairness)	3.86
Organisational Identification	5.19
Supportive Leadership	5.33
Authoritarian Leadership	3.78
Discomfort with Leadership Style	2.60
Leadership Effectiveness	5.58
Respect for Leader	5.73
Leader Prosocial Motivation	5.75
Leader Self-Serving Motivation	3.18
Trust in Leader	5.03
Leader Integrity	5.41
Organisational Integrity	4.20
Individual Integrity _{cw}	6.04
Job Satisfaction	5.76
Engagement	5.82
Challenge Stressors (1-5 scale)	3.67
Hindrance Stressors (1-5 scale)	2.71
Emotional Energy	5.42
Ego Depletion	2.03
Experienced Co-Worker Undermining Behaviour (1-6 scale)	2.22
Extra-Mile Behaviour towards the Organisation _{cw}	5.73
Innovation Behaviour (1-5 scale)	3.42
Voice Behaviour	5.64
Improvement Behaviour	4.86

Notes:

1. All measures used a 1 to 7 scale unless where stated (e.g. 1 - Strongly Disagree, 2 - Disagree, 3 - Slightly Disagree, 4 - Neither Agree or Disagree, 5 - Slightly Agree, 6 - Agree, 7 - Strongly Agree).
2. cw signifies which measures were tested in the co-worker survey.

Table 3: Comparison of Average Scores between Operational and Non-Operational Staff

Measure	Operational (Average)	Non-Operational (Average)	Difference (Effect Size)
Perceived Organisational Support	4.33	5.30	M-L
Procedural Justice (Fairness)	3.72	4.51	M
Organisational Identification	5.06	5.78	S-M
Supportive Leadership	5.33	5.32	<i>n.s.</i>
Authoritarian Leadership	3.96	2.94	L
Discomfort with Leadership Style	2.65	2.31	S
Leadership Effectiveness	5.57	5.65	<i>n.s.</i>
Respect for Leader	5.72	5.77	<i>n.s.</i>
Leader Prosocial Motivation	5.76	5.69	<i>n.s.</i>
Leader Self-Serving Motivation	3.20	2.95	<i>n.s.</i>
Trust in Leader	5.00	5.21	<i>n.s.</i>
Leader Integrity	5.40	5.40	<i>n.s.</i>
Organisational Integrity	4.06	4.85	M
Individual Integrity _{cw}	6.02	6.10	<i>n.s.</i>
Job Satisfaction	5.72	6.03	<i>n.s.</i>
Engagement	5.81	5.85	<i>n.s.</i>
Challenge Stressors _(1-5 scale)	3.61	3.82	S
Hindrance Stressors _(1-5 scale)	2.74	2.63	<i>n.s.</i>
Emotional Energy	5.35	5.74	<i>n.s.</i>
Ego Depletion	2.05	2.05	<i>n.s.</i>
Experienced Co-Worker Undermining Behaviour _(1-6 scale)	2.27	2.08	<i>n.s.</i>
Extra-Mile Behaviour towards the Organisation _{cw}	5.71	5.89	<i>n.s.</i>
Innovation Behaviour _(1-5 scale)	3.38	3.62	S
Voice Behaviour	5.67	5.56	<i>n.s.</i>
Improvement Behaviour	4.81	5.05	<i>n.s.</i>

Notes:

1. All measures used a 1 to 7 scale unless where stated (e.g. 1 - Strongly Disagree, 2 - Disagree, 3 - Slightly Disagree, 4 - Neither Agree or Disagree, 5 - Slightly Agree, 6 - Agree, 7 - Strongly Agree).
2. *n.s.* indicates a non-significant difference between the two groups, suggesting that while there may be a difference in average scores, it is not sufficient to be significant (i.e. it may be due to chance). If the effect size is significant, it can be small (S), medium (M) or large (L).
3. *cw* signifies which measures were tested in the co-worker survey.

Perceptions of organisational integrity are reported at a moderate level for operational staff and moderately high level for non-operational staff. In addition, leader integrity is reported as high and individual integrity is reported as very high across the service.

The average scores for job satisfaction and engagement are very high; this suggests that individuals are generally very satisfied in their role and fully invest their energies into their role.

Non-operational staff report a high average score for challenge stressors, whilst operational staff report a moderately high average score; this implies that non-operational staff experience higher frequencies of workload, responsibly and time pressured work. Hindrance stressors are reported as moderately low across the service. However, please refer to the discussions below on the importance of reducing hindrance stressors in the workplace (Section 6.4).

Emotional energy is reported at high average levels across operational and non-operational staff. Additionally, ego depletion and experienced co-worker undermining behaviour have reduced since the previous survey, and are now reported at very low and low average levels, respectively.

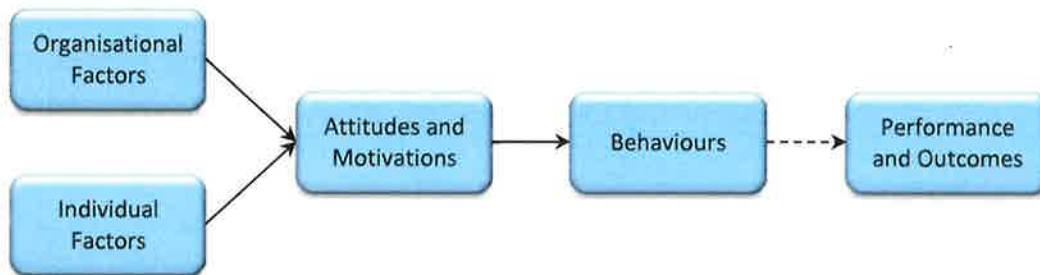
The average score for extra-mile behaviour directed towards the organisation is very high and the average score for voice behaviour is high. These results imply that individuals are willing to engage in behaviours that go beyond their role requirements with the aim of improving the organisation. To support this, improvement behaviour is reported as moderately high. For innovation behaviour, operational staff and non-operational staff reported moderately high average scores.

6 RELATIONSHIPS BETWEEN KEY MEASURES

6.1 Introduction to Analysis of Relationships between Key Measures

In this section we present the findings of a series of statistical analyses to test relationships between the key measures (a significance level of $p < .05$ is adopted for all reported results). Whilst in a cross-sectional study it is not possible to establish causality, we adopt an approach of prediction of relationships between variables from theoretical considerations and from prior research. We then test the generated hypotheses using linear regression analyses and PROCESS analysis². The general model shown in Figure 1 is adopted for testing relationships. In regression models, we control for the effects of role, gender, age, and tenure in service.

Figure 1: A General Model for Testing



Extensive prior research has shown that how people are managed and their attitudes to their jobs have a large impact on behaviour and performance. The following subsections outline the key relationships found between variables in this collaborative research project.

6.2 The Impact of Fairness Perceptions

Table 4 illustrates the impact of fairness perceptions; it shows that fairness positively influences perceived organisational support, organisational identification, job satisfaction and emotional energy, whilst reducing ego depletion. Engagement, voice behaviour,

² Hayes (2014).

innovation behaviour and extra-mile behaviour are also positively impacted by fairness perceptions.

Table 4: The Importance of Fairness Perceptions

Measure	Effect
Perceived Organisational Support	+++
Organisational Identification	+++
Job Satisfaction	+++
Emotional Energy	++
Ego Depletion	--
Engagement	+++
Voice Behaviour	+
Innovation Behaviour	++
Extra-Mile Behaviour for the Organisation _{cw}	++

+ / - denotes whether the impact of the measure is positive or negative.

cw signifies that the measure was collected in the co-worker survey to increase the strength of evidence of the relationship.

6.3 The Impact of Leadership Styles

As can be seen in Table 5, discomfort with leadership style is reduced by supportive leadership behaviour, whilst authoritarian leadership behaviour increases discomfort. Leadership effectiveness and trust in leader increase with supportive leadership and reduce with authoritarian leadership. Supportive leadership increases respect for leader and job satisfaction, whilst authoritarian leadership has no effect on these measures.

Though engagement is found to increase with authoritarian leadership, a greater increase is seen from supportive leadership. Hindrance stressors and ego depletion increase with authoritarian leadership, whilst supportive leadership is found to reduce these measures.

Interestingly, the discretionary behaviours (*voice behaviour, improvement behaviour, innovation behaviour and extra-mile behaviour directed towards the organisation*) are found to increase with supportive leadership, whilst no effect is found from authoritarian

leadership. This result implies that in order to achieve employee discretionary behaviour, a supportive leadership style should be encouraged.

Table 5: The Impact of Leadership Styles

Measure	Supportive Leadership	Authoritarian Leadership
Discomfort with Leadership Style	---	+++
Leadership Effectiveness	+++	-
Respect for Leader	+++	
Trust in Leader	+++	-
Engagement	+++	+
Hindrance Stressors	--	+
Job Satisfaction	++	
Ego Depletion	--	+
Voice Behaviour	++	
Improvement Behaviour	+	
Innovation Behaviour	+	
Extra-Mile Behaviour for the Organisation _{cw}	+	

+ / - denotes whether the impact of the measure is positive or negative.

cw signifies that the measure was collected in the co-worker survey to increase the strength of evidence of the relationship.

The influence of supportive leadership on individuals' improvement behaviour, voice behaviour and innovation behaviour is presented in Figure 2. It suggests that when individuals perceive their leader to be supportive they are likely to engage in positive discretionary behaviour. Further, Figure 2 implies that supportive leadership has a more positive impact when leader integrity is seen as being high; in other words, the positive impact supportive leadership has on discretionary behaviours is multiplied when people perceive their leader to have high integrity.

Figure 2: Supportive Leadership and Discretionary Behaviour

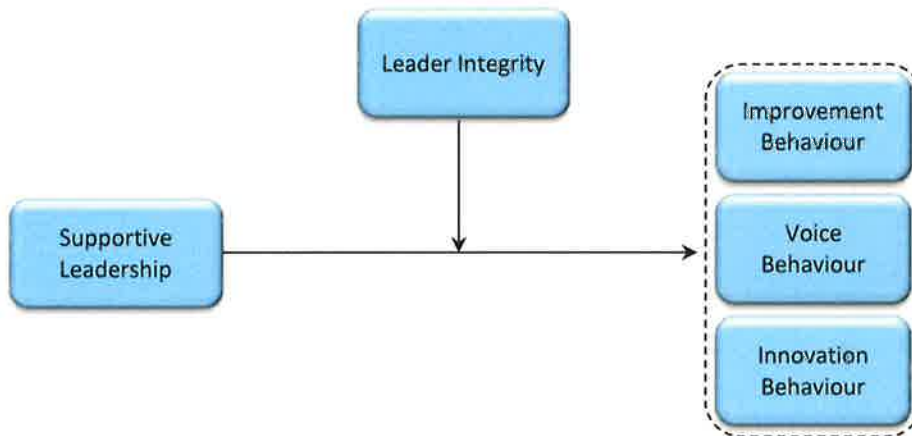
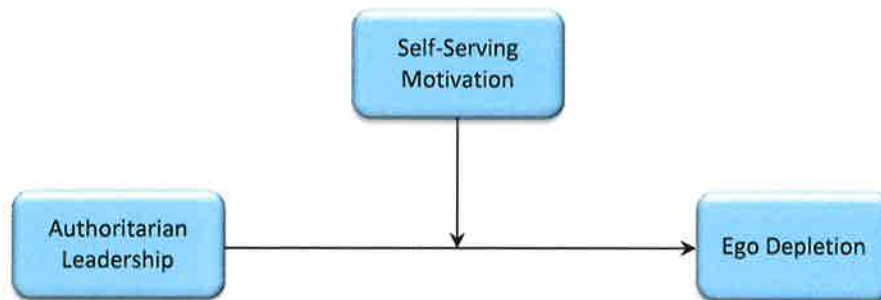


Figure 3 shows that authoritarian leadership increases hindrance stressors, and that hindrance stressors have a positive impact on ego depletion. This model highlights the negative effect of authoritarian leadership as it shows that it depletes individuals' internal resources through increasing the frequency of hindrance stressors at work.

Figure 3: The Impact of Authoritarian Leadership



Figure 4 highlights an interaction that occurs between authoritarian leadership and ego depletion. The figure shows that an authoritarian leadership style depletes employee's internal personal resources, and that this impact is particularly negative when people think their leader is self-serving.

Figure 4: The Impact of Authoritarian Leadership

6.4 The Cost of Hindrance Stressors

Hindrance stressors can be considered as workplace demands; individuals view these demands as constraints and barriers that hinder their performance and achievements at work. Table 6 shows that perceptions of organisational support, job satisfaction, engagement, innovation behaviour and voice behaviour are negatively impacted by hindrance stressors at work. In addition, organisational integrity and leader integrity are negatively impacted by hindrance stressors. In contrast, ego depletion increases when hindrance stressors are frequent at work.

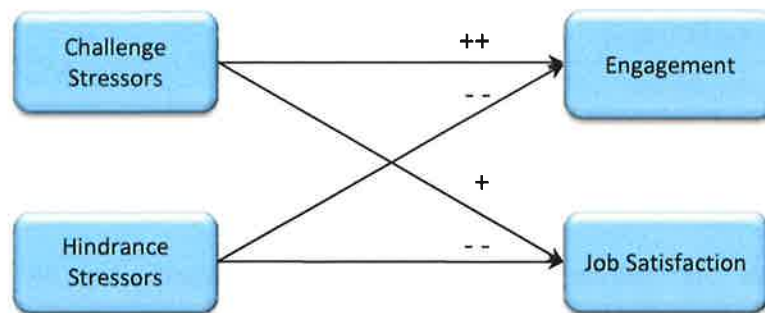
Table 6: The Cost of Hindrance Stressors

Measure	Effect
Perceived Organisational Support	--
Job Satisfaction	--
Organisational Integrity	--
Leader Integrity	---
Engagement	--
Ego Depletion	+++
Innovation Behaviour	-
Voice Behaviour	-

+ / - denotes whether the impact of the measure is positive or negative.

In Figure 5, the effects of challenge and hindrance stressors on individuals' engagement and job satisfaction are shown. From the figure, it can be seen that while challenge stressors have a positive effect on job satisfaction, hindrance stressors have a negative effect.

Figure 5: The Effects of Stressors on Engagement and Job Satisfaction



Of particular note is the negative relationship between hindrance stressors and engagement. This finding suggests that when individuals perceive higher levels of constraint at work, which are perceived as blocking them from doing their job, they will reduce their level of engagement. In contrast, challenge stressors are found to have a positive relationship with engagement. This suggests that when individuals perceive there to be high levels of responsibility and workload expected of them, although they may potentially find them a strain, they will view this as an opportunity for achievement of their valued objectives and engage in their work.

6.5 Factors that Affect Innovation Behaviour

Table 7 presents the factors that positively and negatively impact innovation behaviour. It implies that when the organisation provides employees with support and acts with integrity individuals are more likely to engage in innovation behaviour. Similarly, when individuals identify with the organisation, and feel a sense of belonging with CDDFRS, they will exhibit innovation behaviour. Innovation behaviour is also found to increase when individuals perceive their leader to have integrity and when they are satisfied in their jobs. Ego depletion is found to reduce innovation behaviour.

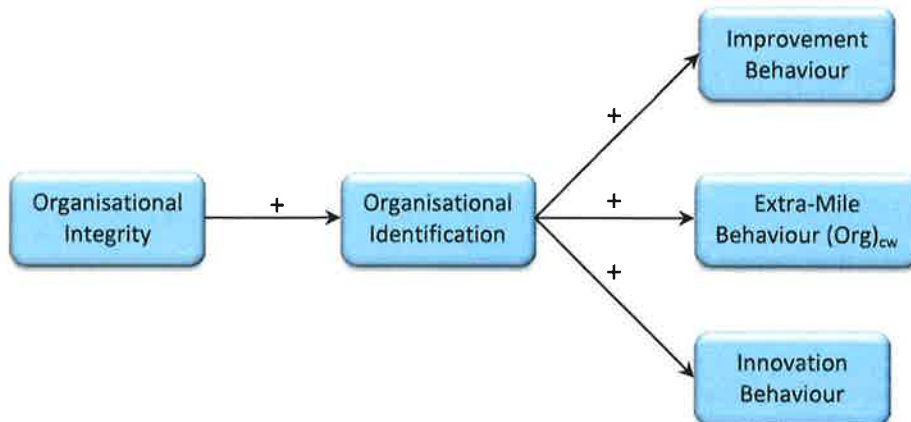
Table 7: Factors that Affect Innovation Behaviour

Measure	Effect
Perceived Organisational Support	++
Organisational Integrity	++
Organisational Identification	++
Leader Integrity	+
Job Satisfaction	++
Ego Depletion	-

+ / - denotes whether the impact of the measure is positive or negative.

Figure 6 illustrates the positive impact organisational integrity has on organisational identification. This implies that when the organisational acts with integrity individuals will feel increased pride and belonging in the organisation, in turn this leads to increased improvement behaviour, extra-mile behaviour directed towards the organisation and innovation behaviour.

Figure 6: The Importance of Organisational Integrity



cw signifies that the measure was collected in the co-worker survey to increase the strength of evidence of the relationship.