



County Durham and Darlington
Fire and Rescue Service



Cultural Survey

COUNTY DURHAM AND DARLINGTON FIRE AND RESCUE SERVICE

REPORT

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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. 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 establish key measures for workplace factors, staff attitudes, motivation and well-being which can be tracked over time, 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. Paper surveys were circulated to employees of CDDFRS. Responses were collected over a four week period, from 3rd October to 31st October 2016.

In total, 347 responses were received from the survey (58.6% response rate). This is a very positive result, and is higher than achieved in other collaborative research.

To enable longitudinal analysis of data, respondents were asked to formulate an anonymous identification code. A very positive result is that 92.8% of respondents were prepared to do this.

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 Mission Importance¹

Public sector organisations often have missions with broader scope and more profound impact on individuals' work attitudes and performance than those typically found in the private sector. If individuals view the organisation's mission as important, they tend to view their roles as more personally meaningful and incorporate organisational goals into their work. In this study, we measure individuals' perceptions of the value of the organisation's mission.

3.2 Positive Culture²

A positive culture is the extent to which members of an organisation share the understanding that behavioural norms and expectations are to: act with integrity, develop conceptual skills and thorough understanding to deal with the tasks and challenges the organisation faces, prioritise the needs of others in the organisation above their own and provide help and support to others. A positive culture encourages individual behaviours that enhance organisational effectiveness and performance.

3.3 Procedural Justice (Fairness)³

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 by senior leaders and across the wider organisation. Procedural justice plays a key role in determining whether or not individuals link

¹ Based on Wright and Pandey (2011).

² Liden et al. (2013).

³ Colquitt et al. (2012).

their social identity to an organisation. Social identity plays an important role, which in turn impacts whether individuals engage in discretionary effort for the organisation.

3.4 Relational Justice (Fairness)⁴

Relational justice concerns the fairness of the ways that individuals feel they are treated during the enactment of organisational decisions; whether individuals feel they are treated in a polite manner, with respect and dignity.

3.5 Perceived Organisational Support⁵

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.⁶ When individuals feel valued they will reciprocate with higher levels of discretionary effort and felt obligation. It also meets individuals' socioemotional needs of respect, being cared for and receiving approval. Perceived organisational support is more strongly related to *social* exchange rather than *economic* exchange. Perceived organisational support is most affected by discretionary actions by the organisation rather than 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 well-being and commitment towards the organisation.

3.6 Empowering Leadership⁷

Empowering leadership involves supervisors highlighting the significance of work to individuals, providing them with participation in decision making, conveying confidence that performance will be high and removing bureaucratic constraints. It involves delegation of authority to individuals so they can make decisions and implement actions without direct supervision. It involves leaders supporting individuals by expressing confidence in their

⁴ Colquitt et al. (2001).

⁵ Eisenberger et al. (1986).

⁶ Rhoades and Eisenberger (2002)

⁷ Ahearne et al. (2005).

abilities, encouraging autonomy and participation, and fostering the belief that individuals' work is meaningful.

3.7 Public Service Motivation⁸

Interest in public service motivation (PSM) has arisen from the observation that employees in the public sector behave differently from their private sector counterparts. PSM is seen as a unique attribute of public-sector employees that provides them with a desire to serve the wider community. PSM has been defined as “the motivational force that induces individuals to perform meaningful . . . public, community and social service.”⁹

PSM comprises of four key dimensions: *self-sacrifice, attraction to public policy-making, commitment to the public interest or civic duty* and *compassion*. PSM is considered as a useful basis for understanding public-sector employee motivation¹⁰ and can be thought of as an attitude that motivates public-sector workers to display altruistic or prosocial behaviours.

3.8 Moral Identity¹¹

Moral identity is a social identity that individuals use to define themselves. It can be thought of as a complex knowledge structure made up of values, goals and behavioural scripts and as acting as a self-regulatory mechanism. Individuals may have identical views on what is moral, but will behave in different ways dependent on the importance they place on moral values relative to other aspects of their identity or self-concept. When moral identity is stronger it exerts a greater influence on the processes that guide an individual's thinking and behaviour than other aspects of identity, and individuals are more likely to behave in a moral way and less likely to behave immorally. The values used in this study to measure moral identity are *honest, hardworking, fair, caring, compassionate, friendly, generous, helpful* and *kind*. Moral identity strength is a changeable part of an individual's self-concept and can be activated or reduced by external factors and situations.

⁸ Adapted from Kim (2011), Wright and Pandey (2012), Perry (1996), Kim (2012).

⁹ Brewer & Selden (1998: 417).

¹⁰ Kim (2010).

¹¹ Aquino and Reed (2002).

3.9 Job Satisfaction¹²

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.

3.10 Organisational Pride¹³

Pride refers to an individual's evaluation of the organisation's standing, general worth and status. When individuals identify their organisation as having high status, they are more likely to have a positive social identity with the organisation. When pride is high there is increased motivation to be loyal to the organisation, its values, rules and leadership. Prior research has found a clear linkage between pride and discretionary behaviour.

3.11 Engagement¹⁴

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.

3.12 Emotional Energy¹⁵

Emotional energy, as measured in this study, 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 job. 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

¹² Camman et al. (1983).

¹³ Blader and Tyler (2009).

¹⁴ Rich et al. (2010).

¹⁵ Maslach and Jackson (1981).

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.

3.13 Ego Depletion¹⁶

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.

3.14 Experienced Undermining Behaviour (Co-Worker)¹⁷

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.

3.15 Mindfulness¹⁸

Mindfulness is defined as "a state of being attentive to and aware of what is taking place in the present."¹⁹ Mindfulness involves four interrelated self-regulatory processes: attending to

¹⁶ Ciarocco et al. (2016).

¹⁷ Adapted from Lee et al. (2016), Duffy et al. (2002).

¹⁸ Adapted from Dane and Brummel (2013).

¹⁹ Brown and Ryan (2003:822).

the present moment, recognising thoughts and feelings as passing mental events, being able to observe the approach to self in action, and acceptance of unpleasant thoughts and feelings. Mindfulness is reduced when awareness and attention is divided due to distraction with outside concerns, when people are worried about the future, when people behave in an automatic manner or when people ruminate about events in the past.

3.16 Role Clarity²⁰

Role clarity refers to whether employees know what is expected of them and explanation of what needs to be done in their role is clear. Individuals with high role clarity know what their responsibilities are, know how they need to prioritise their time, and feel certain about how much authority they have.

3.17 Voice Behaviour²¹

Voice behaviour refers to employees communicating their ideas, suggestions, concerns and information about any work-related issues.²² The purpose of this discretionary communication is to make improvements for the organisation, such as aiding team performance and enhancing service to the public.

3.18 Silence Motives²³

Silence is defined as not speaking up and the withholding of ideas and suggestions for improvement or voicing of concerns in the workplace. Important individual and organisational outcomes can be caused as a result of employee silence, including decreased innovation, failure to address ethical transgressions, process failures and reduced well-being, lower commitment and job satisfaction for individuals. This study examined three reasons for employee silence; the fear of negative consequences, the intention to benefit others or the organisation, and the belief that nothing will change.

²⁰ Rizzo et al. (1970).

²¹ Van Dyne and Le Pine (1998).

²² Morrison (2011).

²³ Knoll and van Dick (2013).

3.19 Making Improvements²⁴

Making improvements is a set of proactive behaviours, based upon personal initiative and conscious decision made by individuals to do something specific in the workplace to make improvements. Making improvements is aimed at implementing positive change through finding solutions to organisational problems, making small changes to working procedures and introducing new working methods. It is therefore considered as an extra-role behaviour.

²⁴ Adapted from Morrison and Phelps (1999).

4 DESCRIPTIVE RESULTS

4.1 Introduction

The descriptive statistics for the measures are presented in Table 1. Discussions of the average scores are presented below.

4.2 Discussion of Average Scores for Key Measures

Mission importance is reported as very high, with an average score of 6.18. This implies that individuals across the service believe CDDFRS's mission to be highly important. Positive culture is reported as moderate (average score 4.14).²⁵

Procedural justice is reported as moderately low, with an average score of 3.64. The score for relational justice is more encouraging at 4.86; this suggests the service's interactional element of decision making is fairer than the procedural element. Perceived organisational support is reported as generally positive (average score 4.13). This implies that individuals believe the service shows moderate levels of consideration for their efforts and well-being.

Empowering leadership reflects a positive level of leadership in the service. With a very high average score of 5.19, it suggests that supervisors make individuals feel empowered, highlight the significance of work, provide them with participation in decision making, convey confidence that performance will be high and remove bureaucratic constraints.

Public service motivation is high across the service, with an average score of 5.03. This indicates the majority of individuals feel a high level of calling to serve the public, are prepared to make self-sacrifices, and are motivated to make a positive difference to society.

²⁵ In future research in this organisation we would not assess positive culture using this measure as there was reported lack of understanding of how to answer the questions in the scale and evidence of a lack of reliability which may be due to the context of this organisation.

Table 1: Average Scores for Key Measures, All Respondents

Measure	All Respondents
Mission Importance	6.18
Positive Culture	4.14
Procedural Justice (Fairness)	3.64
Relational Justice (Fairness)	4.86
Perceived Organisational Support'	4.13
Empowering Leadership	5.19
Public Service Motivation	5.03
Moral Identity	6.19
Job Satisfaction	5.45
Organisational Pride	5.71
Engagement	5.47
Emotional Energy	4.93
Ego Depletion	3.02
Experienced Undermining Behaviour (1-6 scale)	2.65
Mindfulness (1-6 scale)	4.46
Role Clarity	5.60
Voice Behaviour	5.47
Silence (Fear)	3.68
Silence (Prosocial)	3.76
Silence (No Change)	3.79
Making Improvements	4.73

Notes:

1. All measures used a 1 to 7 scale, except 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).

Individuals reported very high levels of moral identity (average score 6.19). This suggests that individuals identify themselves as moral people who behave with integrity.

The average score for organisational pride is very high at 5.71. This implies that individuals across the service view CDDFRS's status and worth as very high. Moreover, levels of engagement are very high (average score 5.47). This suggests that individuals are willing to invest their personal emotional, cognitive and physical energies into their work. In addition, job satisfaction is also reported as high, with an average score of 5.45.

A very positive result is that emotional energy is reported as high (4.93). Emotional energy reflects individuals' well-being, and the levels of emotional and mental energy they have available to them to complete daily demands in their job. Furthermore, ego depletion is low across the service (average score 3.02) suggesting that individuals can generally regulate their behaviours in a positive manner.

Individuals reported low levels of experienced co-worker undermining behaviour (2.65). This suggests individuals believe that in general the levels of undermining that occur in the workplace are low. However, some individuals did report experiencing moderately high levels.

Mindfulness is at a positive level, with an average score of 4.46. This suggests that individuals are attentive and aware of the present moment, recognise thoughts and feelings as passing mental events, and accept unpleasant thoughts and feelings.

Role clarity is reported as very high, average score 5.60, this suggests individuals have a clear understanding of what is expected of them in their role.

Voice behaviour is reported as high, with an average score of 5.47. This suggests that individuals communicate their ideas, suggestions, concerns and information about any work-related issues with the intent to make improvements for the service.

The three silence motives are reported as low; the average score for *“fear of consequence of speaking up”* is 3.68. The average score for *“prosocial”* silence is 3.76, similarly the average score for *“silence through a belief that nothing will change”* is 3.79.

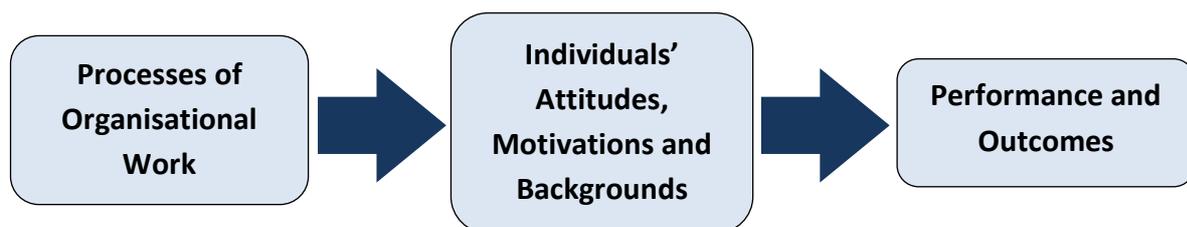
Making improvements is reported as high, with an average score of 4.73. This suggests individuals demonstrate proactive and promotive behaviour at work, with the aim of making improvements and achieving organisational goals.

5 RELATIONSHIPS BETWEEN KEY MEASURES

5.1 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 analysis.²⁶ The general model shown in Figure 1 is adopted for testing relationships. In regression models, we control for the effects of gender, age and tenure in service.

Figure 1: A General Model for Testing



5.2 The Impact of Fairness Perceptions

As can be seen in Table 2, fairness perceptions positively impact perceptions of organisational support, positive culture and mission importance. Organisational pride and job satisfaction increase when perceptions of fairness are higher. Public service motivation, engagement and making improvements are also positively impacted by fairness perceptions. Moreover, levels of emotional energy increase when fairness perceptions are high, and ego depletion decreases. When perceptions of fairness are higher, individuals engage in more voice behaviour and the fear of speaking up reduces.

²⁶ Hayes (2014)

Table 2: The Impact of Fairness Perceptions

Measure	Effect
Perceived Organisational Support	+++
Positive Culture	+++
Public Service Motivation	+
Job Satisfaction	+++
Organisational Pride	+++
Engagement	++
Mission Importance	++
Emotional Energy	++
Ego Depletion	--
Silence (Fear)	--
Making Improvements	+
Voice Behaviour	+

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

Figure 2 illustrates that fairness perceptions have a positive impact on perceived organisational support, which in turn positively influences emotional energy, job satisfaction and making improvements.

Figure 2: The Importance of Fairness Perceptions

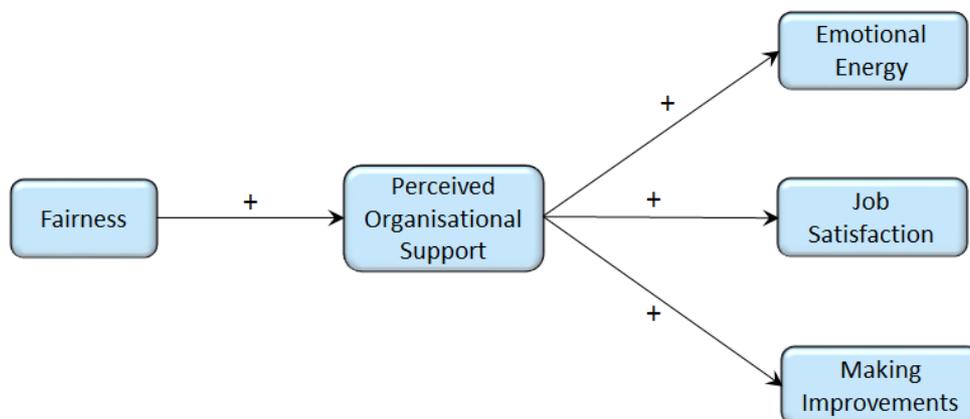
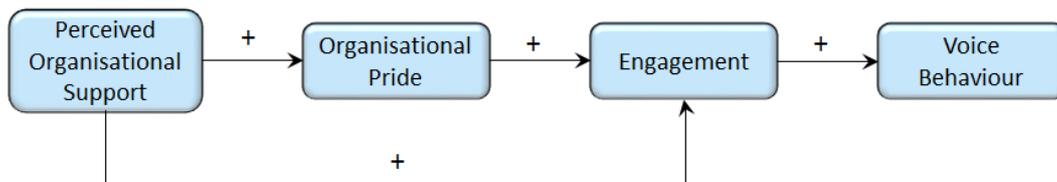


Figure 3 illustrates that perceived organisational support leads to organisational pride, which in turn leads to individuals becoming more engaged in their work, and thus demonstrate more voice behaviour. This model also shows that perceived organisational support leads directly to engagement.

Figure 3: The Importance of Perceived Organisational Support



5.3 Factors Influencing Making Improvements

Table 3 shows the factors that positively affect individuals' making improvements for the service. Making improvements relates to individuals attempting to find solutions to organisational problems through making small changes to working procedures and introducing new working methods in their jobs. As can be seen, making improvements is found to be positively influenced by mission importance, public service motivation and engagement. Organisational pride and empowering leadership also have a positive relationship with making improvements. In addition, perceptions of fairness and organisational support are found to be positively related to individuals making improvements at work.

Table 3: Factors Influencing Making Improvements

Measure	Effect
Mission Importance	+
Procedural Justice (Fairness)	+
Perceived Organisational Support	++
Empowering Leadership	+
Public Service Motivation	++
Organisational Pride	+
Engagement	++

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

5.4 Factors Influencing Voice Behaviour

As can be seen in Table 4, factors that positively influence voice behaviour include empowering leadership, public service motivation and mission importance. Perceived organisational support and organisational pride also positively influence voice behaviour. Whereas, ego depletion and silence²⁷ reduce individuals' levels of voice behaviour.

Table 4: Factors Influencing Voice Behaviour

Measure	Effect
Mission Importance	+
Perceived Organisational Support	+
Empowering Leadership	++
Public Service Motivation	++
Organisational Pride	+
Silence (Fear)	-
Silence (Nothing will change)	-
Ego Depletion	--

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

²⁷ *Fear and no change* dimensions of silence.

5.5 The Impact of Experienced Co-Worker Undermining Behaviour

Table 5 shows the very negative impact that experiencing undermining behaviour from co-workers has on individuals. As can be seen perceptions of organisational support and fairness reduce when individuals experience undermining from their co-workers at work. Similarly, empowering leadership, positive culture and organisational pride also reduce when levels of experienced undermining behaviour are higher. Importance of mission, job satisfaction and role clarity decline when individuals have received undermining from co-workers. When individuals experience undermining behaviour from their co-workers, mindfulness, emotional energy and positive emotions will decrease. Ego depletion, fear of speaking up and negative emotions increase when experienced undermining behaviour is higher.

Table 5: The Impact of Experienced Co-Worker Undermining Behaviour

Measure	Effect
Perceived Organisational Support	---
Procedural Justice	---
Empowering Leadership	--
Positive Culture	---
Organisational Pride	--
Mission Importance	--
Job Satisfaction	--
Role Clarity	--
Mindfulness	--
Ego Depletion	+++
Emotional Energy	---
Silence (Fear)	++
Negative Emotions	+++
Positive Emotions	--

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

Figure 4: The Impact of Experienced Co-Worker Undermining Behaviour

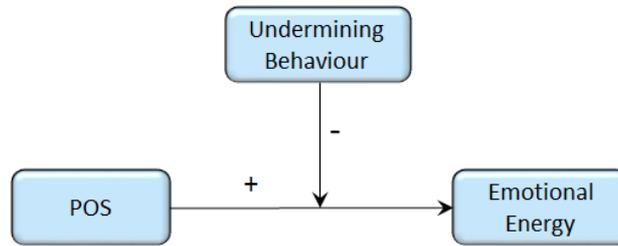


Figure 4 suggests that when individuals feel supported by the service, their emotional energy will increase. However if individuals experience undermining behaviour from their co-workers, their emotional energy will decline, even if individuals feel supported by the organisation.

Figure 5: The Impact of Experienced Co-Worker Undermining Behaviour

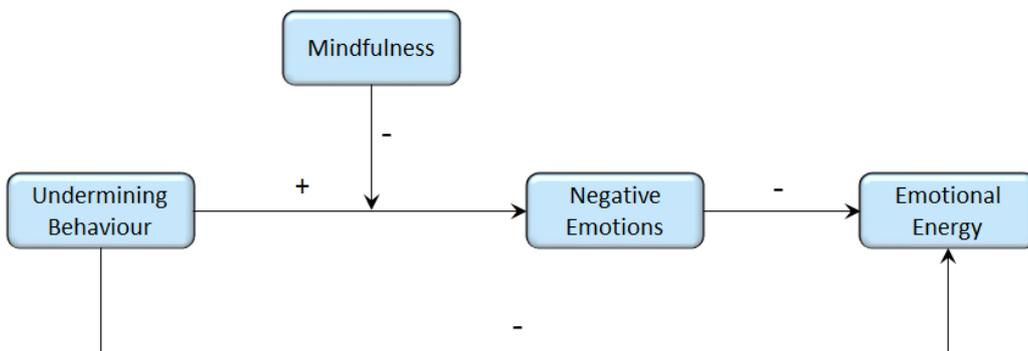
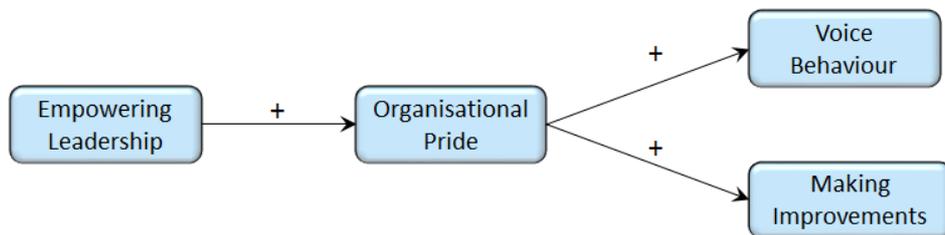


Figure 5 illustrates that when individuals experience undermining behaviour from co-workers it leads to negative emotions, which in turn leads to reduced emotional energy. However if individuals are mindful, this will buffer the adverse effect. Figure 5 also shows that there is a direct negative relationship between undermining behaviour from co-workers and emotional energy.

5.6 The Impact of Empowering Leadership

Figure 6 illustrates that empowering leadership predicts voice behaviour and making improvements through organisational pride. It suggests that when individuals receive empowering leadership from their immediate supervisors, it leads to them experiencing higher organisational pride, in turn this positively relates to individuals engaging in voice behaviour and making improvements.

Figure 6: The Impact of Empowering Leadership



6 SUMMARY

Public service motivation, empowering leadership, job satisfaction, engagement and organisational pride are at high levels.

Moral identity and mission importance are very high.

Emotional energy is found to be generally positive.

Preparedness to make improvements and voice behaviours are high.

Role clarity is reported as high.

Relational justice is higher than procedural justice. Procedural justice is an area for consideration for improvement.

Although it is often not seen by individuals as harmful, awareness of the negative impacts that undermining has on people, and it should be discouraged and reduced as much as is possible in the workplace.

