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# **Procedural Justice, Identity, Reciprocity and Behaviour**

*The Importance of Fairness for Employee Behaviour in*

*Emergency Services*

**Master of Arts (MA) by Research**

Thesis Submitted to Durham University

**Natalie Jayne Brown**

**Z0969444**

June 2018

Word Count: 31,597



## **DECLARATION**

**I hereby declare that this thesis was composed by myself and that the work is my own.**

**Natalie Brown**

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## **Abstract**

This thesis examines the relationship between procedural justice and positive employee behaviour, and is comprised of two studies. Study 1 draws upon social identity theory and social exchange theory, and examines the two as competing routes for explaining the relationship between procedural justice and work engagement. Data from 347 employees suggests that organisational pride and perceived organisational support are found to be mediators of this relationship. Drawing upon self-concept theory, Study 2 investigates employee collective self-concept as an important mediator for the relationship between procedural justice and ethical voice behaviour. Data from 239 employees and their co-workers suggests that procedural justice is positively related to ethical voice behaviour, and that employee collective self-concept fully mediates this relationship. Individual self-concept and relational self-concept were controlled for in the mediation model, and the results show that individual self- and relational self-concept were not found to mediate the relationship between procedural justice or ethical voice behaviour.

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I would also like to thank my family who have been an incredible support system for me throughout my post-graduate degree; they have believed in me at times when I didn't believe in my self – the strength they have given me has been unparalleled.



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## Chapter 1 Introduction

The current state of the public sector is one of austerity. The public sector has undergone budget cuts and, as a result, has found themselves in a challenging environment. There are expectations for police forces and fire services to deliver more, while having reduced resources (Her Majesty's Inspectorate of Constabularies, 2014a). As a result, police forces and fire services have undergone organisational restructuring and reduced their number of employees (e.g. between 2010/2011 and 2014/2015 the number of police officers reduced by nine percent and police staff by 14 percent) (Home Office, 2015), with the aim to improve efficiency and performance. Overstretched workforces are expected to 'achieve more with less' whilst facing changes in demands and their environment, with the added pressure of acting with integrity. Within the police and fire sector, there is growing concern as to how these changes will influence individuals' attitudes and behaviours, and the service they deliver to the public (Her Majesty's Inspectorate of Constabularies, 2014b). It has been suggested the police and fire services require innovation and cooperation from their employees in order to become adaptive to the challenges they face, with the aim of 'achieving more with less'. Due to the change to the structure of teamwork and organisational challenges, discretionary effort towards the organisation proves more critical than ever. The literature suggests organisations with high abilities and competence employ individuals who are willing and prepared to engage in discretionary behaviour (e.g. Organ, 1988; Tyler & Blader, 2000). Further, it has been suggested that organisational failure can occur as a result of an absence of discretionary effort, in particular voice behaviour (Morrison, 2014). Academic research suggests that in order to increase discretionary effort in work teams, individuals must perceive the workplace to demonstrate fairness; in turn,

this will encourage individuals to exhibit cooperative behaviours (Lind, 2001). The research questions posed in this thesis address growing concerns within the policing and fire community; of how to encourage increased engagement, discretionary effort and ethical behaviour from employees to maintain service delivery.

Her Majesty's Inspectorate of Constabularies (HMIC) is the inspectorate body in policing, they independently assess and report on the areas of effectiveness, efficiency and legitimacy for 43 police forces in England and Wales; their principal role is to promote improvements in policing. HMIC defines effectiveness as "an assessment of whether appropriate services are being provided by each police force and how well those services work"; efficiency as "an assessment of whether the manner in which each force provides its services represents value for money"; and legitimacy as "an assessment of whether, in providing services, each force operates fairly, ethically and within the law" (HMIC, 2017a: 38). Within the legitimacy arena, HMIC identifies fairness as an important workplace factor that influences officer and staff attitudes (HMIC, 2014a). This was further emphasised through their recognition of the importance of organisations treating their people fairly and with respect, in addition to the acknowledgement that organisations need to do more in order to reduce the perceptions of unfair treatment at work (HMIC, 2014a). The justice literature supports this viewpoint. Adams (1965) states that individuals' attitudes and behaviours are guided by their experience of fair or unfair treatment at work. Moreover, Tyler and Blader (2003) state that justice is substantial factor in its ability to shape individuals' thoughts, feeling, and behaviour, and they concluded that individuals utilise signals and information received from procedural justice to establish and evaluate their own identity (Tyler, Boeckmann & Smith, 1997). Prior research has found that individuals use fairness perceptions to evaluate the organisations' attitude towards them (Lind, 2001;

Greenberg & Cropanzano, 1993). When fairness is perceived as high, this communicates a sense of inclusion, unity and cohesion, while when fairness is perceived as low, it signals a risk of being exploited and excluded (Lind, 2001; Greenberg & Cropanzano, 1993).

The area of organisational justice has grown in its popularity over the past four decades, and it has found a secure place in the organisational literature (Blader & Tyler, 2003). The growth of the interest in workplace fairness is a result of the positive outcomes it is associated with; organisational justice research assists the understanding of how desirable organisational outcomes can be achieved (Colquitt, LePine, Piccolo, Zapata & Rich, 2012; Lavelle, Rupp & Brockner, 2007; Lavelle, Brockner, Konovsky, Price, Henley & Taneja, 2009a). For example, organisational justice has been linked to a range of organisational outcomes including job satisfaction (McFarlin & Sweeney, 1992), organisational commitment (Colquitt, Conlon, Wesson, Porter, & Ng, 2001), organisational citizenship behaviours (OCBs) (Cohen-Charash & Spector, 2001) and discretionary effort (Tyler & Blader, 2000). The dimension of organisational justice focused on in this thesis is procedural justice. Organisational procedural justice was chosen as prior research has demonstrated that it has the largest positive impact on employee behaviour and motivations, when compared to other dimensions of organisational justice (e.g. distributive, interpersonal, informational) (see Bradford, Quinton, Myhill & Porter, 2014; Bradford et al., 2014; Colquitt, 2001; Cohen-Charash & Spector, 2001). In this thesis, the approach of McFarlin and Sweeney (1992) and Cohen-Charash and Spector (2001) is followed, and the dimension of organisational justice measured, due to its larger impact on organisational outcomes and work performance, is procedural justice. This thesis follows the definition of Cohen-Charash and Spector (2001: 279), who define procedural justice as “the perceived fairness of the process by which outcomes were arrived.” Prior research has found that when the workplace is perceived as

fair (high procedural justice) employees exhibit more positive attitudes, such as towards serving the public (Myhill & Bradford, 2013), and positive behaviours, such as job performance (Konovsky & Cropanzano, 1991), and organisational commitment (Colquitt et al., 2001).

Tyler and Blader (2003) suggest that procedural justice provides insight into individuals' motivations to engage in cooperative behaviours in groups. It shows what individuals are seeking to gain when they immerse themselves and identify with groups; this illustrates the importance of justice in social settings (Lind, 2001). This is because perceptions of fairness influence peoples' social identities with groups, and thus impacts on individuals' attitudes, values and behaviours. This reinforces the importance of procedural justice at work, as procedural elements of fairness consist of information individuals use to evaluate group status (Deng, 2016) and to decide where to invest their social identity (Tyler & Blader, 2003). If a group treats its members and others fairly, individuals will perceive the group to be higher status (Tyler & Blader, 2000). When a group is deemed to have high status, individuals will endeavour to invest their social identity into said group as they seek positive information from their group membership to form their own self-image (Tyler & Blader, 2001) and self-esteem (Tyler & Blader, 2000; Tyler, DeGoey & Smith, 1996). Social identity has the ability to encourage positive employee behaviour as group members will endeavour to ensure the high status of the group is maintained (Bartel, 2001), and because they believe their cooperative behaviours will not be exploited (Colquitt et al., 2012); in essence, fair treatment of group members and others cultivates positive behaviour through the activation of social identity. To support this, it has been suggested that fair treatment determines members' identification and relationship with the group which prime cooperative behaviours that contribute to the group (Tyler & Blader, 2001). Moreover, it is

known that status judgements are antecedents of cooperative behaviours; this reinforces the importance of procedural justice in the formation of effective high performing groups and cooperative behaviours (Tyler & Blader, 2001). To further support this, a study done by Blader and Tyler (2009) found procedural justice is positively related to social identity. Another study by Bartel (2001) has found that social identity generates high levels of cooperative behaviours.

A fundamental dilemma for individuals is whether we look after ourselves or cooperate with others (Van den Bos & Lind, 2001). If we cooperate with others we can achieve more, but the contribution to others' interests involves exposure to the risk of being exploited (Colquitt et al., 2001; Lind, 2001). As such, a common idea is that cooperative behaviours are motivated by synergistic purposes of aiding performance and positive outcomes. It has been proposed that cooperation and discretionary effort are fuelled by individual desires to develop a positive sense of self, through utilising identity relevant information supplied by membership of a collective and its members (Tyler & Blader, 2001). Lord and Brown (2004) suggest that information provided in the broader social environment affects individuals' self-concept. This is supported by Tyler and Blader (2001) who suggest that individuals take information from group memberships to make judgement of themselves. As a result, individuals will cooperate and display discretionary effort to maintain the status of the group as to enhance their own self-image.

Capabilities of a group are improved when its members demonstrate positive behaviour that aid the performance of the group, through helping and improving its functionality and effectiveness (Tyler & Blader, 2000). These behaviours, however, cannot be expected or presumed. Often, factors including 'self-interest' and retaliation may be present and detract



from functionality. This shows the importance of understanding the antecedents of positive behaviours, and how to minimise the factors which negatively impact cooperation. Individuals' attitudes and values are influenced by identity, and are known to predict discretionary effort. Through this, we can explain individuals' motivations to engage in discretionary positive behaviour in groups.

The employee behaviours of interest in the study are engagement, voice behaviour and ethical voice behaviour. Engagement, as tested in this study, is defined as an individuals' full investment of themselves in their work role, in terms of their emotional, cognitive and physical energies (Kahn, 1990; Rich, LePine & Crawford, 2010). Engagement has been recognised as an important motivational concept that increases job performance and provides organisations with increased performance (Rich et al., 2010). For individuals to be engaged in their work, it is suggested that they must feel their job has meaning, that their workplace is psychologically safe, and that they have the resources required to complete their work (Kahn, 1990). Voice behaviour can be defined as "promotive behaviour that emphasizes expression of constructive challenge intended to improve rather than merely criticize" (Van Dyne & LePine, 1998: 109). It can be thought of as individuals sharing information and knowledge (Collins & Smith, 2006), speaking up with work-related suggestions for organisational improvements (Detert & Burris, 2007; Liang et al., 2012; Morrison, 2011) and taking initiative to develop new products and services (Baer & Frese, 2003); as such, going beyond what is expected of them in their formal job requirements. This leads to organisations increasing their performance through facilitating learning, developing and innovation (Morrison & Milliken, 2000). Before speaking up, individuals evaluate the potential organisational and individual benefits that may be achieved through engaging in voice behaviour (Liang et al., 2012). The intention of this discretionary effort is

to make improvements to existing practices and procedures, which in turn will benefit the organisation by aiding its performance and enhancing service to the public (Detert & Burris, 2007). Ethical voice behaviour refers to the communication between individuals and their work teams, with a particular focus on integrity and ethical behaviour. It investigates the extent to which individuals are prepared to approach and talk to colleagues if they perceive them to be acting unethically or with a lack of integrity (Hannah & Avolio, 2010; Lee, Choi, Youn & Chun, 2015). The aim of ethical voice behaviour is to ensure the organisation operates more ethically, particularly at an employee level. As such, this measure was included as a proxy of ethical behaviour demonstrated by employees. It is believed that the examination of the relationship between procedural justice and these employee behaviours will not only expand our understanding of the impact of procedural justice in organisational settings, but also offers a substantial theoretical perspective for explaining employee engagement, discretionary voice behaviour and ethical conduct in the workplace.

This study aims to establish relationships between procedural justice and positive employee behaviours, by understanding through which processes this relationship occurs. The relationships and hypotheses were drawn from theoretical frameworks, including the group engagement model, social identity theory, social exchange theory and self-concept theory. To test the hypotheses, path analysis using Mplus 8 is employed to establish the mediating variables between procedural justice and employee engagement, discretionary effort and ethical behaviour, in the respective studies.

### **The Purpose and Aims of this Study**

This study will examine procedural justice and its ability to explain employee discretionary behaviour and ethical behaviour. The purpose of this study is to investigate this relationship

in the context of fire and rescue and policing, thus consolidating the importance and utility of organisational fairness across emergency services (e.g. Bradford et al., 2014). To support this, following the announcement that the government intends to transfer Fire and Rescue Services to the Home Office in order to encourage collaborations between police and fire services (Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS), 2017), this reinforces the need for public sector organisations to reconsider more cost-effective options, such as sharing resources and knowledge sharing. The purpose of these collaborations is to support and encourage knowledge transfers and sharing of best practice, and to ensure seamless collaboration between police and fire and rescue services that will enhance service to the public through facilitating improvements and establishing good practice (HMICFRS, 2017). Therefore, this thesis will provide understanding and support for the achievement of increased organisational performance for both policing and fire and rescue services, through establishing how individuals respond to organisational procedural justice and ultimately how this leads to discretionary effort and ethical conduct. It is hoped the results of this study will add to practitioner knowledge of the importance of organisational justice and will contribute to existing theory in justice literature; including social identity theory, social exchange theory and self-concept theory. The aim of this thesis is to add to the body of evidence to support the assertion from the HMIC which states the importance of fairness for enhancing performance in police forces (HMIC, 2014a).

### **Research Questions**

The research will attempt to answer the following research questions:

- Is fairness an important factor for discretionary effort and ethical behaviour in policing and the fire service?

- What is the importance of social exchange and social identity as mediators of the impact of fairness on engagement and discretionary effort?
- What is the importance of self-identity as a mediator of the impact of fairness on ethical behaviour?

### **The Contributions of this Study**

This thesis consists of two main studies; Study 1 is conducted in a fire and rescue context and explores the twin processes of social exchange and social identity, with a sample size of 347, while Study 2 investigates the process of self-identity. The data for Study 2 was multi-source, in that it was obtained from self-report surveys and co-worker rated surveys that were matched using identification codes. The total number of match dyads in Study 2 is 239.

This thesis makes a number of contributions. Firstly, theoretical contributions are shown below:

1. In their Group Engagement Model (GEM), Tyler and Blader (2003) suggest that an increase in social identity will relate to an increase in work engagement. However, this variable was not included in their model. Study 1 contributes to GEM theory by testing the relationships between procedural justice, social identity and engagement.
2. The GEM examines the impact of organisational fairness on employee discretionary effort using social identity theory. In Study 1, both social identity theory (as used in the GEM) and social exchange theory (Eisenberger, Huntington, Hutchinson & Sowa, 1986) are used to examine relative impacts of these two different perspectives. Specifically, the strength of mediation effects of organisational pride (Tyler & Blader,

2003) and perceptions of organisational support (Eisenberger et al., 1986) are compared, for the relationship between procedural justice and engagement.

3. The most commonly used scale to measure engagement is the Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova, González-Romá & Bakker, 2002). However, the UWES has been criticised as it is conceptualised as being the opposite of burnout, as opposed to following the approach of Kahn (1990) (Newman & Harrison, 2008; Rich et al., 2010). Rich et al. (2010) developed an 18-item scale. They argued that this scale is more appropriate as it is based on the original conceptualisation of work engagement of Kahn (1990). In Study 1, a shorter version of the scale (9-items) was tested and found to be valid.
4. Study 2 contributes to the procedural justice literature by identifying ethical voice behaviour as an outcome. While much prior research has demonstrated procedural justice as an organisational factor to increase employee work behaviours, in this study procedural justice is expanded to prominently explain its positive impact on employees' ethical conduct, such as ethical voice behaviour. In doing so, this study provides an initial step to link procedural justice with workplace ethics, and more importantly, provide further empirical support in demonstrating the positive impacts of procedural justice on employees' work behaviours.
5. Study 2 also contributes to the existing literature by adding a new substantive mediator to explain how procedural justice promotes employee work behaviours. Drawing upon self-concept theory, employees' collective self-concept is found to mediate the positive association of procedural justice and ethical voice behaviour.

Secondly, the practical contributions are as follows:

1. There is extensive research in policing examining the impact of treating members of the public fairly and for the impact of procedural justice for the achievement of positive citizen behaviours and attitudes. It seems strange that, there is limited research in policing examining the impact of fairness on police employees (for an exception, see Bradford et al., 2014). This research builds on the work of Bradford et al. (2014) which investigated the impact of organisational fairness on police officer extra-role activity. From a practical perspective, this research will add to the understanding as to how organisational procedural justice affects police staff discretionary effort and ethical behaviour, and the mechanisms through which this occurs. The results highlight the importance for individuals to perceive fair treatment at work, thus implying that organisations should actively aim to reduce perceptions of unfair treatment at work (HMIC, 2014a). Moreover, the results of this thesis will provide strong support for the HMIC legitimacy audits, and will provide evidence to support that fairness at work is an important factor in cultivating positive employee behaviour (HMIC, 2014a).

To conclude, Study 1 examines the relationship between procedural justice, employee engagement and voice behaviour through two competing routes; a social identity route and a social exchange route. In Study 2, self-concept is explored as a mechanism through which procedural justice leads to ethical voice behaviour. Thus, the results of this thesis will add to the understanding of the mechanics between procedural justice and positive employee behaviour in the context of emergency services. The first study is in the context of fire and rescue, and the second is in the context of policing.

## **The Structure of this Thesis**

This chapter has introduced the topics that will be examined in this thesis and their importance, both theoretically and practically. Moreover, the purpose, aims and contributions have been discussed.

In the next chapter (Chapter 2), the relevant theory and literature used in this thesis are presented and discussed. This chapter starts with an introduction to organisational justice and further goes on to discuss the dimensions of procedural justice. Tyler and Blader's (2003) social identity theory is drawn upon and their idea that pride leads to engagement is explored. Additionally, Eisenberger et al.'s (1986) social exchange theory, which suggests perceived organisational support is an important factor for predicting work engagement, is also considered. Tyler and Blader's (2003) Group Engagement Model (GEM) is explored and extended through adding a social exchange path alongside the original social identity path, resulting in a two-path completing model. This chapter ends with a discussion of the theory of self-concept (Lord, Brown & Freiberg, 1999; Selenta & Lord, 2005; Lord & Brown, 2004), and its linkage to organisational fairness.

In Chapter 3, the methodological overview, the research philosophies, paradigms and design are discussed. The idea of common method variance is then introduced, including its definition, sources and remedies. In addition, ethical issues faced in this thesis are discussed. Following that, statistical methods are introduced: identification of outliers, statistical approach and justification for the use of bootstrapping.

Chapter 4 presents the results and discussion of Study 1. Study 1 draws upon social identity and social exchange theory. The hypothesised model in this study implies that procedural justice will lead to engagement and voice behaviour, through two competing routes

(organisational pride and perceived organisational support). The discussion of this study will compare the completing routes and if the routes are significantly different.

Chapter 5 presents the results and discussion of Study 2. Study 2 explores the relationship between procedural justice and ethical behaviour, through the process of self-concept. The three levels of self-concept are investigated, and the significant, hypothesised route is discussed.

This thesis closes with a conclusion chapter, which summarises the findings, provides conclusions and refers to the initial aims and contributions of the research. This chapter will review the results which provide support for the importance of procedural justice in leading to employee engagement, discretionary voice behaviour and ethical behaviour. Furthermore, strengths, limitations, ideas for future research and implications are presented.



## Chapter 2 Literature Review

### Introduction

The studies in this thesis draw upon the following theories: fairness heuristic theory (Lind, 2001), social exchange theory (SET) (Eisenberger et al., 1986), social identity theory (Tyler & Blader, 2001; Blader & Tyler, 2009; Hogg, 2001), the group engagement model (GEM) (Tyler & Blader, 2003) and self-concept theory (Lord et al., 1999; Selenta & Lord, 2005; Lord & Brown, 2004).

The following section will start with a brief description and history of organisational justice, followed by a progression towards organisational procedural justice as the main theoretical focus in this study. The key theories, as previously stated above, will then be introduced and discussed in further detail.

### Organisational Justice

Organisational justice research assists the understanding of how desirable organisational outcomes can be achieved (Colquitt et al., 2012; Lavelle et al., 2007; Lavelle et al., 2009a). Organisational justice is considered to be socially constructed and is used to explain the role of workplace fairness (Colquitt et al., 2001). Justice can be conceptualised as a complex organisational process with three dimensions: procedural, distributive and interactional (which has also been argued to consist of two separate dimensions of interpersonal and informational justice components) (Colquitt, 2001). Firstly, procedural justice is an individuals' subjective perception and is concerned with the fairness of the procedures used to determine the outcomes (Cohen-Charash & Spector, 2001). It has been suggested that procedural justice is focused on the employee's cognitive map of events in the organisation,

and that it comes before the distribution of the reward (Leventhal, 1980). Procedural justice has been defined as “an individual’s evaluation of procedural components of the social system that regulate the allocative process” (Leventhal, 1980: 5). Secondly, distributive justice concerns the fairness of the allocated outcomes and is related to the perceived delivery of fairness, such as performance appraisals (Cohen-Charash & Spector, 2001; Greenberg, 1990). It is suggested that individuals base their perceptions of distributive justice by evaluating the extent to which they believe the ratio between their inputs and their outcomes is fair, in comparison to others (Adams, 1965; Colquitt et al., 2001). Thirdly, interactional justice, which is orientated around the interpersonal practices and communication between managers and employees (Cohen-Charash & Spector, 2001), encompasses both interpersonal and informational facets of justice (Greenberg & Cropanzano, 1993; Muzumdar, 2012).

### **History of the Organisational Justice Literature**

Early justice research was used to explain rebellious behaviours, including riot behaviour, theft, sabotage and resistance (Crosby, 1976; Gurr, 1970). Prior to 1975, much of the justice literature was focused on distributive justice, derived from Adams (1965), who used social exchange theory to explain how fairness operates in the workplace. Adams (1965) suggests that fairness is calculated by understanding the ratio of contribution against outcomes, and comparing that ratio with another. Following Adams (1965) work, it was suggested that when individuals maintain control over the procedure of decisions, they will be prepared to sacrifice control in the decision-making stage (Thibaut & Walker, 1975). They continued to suggest that perceptions of fairness depend on whether the individual has the opportunity to present their argument and ideas, this is known as the ‘process control’ effect, or ‘voice’

effect (Folger, 1977; Lind & Tyler, 1988). Leventhal's theory (1980) recognised that individuals have concerns over organisational procedures, as a result, he conceptualised procedures into needing six criteria in order for concerns of unfairness to be mitigated. He proposed that when the six criteria are upheld, the individual would deem the procedure fair. Leventhal's (1980) six criteria recommend that the procedure should be applied consistently, have bias suppression, ensure that accurate information is used, have the option to correct inaccuracies, conform to ethical standards, and ensure the ideas and opinions of different groups/people affected by the decision have been considered.

In 1986, Bies and Moag introduced the idea of interactional justice, which focuses on the interpersonal treatment perceived by individuals and communication between managers and employees when procedures are implemented (Cohen-Charash & Spector, 2001). They explained interactional justice as being comprised of two types of treatment: interpersonal and informational. Interpersonal treatment is characterised by politeness, dignity and respect by those in authoritative positions who are involved in the allocation of outcomes, whereas informational treatment concerns the information that is communicated to individuals regarding the justification of the way in which the outcomes are arrived and procedures are conducted (Colquitt et al. 2001).

Since the 1990s, organisational justice – procedural justice in particular – has been broadly applied and investigated in social science literature; reinforcing its importance (Blader & Tyler, 2003). Procedural justice has been referred to as fundamental to organisations due to the variety of outcomes fair procedures are considered to predict (Blader & Tyler, 2003). Research has identified procedural justice as an antecedent of behaviours; for example organisational commitment (Colquitt et al., 2001), organisational citizenship behaviours

(Cohen-Charash & Spector, 2001) and positive attitudes in police officers towards serving the public (Myhill & Bradford, 2013). In addition, Cohen-Charash and Spector (2001) and Muzumdar (2012) suggest procedural justice relates to job performance. The agent system model, supported by Cropanzano, Prehar and Chen (2002), suggests perceptions of procedural justice impacts individuals' evaluations of the organisation. From this, we can predict that fairness will relate to organisational-level variables, including perceptions of organisational support and organisational pride. These evaluations of the organisation guide individuals' reactions and behaviours directed towards the organisation (Cropanzano & Greenberg, 1997). The academic literature provides a host of support in suggesting procedural justice's role as an antecedent for employee attitudes, behaviours and organisational outcomes (Colquitt et al., 2012; Dijke, De Cremer, Mayer & Quaquebeke, 2012; Lambert, Hogan, Jiang, Elechi, Benjamin, Morris, Laux & Dupuy, 2010). The shift of interest in the relationship between fair procedures and negative behaviours towards positive outcomes has allowed hypotheses to be drawn and tested between individuals and how they respond to groups; this involves responses to justice and injustice in work teams, and how this encourages or discourages engagement and cooperative behaviour (Tyler & Blader, 2003).

To confirm, the dimension of organisational justice focused on in this study is procedural justice, due to its larger impact on organisational outcomes (see McFarlin & Sweeney, 1992; Cohen-Charash & Spector, 2001). Procedural justice was chosen as prior research has suggested that it has the largest positive impact on employee behaviour and motivations, when compared to other dimensions of organisational justice (e.g. distributive, interpersonal, informational) (see Bradford et al., 2014; Colquitt, 2001; Cohen-Charash & Spector, 2001).

## Procedural Justice

### Defining Procedural Justice

Cohen-Charash and Spector (2001: 279) define procedural justice as “the perceived fairness of the process by which outcomes were arrived.” The importance of procedural justice to individuals arises from their perceptions of reward allocation (Leventhal, 1980) and whether they will be fairly treated in line with their perceptions of what they deserve (Cropanzano & Rupp, 2008). Procedural justice affects individuals’ perceptions of the social elements of decisions, which regulate the allocation stage (Leventhal, 1980), suggesting that individuals utilise information from procedural justice when evaluating social situations at work (Tyler et al., 1997; Van den Bos & Lind, 2002). When individuals perceive high levels of procedural justice, it indicates to them that they are valued and respected by the organisation (Lind & Tyler, 1988; Tyler & Lind, 1992). When individuals feel respected and valued, it primes their affiliation with their group, leading to the pursuit of shared goals (Tyler & Blader, 2001). The procedural foundations of fairness can be categorised into two areas; decision making and personal treatment. Individuals evaluate the fairness and quality of these two categories when shaping their identity. These elements of fairness are highly salient for individuals as they communicate if it is safe for them to identify with the group (Tyler & Blader, 2003). This suggests procedural justice is an antecedent of identity (Tyler & Blader, 2000; Tyler & Blader, 2003).

Fairness influences individuals’ cognitions, as well as having a large impact on behaviours that relate to accepting and respecting the organisation (Lind, 2001). An example of this can be seen in the work of Huo, Smith, Tyler and Lind (1996), who suggest that when individuals are fairly treated they are likely to trust the decisions made by the organisation, and as a

result, they are more likely to engage in organisational citizenship behaviours (OCB). Prior research suggests that when individuals perceive that they are treated fairly, they feel a duty to reciprocate through engaging in OCB (Organ, 1988; Ehrhart, 2004; Organ & Moorman, 1993; Colquitt et al., 2001).

### **Fairness Heuristic Theory**

Judgements of fairness have substantial impact on individuals' attitudes and behaviours, as it communicates to them whether or not it is safe to engage and invest in discretionary effort in social settings. It was through this observation that fairness heuristic theory was developed (Lind, 2001).

Research has shown that judgements of fairness are not purely based on the outcome, but they are also judged on the fairness of the process and procedure to the treatment (Lind, 2001). It has been recognised that reactions to fairness are stronger following the treatment rather than the outcome (Lind & Tyler, 1988; Tyler & Lind, 1992). In other words, this suggests that individuals react according to the way in which they are treated, not on the perceived favourable outcome. It is on this ground that the fairness heuristic theory was born. The purpose of fairness heuristic theory is to answer why the procedural element is deemed highly important for individuals when evaluating workplace fairness, and to identify the attitudes and behaviours that follow.

The *fundamental social dilemma* as termed by Lind (2001) involves two potential outcomes resulting from engaging and identifying with a group. He suggests that, firstly, it increases the accomplishment of goals, higher performance and provides opportunity for individuals to invest their identity securely. However, secondly, he suggests that the group to which the individual identifies may restrict their freedom, threaten their self-esteem through

exploitation and rejection, thus resulting in a loss of identity and a weakened view of self. In simple terms, individuals are exposed to risk when they identify with a group and when their own outcomes are contingent on the behaviour of others. Individuals expect that if they invest their energy and time into a group, the group will reciprocate and not exploit their cooperation. This dilemma naturally involves tensions, such as individuals wanting to act on their own individual interests and social morals; it is these tensions that constitutes to the existence of human beings (Lind, 2001).

Individuals utilise judgments of fairness as a heuristic device in order to gain trust in their group. This feeling of trust is then used to decide how to respond to demands placed upon them by the group and to guide their investment and membership in the group, particularly in the stage of establishing the benefits and costs of group membership (Lind, 2001). As a result, fairness can be considered as a social heuristic that guides individuals' attitudes, involvement and investment towards social groups. Therefore, it can be expected that individuals' responses and interests vary depending on the fair treatment they receive from the group. For example, individuals respond more positively and cooperatively towards authority when they perceive the treatment they receive is fair (Lind, 2001). It is proposed that these perceptions of fairness are derived from long-term relationships, as opposed to newer shorter-term relationships (Lind, 2001).

Fairness heuristic theory suggests that unfair treatment activates a person's "individual mode"; this mode implies their response to social scenarios will be motivated by self-interest. In contrast, it suggests fair treatment leads to the activation of a person's "group mode"; whereby their responses are motivated by the interests of the group. Further to this idea, the motivation behind "group mode" can also be considered in light of safety; fairness

represents security and reduces the risk of rejection and exploitation, and as a result leads to compliance due to the lowered risk of mistreatment (Lind, 2001). The role of procedural justice alternates to the individual depending on their concerns; for example when concerned with self-interest it acts as a reassuring mechanism, whereas when the concern is collective interest, procedural justice serves as a heuristic of information that informs responsibility for the group and signals group status (Deng, 2016).

Fairness heuristic theory (Lind, 2001) states that individuals' attitudes and behaviours are guided by the level of fairness they perceive from their organisation and other social contexts. The fairness perceptions are derived from routines (*baselines experiences*) which are subject to change depending on new events or interactions. In contrast, fairness theory (Folger & Cropanzano, 2001) suggests that fairness perceptions and evaluations are based on isolated events (*episodic experiences*). However, when evaluations of fairness are based on isolated events, the problem of negative asymmetry arises, meaning that those episodes of injustice are more prominent than fair treatment. Another concern between baseline and episodic experiences of (in)justice regards those accountable for the treatment, as it is known that individuals perceive managers to be more accountable for baseline than episodic experiences of justice/injustice (Barclay, Skarlicki & Pugh, 2005).

### **Multiple-Needs Model**

Cropanzano et al. (2001) argue that fair treatment meets three types of individuals' needs, they termed this the *multiple-needs model* which comprises instrumental, interpersonal and deontic models:

- ***Instrumental models*** of justice suggest that perceptions of organisational justice are associated with long-term outcomes. It is believed that people are motivated by self-



interest when dealing with others (Miller, 1999). The instrumental model in organisational justice states that people want control over their own outcomes if possible (Cropanzano et al., 2002), and by means of this have control over the process or decision maker (Thibaut & Walker, 1975) with the intention to maximise their own interests and outcomes.

- **Interpersonal models** of justice suggest that perceptions of fairness are used as a way of fulfilling individuals' social needs, such as maintaining positive relationships and belonging in valued groups. The interpersonal model involves gaining or losing psychological resources at the hands of the group, as such unfair treatment from a group may lead to an individual feeling excluded. This approach can be viewed as receiving psychological resources, such as self-esteem, as opposed to tangible outcomes.
- **Deontic models** of justice refers to the importance of fairness stemming from fairness for 'its own sake' (Crawshaw, Cropanzano, Bell & Nadisic, 2013). This model of justice is centric to the idea that people have preference to live in society whereby the systems through which it operates are ethical and just.

The instrumental model and interpersonal model identify two contrasting approaches and outcomes which individuals may endeavour to obtain when dealing with others in the organisation or group, whereas the deontic model recognises that individuals have a desire for treatment to be fair for ethical and moral reasoning (Crawshaw et al., 2013). The deontic model of fairness suggests that the concern individuals place on fair treatment at work stems from their innate ethical concern for receiving fairness at work 'for its own sake' (Folger et al., 2005; Crawshaw et al., 2013). This suggests that unfair treatment implies to

individuals that the organisation violates moral norms, and as a result employees will experience moral outrage or deontic rage (Folger, 2001; Bies, Barclay, Tripp & Aquino, 2016).

## Social Identity Theory

### Defining Social Identity Theory

Social identity theory can be used to explain why people follow and associate with groups, it can therefore be considered as a followership theory. Tajfel and Turner (1979:40) defined a group as “a collection of individuals who perceive themselves to be members of the same social category.” It can be assumed that individuals with a high identification with the group will invest higher levels of effort on behalf of the group as a direct expression of themselves, and not just with the intention of receiving resources from the group (Tyler & Blader, 2001). Tyler and Blader (2001) imply that individuals join and cooperate with their group as a way of developing a positive sense of self, as opposed to the common idea that individuals cooperate for synergistic purposes to achieve performance objectives.

Individuals use the feedback they receive from engaging in and cooperating with their group to form their identity (Tyler & Blader, 2003). Tyler and Blader (2003) suggest individuals’ self-worth is somewhat derived from the groups in which they belong. Individuals’ extent to which they will engage stems from how much they identify with their group, or how much resource they will gain from being a member of the group. Tajfel and Turner (1979) explain that individuals’ behaviour towards others is determined by their identity, suggesting that social groups inform their members of their identification in the social context and provide them with their self-image. Further, they suggest individuals aspire to obtain a positive self-

concept, this is achieved when individuals internalise their group membership (Tajfel & Turner, 1979).

Tyler and Blader (2001) suggest that the primary aim of group membership is to obtain desired resources, however such resources do not have to be material. Group membership can be evaluated through an individuals' desire to remain in their group. If individuals believe they are gaining from the group, they will be motivated to remain a member. The resources individuals aspire to gain from group membership do not necessarily need to be concrete. If the status of the group is high, individuals will endeavour to remain with their group as it feeds their evaluations of their self-worth, thus providing them with a benefit and reason to remain a member. Social identity theory supports this idea, by implying engagement is motivated by social identity information communicated by the group, which informs individuals' perception of self. To understand an individual's relationship with a group, you must understand the implications that group membership has on the individuals' self-concept.

Tyler and Blader (2000) suggest that pride is a reflection of one's assessment of a group. Further, they imply that individuals utilise feelings of pride of a group to form their evaluations of their own self-worth and self-esteem. The recognition that there is a positive relationship between pride and collective self-esteem indicates an association with group membership. Identification and pride motivate individuals to increase their levels of engagement in their role and perform discretionary behaviours that benefit the group (Tyler & Blader, 2003). Therefore, those who utilise high status and pride of their group to inform their personal self-esteem and self-worth will be more likely to engage in cooperative

behaviour (Tyler & Smith, 1999). Therefore, it can be expected that cooperation will be explained through the effects of social identity (Tyler & Blader, 2001).

Status assessments can come in the form of pride which refers to the judgements and evaluations individuals make about the worth and status of a group (Mael & Ashforth, 1992). This implies that those associated with high status groups will assess their own self-worth positively. Tyler and Blader (2001) suggest that pride positively relates to behaviours at a group-level, and that pride judgements influence individuals' relationship with a group, and the norms and values expressed by the group. In groups, collective behaviour depends on norms. Those who decide to ignore or abuse these norms will endure consequences as a result. Norms are dynamic, meaning they can change in the environment over time. Social norms can be considered as a set of rules for which behaviours are expected to follow, and are deemed acceptable by a group. In contrast to the collective-level, behaviour at an individual-level depends on the individuals' attitudes and values (Deng, 2016). Social identity is believed to influence individuals' values and attitudes (Tyler & Blader, 2003; Blader & Tyler, 2009), suggesting that group identification guides behaviour in groups.

### **Social Mobility**

Tajfel and Turner (1979) introduced the idea of *social mobility*, which they explain occurs when an individual is not satisfied with their membership with a social group and results in individuals seeking membership elsewhere to find a better alignment between themselves and the status of another group. Hirschman (1970) believed that success leads to upward social mobility, leading to progress up the social ladder whereby a successful individual will be accepted into a higher status group, this can be considered in terms of evolutionary individualism. In contrast, if individuals are overtly loyal towards their group, despite it

having a low status, individuals may become motivated to implement social creativity, instead of social mobility. The intention of social creativity is to increase group status over time, as an alternative to leaving the group.

### **Negatives of Group Membership**

Identifying with a group contains risks. The more individuals identify with a group, the more they will suffer when receiving negative feedback from members (Tyler & Blader, 2003; Brockner, Grover, Reed & Dewitt, 1992). These risks and vulnerabilities are greater when the status and worth of the group is undefined (Tyler & Blader, 2003), or if their role and inclusion within the group is unclear (Tyler & Lind, 1990).

### **Group Engagement Model (GEM)**

Individuals use perceptions of their work context, such as perceptions of fairness and organisational support, to inform their willingness to engage in their role at work, as it influences their internal motivations (Kahn, 1990). The GEM theorises that procedural justice is highly influential in impacting individuals' social identity, this is because fairness perceptions are evaluations of the treatment they receive from the organisation, and this treatment holds information highly relevant for creating pride in the organisation (Tyler & Blader, 2003). Tyler and Blader (2003) suggest that procedural justice provides individuals with a 'security' identity, as such when people feel a sense of security they are more likely to engage and identify with their group. Individuals are more prepared to fully immerse themselves in their role when they believe it to be safe from exploitation (Colquitt et al., 2012). The GEM derives social identity into three elements; pride, respect and identification, all of which are related to esteem and self-worth (Tyler & Blader, 2000; Tyler et al., 1996). When individuals identify with the group, they are more aware of the groups' values, which

leads to members conforming to the groups' ideals (Tyler & Blader, 2003). Pride and respect are evaluative elements of social identity (Blader & Tyler, 2009), suggesting that when individuals experience high levels of organisational pride their self-worth, identification and engagement in the organisation will increase. Identifying with a group provides people with a sense of self-worth and support, as they utilise the worth of the group as a source of affirmation. This suggests individuals can gain confidence through group membership (Tajfel & Turner, 1979).

Group membership provides individuals with information on which their views of self are formed (Tyler & Blader, 2001). When a member of a group, an individual will strive to maintain the status held in the group, to enhance their own status judgement and self-image, they will achieve this through increasing their work engagement. It is assumed that individuals who have invested their sense of self in a role will enhance their sense of self through improving their job performance (Chen, Ferris, Kwan, Yan, Zhou & Hong, 2013; Ferris, Lian, Brown, Pang & Keeping, 2010). This is supported by the GEM, which predicts that when an individual has a high identification with their group, they will be more prepared to engage in their group as this will aid group success, which in turn will enhance individuals' self-worth and social identity. In summary, identity judgments are important in influencing engagement, through impacting attitudes and values as they relate to discretionary effort (Tyler & Blader, 2003).

## **Social Exchange Theory (SET)**

### **Defining Social Exchange Theory**

Social scientists created SET through the observation that exchange appears to be about more than just a transactional exchange. Throughout history, it has been well established

that individuals increase their economic worth through engaging in exchanges, and it has been noted that such transactions can be used to establish interpersonal relationships between two or more parties (Fiske, 1991; Organ, 1990). Nord (1973: 421) defined SET as “an eclectic body of work which may promote integration of sociological and economic analysis.” Further, he explained that SET is relatively unique in its use in economic transactions, due to its emphasis on the initiation and maintenance relationships and social processes. Within organisational sciences, theorists have explained social exchange relationships relative to the quality and category of the relationship (e.g. Rousseau, 1995), in order to establish to root of the motivation.

Now, we can view social exchange relationships as a social bond characterised by trust between two parties (Cropanzano & Rupp, 2008). The importance of relationships can be illustrated through the idea that building high quality interpersonal relationships without authenticity and consideration of obligations towards those involved is difficult to create and maintain (Chavannes, 1883-1885). As a result, few attempts were made to integrate justice research with SET; to overcome this, SET was reframed to incorporate relationships. The work of Blau (1964) led SET in this new direction, resulting in reincorporating the importance and relevance of relationships. Blau’s (1964) work identified differences between economic and social interests and motivations; one of which referred to social relationships engendering feelings of trust and duty, whereas economic interest does not. He explained the motivation of such relationships is dependent on the type of relationship between the two parties engaging in the transaction. Early theorists discussed the self-interest model for human motivation (see Knox, 1963; Homans, 1958; Chavannes, 1883-1885). Chavannes (1883-1885) added that motivations may either be a triggered by duty or self-interest. Homans (1958) was more in favour of economic exchanges, explaining that

individuals' motivations to engage in exchanges involve little consideration of long-term implications. In contrast, Chavannes (1883-1885) argued that individuals' motivations to engage in exchanges involve knowledge and memories. Knox (1963) explained that a fundamental part of exchanges is happiness, not merely wealth. Homans (1958) supported this by suggesting those with economic motivations need to rehabilitate through exposure to non-material exchanges. These arguments illustrate the economic and sociological elements apparent in exchanges.

In organisational behaviour, SET is known as a fundamental conceptual paradigm (Cropanzano & Mitchell, 2005). Social exchange relationships involve social patterns that hold information relevant for making judgements of procedural justice (Cropanzano & Mitchell, 2005). Social exchange relationships occur in the workplace between employees and their employer when the employer signals through social patterns that they care for their employees. The notion of SET is that exchanges result in interpersonal relationship characterised by obligation and commitment, which over-time prove rewards to each party (Cropanzano & Mitchell, 2005). To add to this, Emerson (1976) suggested that SET has been conceptualised to involve interdependent, bidirectional interactions which inhabit obligations and a sense of duty. This implies that the interactions are dependent on the actions of those involved and their adherence to exchange rules and norms (Blau, 1964). These interactions have the ability to develop into high-quality, longer-term, open-ended relationships with mutual commitment. It has been argued that obligation, loyalty and commitment form stronger foundations to build working relationships than negotiations and bargaining (Molm, Takahashi, & Peterson, 2000).



SET can be used to explain individuals' actions and behaviours exhibited within their group, such as remaining in the group and adhering to rules (Thibaut & Kelley, 1959). SET implies that when individuals perceive that they are benefiting from being a member of the group, such as by gaining resources, they will cooperate and participate with the group; illustrating the exchange of effort and resources. This shows that the motivation behind an individuals' engagement in a group stems from is the provision of desired resources and benefits they will receive as a result.

### **Reciprocity**

Society is formed on the basis of relationships that are mutually beneficial (Knox, 1963). Chavannes (1883-1885) suggests that the foundations for socialisation are formed on profitable exchanges as they provide base for relations to occur. This is supported by the work of Malinowski (1922, *republished in 2002*) who expressed interest in the importance of reciprocity and returning favours in relationships. He further discussed the idea that reciprocity does not require an exchange of payment to take place; instead obligations are an apparent characteristic of communal relationships which result in mutual benefits. He further described relationships as encompassing social bonds which bind individuals with reciprocal obligations, making them follow norms and behaviour in a mutual manner. Gouldner (1960) referred to reciprocity as a moral norm, Nord (1973) extended this by suggesting it is also an internalised characteristic. Mauss (1925) added to Malinowski's work by proposing social exchange relationships have symbolic importance as well as economic importance. Moreover, Blau (1964) proposed the idea of self-interest as a motivator; however in 1968 he reviewed this and added that motivations other than self-interest are likely to play a role. Social exchange theorists expanded the work of Blau (1964), by

illustrating the economic and social exchanges on a continuum; one pole economic and the other pole social exchange. The economic relationship is characterised by the short-term, whereas, the social exchange relationship offers individuals longer-term, open-ended relationships that entail socioemotional goods, such as loyalty and support, which lead to identification with the group.

Reciprocity can be viewed as a transactional pattern that occurs in interdependent relationships and exchanges, as the outcomes from interdependent relationships are contingent on both parties' efforts, whereby something has to be received and returned (Gergen, 1969), of which the return cannot be bargained (Cropanzano & Mitchell, 2005). To support this, Molm et al. (2000) explained that although interdependent relationships involve exchange and mutual arrangements, they do not involve explicit bargaining. This implies the nature of the exchange can alter the nature of the relationship. Interdependent relationships are a defining factor of social exchange, and these mutual arrangements result in lower risk and enhanced efforts for each party (Molm, 1994). This process is often initiated by the employer (Cropanzano & Mitchell, 2005), and is likely to be continuous, meaning that one transaction involves one move from each party, then when a third move is made, the process starts again. However, when the process starts again, the transaction is built on a stronger foundation than the previous. This suggests the exchanges and obligations reach a fair equilibrium, which again reduces risk and implies people will get what they deserve (Cropanzano & Mitchell, 2005). Further, when conceptualising social exchange in terms of reciprocity, it implies that when an individual is credited by a donor, the recipient believes they must repay the donor to restore justice. Reciprocation works both ways, both positively and negatively. Individuals who are treated positively will

reciprocate positively, and those who are treated negatively will respond negatively (Cropanzano & Mitchell, 2005).

Individuals are likely to form social exchange relationships with their organisation on the ground of reciprocity, as they view the relationship as longer-term and do not expect instant repayment. This can be used as a way of explaining individuals' engagement in OCB (Organ, 1990), as entering into a relationship involves feelings of certain obligations as a way of repayment. When perceptions of fairness are higher, individuals are even more likely not to be expecting instant repayment, due to less fear of exploitation. This suggests fairness perceptions play an integral role in the relationship element of exchange. Due to their common interest in human interactions and exchanges, SET is frequently used as a lens to analyse justice literature (Cropanzano & Rupp, 2008). This is supported by Smith (1776) who viewed justice as the most important social characteristic.

In summary, employment can be considered as a form of exchange between employer and employee (Blau, 1964). In light of social exchange, interdependent relationships play an integral part in highlighting the importance of reciprocity. When initiating interdependent relationships, it is the employer that has the ability to start the relationship between employer and employee (Cropanzano & Mitchell, 2005). This implies that once the relationship is initiated, and once the employee perceives that the employer has invested effort in establishing such relationship, they are likely to return the effort and reciprocate to restore justice (Gergen, 1969). When considered in a practical view, reciprocation can be considered as a tool, as used by employers and employees, that has the ability to facilitate and cultivate positive outcomes, in that employers will receive increased levels of effort on their behalf as deposited by employees, and employees will benefit from positive treatment

and support from their organisation; both of which when considered together illustrate that obligation and repayment occurs from both parties involved in the social exchange relationship.

### **The Importance of Socioemotional Needs**

Exchanges do not have to merely involve material goods, exchanges can also be symbolic (Cropanzano & Mitchell, 2005). Concrete goods relate to short-term exchanges, whereas symbolic resources relate to open-ended, longer-term exchanges. Socioemotional needs are often met through the exchange of symbolic resources. Socioemotional needs are those related to an individuals' self-esteem and their social needs, such as feeling valued and respected, which are derived from symbolic resources. Social exchange relationships involve the exchange in psychological terms, as such they provide individuals with support which leads to their socioemotional needs being met (Cropanzano & Rupp, 2008). When parties reciprocate, the relationship quality increases and when these relationships are characterised by trust, this provides foundation for the employees' socioemotional needs to be met (Cropanzano & Mitchell, 2005; Molm et al., 2000). Prior research has reinforced the importance of communal, longer-term relationships involving socioemotional benefits as they place higher value on the needs of the other party (Clark & Mills, 1979). This work led to SET being used as a method of understanding longer-term communal relationships which lead to identification in groups (Clark & Pataki, 1995). In contrast, economic transactions are categorised as short-term, in that individuals expect repayment for their contribution immediately, suggesting socioemotional outcomes are not as clearly involved and that those individuals do not take into account the needs of others involved.

Social exchange relationships, between individuals and organisations, occur when individuals exchange effort at work for economic and socioemotional benefits from the organisation. Reciprocation happens when the individuals' socioemotional needs are met, as such when individuals believe the organisation demonstrates consideration for their efforts and well-being (Eisenberger et al., 1986), resulting in the individuals demonstrating higher levels of effort and loyalty to the organisation (Armeli, Eisenberger, Fasolo & Lynch, 1998). In simple terms, when individuals perceive their organisation to exhibit support for them, their socioemotional needs of approval and respect are satisfied (Cobb, 1976; Cohen & Wills, 1985). Those who have high need for respect and approval will place higher value on the social exchange relationships and find the exchange process motivating and rewarding, thus creating higher levels of obligation when compared to those with lower socioemotional needs. However, the social exchange relationship between the individual and the organisation can become damaged when individuals believe they have experienced injustice from the organisation (Organ, 1990). High perceptions of organisational support indicate to individuals that the organisation values their performance and is proud of their accomplishments, which makes individuals feel welcome in the workplace, and shows understanding when they face difficult situations at work (Eisenberger et al., 1986). These three elements meet individuals' need for esteem, affiliation and emotional support, respectively. To support this, Hill (1987) implied that individuals' need for esteem (e.g. praise and recognition), affiliation (e.g. affection) and emotional support (e.g. cognitive stimulation) act as part of social contracts, which have high levels of influence on guiding individuals' behaviour.

## **Perceived Organisational Support**

Perceived organisational support (POS) was first posed by Eisenberger et al. (1986), and since, scholars have studied POS and confirmed its ability to predict positive outcomes that benefit the individual, such as increased well-being, and that benefit the organisation, such as increasing employee orientation towards to organisation (Eisenberger & Stinglhamber, 2011).

Individuals may perceive organisations as owning human-like qualities, which as a result leads to the relationships being not purely between humans, e.g. between a leader and their follower. Instead, the organisation takes the form of an exchange partner in the relationship between the individual and the organisation (Lavelle, McMahan & Harris, 2009b). Perceived organisational support captures this idea. If individuals desire such relationships, and the organisational context provides a foundation to build this upon, they will feel obligated to reciprocate in the form of positive attitudes and behaviours. Organisations can initiate social exchange relations by treating employees fairly (Lavelle et al., 2007; Lavelle et al., 2009b). Fairness relates to perceived organisational support in that it makes individuals feel supported by the organisation, which then leads to engagement in extra effort at work (Cropanzano & Rupp, 2008). Research has identified fairness as an antecedent of perceived organisational support (e.g. Cropanzano & Rupp, 2008; Konovsky & Pugh, 1994; Moorman, Blakely & Niehoff, 1998; Masterson, Lewis, Goldman & Taylor, 2000), and it is believed they operate in sequence.

Organisations gain when they treat their people well. Positive treatment from organisations has been linked to individuals' willingness to go beyond their role requirements (e.g. Organ & Moorman, 1993; Moorman, 1991). The evaluations individuals make on the positive

treatment and support they receive from their organisation form a basis on the strength of the relationship between themselves and the organisation (Eisenberger & Stinglhamber, 2011). Moreover, individuals' perceptions of the treatment and support they receive from their organisation informs them on how they will be supported in the future (Eisenberger & Stinglhamber, 2011).

Employees tend to be concerned with the value their organisation places on them, and how their organisation evaluates them and their efforts at work (Eisenberger & Stinglhamber, 2011). When organisations treat employees well socioemotional needs, such as emotional support and approval are met. It also signals to employees that the organisation is willing to provide them with the required resources to ensure that they are able to conduct their jobs well (Eisenberger & Stinglhamber, 2011). These positive evaluations lead to employees behaving in ways that benefit the organisation. This can be explained as social exchange. Scholars have argued that employment can be considered as employees trading off materials goods and socioemotional resources for their effort (Gould, 1975; Levinson, 1965; Mowday, Porter & Steers, 1982).

Perceived organisational support is considered as a key element in SET (Eisenberger et al., 1986), in that it reflects the quality of the relationship an individual perceives they have with their organisation. Ambrose and Schminke (2003) supported this by suggesting perceived organisational support evidences the quality of a social exchange relationship between an employee and the organisation. Individuals who perceive organisational support may feel they need to reciprocate the gesture, as such, engage in OCB (Moorman et al., 1998; Wayne, Shore & Liden, 1997; Masterson et al., 2000). Reciprocation, or repayment, is conducted by individuals in order to maintain their own self-image, to avoid stigma of

violating the norm and to ensure positive treatment in the future (Eisenberger, Armeli, Rexwinkel, Lynch & Rhoades, 2001). Prior research has demonstrated that perceptions of support are strongly related to individuals' performance, particularly when an individual's socioemotional needs are high (Armeli et al., 1998). Moreover, it is implied that this relationship is bidirectional in that when individuals' performance increases, the organisation will support employees with higher levels of in-role independence (Armeli et al., 1998). But perceived organisational support creates a high level of expectation for reward (Eisenberger et al., 1986), suggesting that when employee expectations are not met, perceptions of unfairness will increase. An additional concern is that perceptions of organisational support are hard to change. Changes in individuals' perceptions of organisational support are considered to happen slowly over long periods of time (Eisenberger & Stinglhamber, 2011).

### **Application of Social Exchange Theory to Management Literature**

SET has been applied to management literature to understand why individuals exert extra effort on behalf of the organisation (Organ, 1988). Management scientists (such as Organ, 1988) reoriented SET to being central to interpersonal relationships. Naturally, the addition of fairness literature made its way to SET on the basis that fairness is a fundamental element of developing relationships between individuals and organisations, and due to their common interest in human interactions and exchanges (Cropanzano & Rupp, 2008). The initiation of this application came from the interest to understand how fairness stimulates social exchange relationships, and also how social exchange relationships mediate the relationship between perceptions of fairness and attitudes and behaviours. This contemporary application of SET to justice research was at first hesitant, as it challenged



classical theorists work. Early justice research was driven by the idea that individuals' motivations are fuelled by self-interest (see Konovsky, 2000; Tyler & Lind, 1992), and applying the idea of social exchange was viewed with suspicion as it challenged this viewpoint. The literature then started to change focus and began to utilise justice to explain social exchange (see Organ & Moorman, 1993). Within social exchange literature, the emphasis changed and began to focus on types of relationships, rather than self-interest. This highlights how the currency in social exchange relationships changed from purely transactional and began to encompass relational value (Cropanzano & Rupp, 2008). An individual's exchange ideology has been shown to strengthen the relationship between perceived organisational support and obligation and its impact on discretionary effort (Witt, 1991a). Similar effects have been noted for procedural justice (Witt, 1991b).

### **Belongingness Theory**

Belongingness theory (Baumeister & Leary, 1995) suggests that individuals have a desire to belong to a group (Ferris, Brown & Heller, 2009). In this light, perceived organisational support provide the means for this need as it suggests organisations accept, approve and include individuals (Rhoades & Eisenberger, 2002; Pierce & Gardner, 2004). In contrast, low levels of perceived organisational support will frustrate those with a high need to belong, as it signals to individuals that they are not valued, creating a threat to their identity and diminishing their self-worth (Aquino & Douglas, 2003). When individuals are threatened by low perceived organisational support, they will suffer from a reduction in their ability to self-regulate. This means individuals will experience a lack of self-awareness and will find it more difficult to modify their behaviours at work to comply with organisational standards; this is a main predictor of deviant behaviour at work (Marcus & Schuler, 2004).

## Self-Concept Theory

### Defining Self-Concept

The self-concept is defined as a multifaceted schema that holds all information relevant to the self, including amalgamations of images, conceptions and prototypes (Markus & Wurf, 1987). The self-concept operates at three different levels; individual, relational and collective. Individuals use knowledge about themselves to form their self-concept; this knowledge may include personality traits, perceptions of their physical appearance, a view of their future self (Lord & Brown, 2004). Moreover, individuals interpret and use information communicated from organisational contexts to inform their own identity, evaluate their own self-worth, and to ultimately define themselves (De Cremer & Tyler, 2005). Self-concept is believed to guide motivation of behaviours through making certain goals important to the individual, depending on which tripartite dimension is salient (Johnson & Chang, 2006). To add to this, Katz and Kahn (1966) suggest the values that comprise self-concept provides individuals with intrinsic motivation. It is suggested that this motivation comes about because of individuals' need to act congruently with the values that are associated with the dimension of self-concept to which they identify (Mayfield & Taber, 2010). Present research on self-concept is based on the idea that individuals are not mere pragmatic beings, but are also self-expressive (Shamir, House & Arthur, 1993). For example, some people behave in order to attain goals, whereas others behave in a way that allows them to express their values and affirm their identity (Shamir et al., 1993). Mayfield and Taber (2010) suggest that the motivation behind human behaviour can be considered in light of self-concept theory. Self-concept theory can be used to explain motivation because individuals act in ways that are consistent with their personal values. However, people may

demonstrate the same behavior, but they may have different motives or self-concepts (Mayfield & Taber, 2010).

Lord and Brown (2004: 33) considered self-concept as “an extensive knowledge structure containing many pieces of information relevant to the self.” Not all information is salient at one time, which makes an individual’s self-concept dynamic in nature (Johnson & Chang, 2006). Information relevant to collective self-concept is anchored in the broader social environment, whereas the information relevant to activating the individual self-concept is set in an individual’s own values and interests. It is believed routines and social interactions influence individuals’ self-concept as they hold contextual cues, and that the self-concept helps translate these cues into behaviours and goals (Lord & Brown, 2004).

It is believed that only one identity-level can be activated at one time, suggesting that the importance of an identity is at its highest when the subsequent two other identities are low (Lord & Brown, 2004). Moreover, it is possible for individuals to experience all three self-concept levels at different moments in their life, in different contexts (Epitropaki, Kark, Mainemelis & Lord, 2017). Different contexts activate the processing units that make up the self, which then lead to emotional behavioural and motivational responses (Lord & Brown, 2004). This process is believed to occur outside of individuals’ consciousness and control, making it operational at an implicit level (Johnson & Saboe, 2010). Therefore, it is important organisations treat their people well, in doing so, they will be able to positively influence their employees’ cognition and self-schemas (Markus & Wurf, 1987). This will lead to positive knowledge structures becoming more salient and accessible in their minds (Lord & Brown, 2004). It is suggested that the knowledge that comes to a person’s mind first is believed to motivate and guide their behaviours (Bargh, Chen & Burrows, 1996); therefore,

this implies fair treatment may lead to positive behaviour from employees through a positive self-concept. In summary, organisations can influence their employees' self-concepts through the organisational and social contexts they create. Therefore, it is in the organisations' best interests to initiate contexts which activate a positive sense of self in its employees, as in turn this will impact their thoughts, attitudes and behaviour, which enhance organisational functioning (Lord & Brown, 2004).

### **Levels of Self-Identity**

Self-identity can be conceptualised into two distinct levels; independent and interdependent. Independent level self-identity can be thought of as individual self-concept, whereas interdependent identity can be considered as both relational self- and collective self-concept (Johnson & Lord, 2010). Each level is associated with different self-views, cognitions and behaviours, which can be used as a way to explain different social processes (Lord & Brown, 2004). Interdependent level identities are believed to influence individuals' concern for others; as such it leads behaviours that benefit others (Johnson & Saboe, 2010). In contrast, those with independent identities are more likely to engage in counterproductive behaviour with self-interest, as they are unaware of the social context and the negative impact their behaviours have on others.

### ***Individual Self-Concept***

Those with an individual self-concept derive their self-worth from their differences with others around them (Johnson & Saboe, 2010). Brewer and Gardner (1996) argue that those with an individual self-concept gain meaning in self from making favourable social comparisons to their peers, and that these comparisons are likely to involve self-enhancing biases and particularly stringent evaluations of their peers (Lord & Brown, 2004). Self-

enhancement leads to the belief that their skills are better than others and, as a result, they believe they deserve greater outcomes and rewards. This hinders an individualistic person's ability to show concern for others, and develop a collective identity. The comparisons and self-enhancements individualistic people make can impact the view of themselves and other around them, thus highlighting the effect they have on intra- and interpersonal regulation (Lord & Brown, 2004). Those with an individual self-concept may find benefit in their comparisons and self-enhancements, for example Lord and Brown (2004) argued that these people may possess a unique insight that may result in the achievement of goals. However, this potential benefit needs to be considered against the problem of their ability to overstate their self-evaluation.

### ***Relational Self-Concept***

Relational self-concept refers to individuals defining themselves based on high quality dyadic relationships with significant others, and positive feedback they receive from their dyadic partners (Johnson & Saboe, 2010). At the relational level, self-views are determined by how significant others perceive them, these perceptions are learnt from social interactions (Lord & Brown, 2004). People with a relational self-concept are sensitive to the feedback of significant others because this feedback aids the formation of their view of self, and they use the information held in the feedback as an indicator of their belongingness and social resources (Lord & Brown, 2004). Negative feedback, and thus a negative view of self, will threaten these resources.

### ***Collective Self-Concept***

The main self-identity focus in this study is collective self-concept, which is an interdependent level identity. Individuals with a collective self-concept base their self-worth

on group successes and meaningful group membership (Johnson & Saboe, 2010). It is because of this that their goal is to contribute to the group to benefit its status (Lord & Brown, 2004). Therefore, it can be expected that group-orientated behaviour occurs when collective self-concept is activated, as collective self-concept emphasises the importance of prosocial goals (Lord & Brown, 2004). Collectivists' self-views are rooted in the organisational culture and its collective norms, and these individuals view themselves in terms of a group prototype (Lord & Brown, 2004). At the collective level, the goals and social norms of the group are internalised, and it is believed that the internalisation of the groups' goals and norms confirms and fulfils their role within the group (Johnson & Chang, 2006). They will find positive similarities between themselves and the group and base their self-view upon them.

Those individuals with a collective self-concept will have strong communal motives and therefore are likely to engage in self-sacrificing behaviours, take into consideration the needs of others and act in ways that benefit them, rather than focusing on their own welfare and engaging in self-serving acts to maximise their own interests. Further, these individuals will promote social systems and interests of the collective (Johnson & Chang, 2006; Tajfel & Turner, 1979).

### **Levels of Identity and Justice**

Social communications prime identity levels and the salience of the dimensions of social justice (Baker, 1998). Lind (2001) suggested that perceptions of organisational fairness influence individuals' identity at different levels. Self-concept helps to explain the importance of fairness, as it has been proposed as one of the psychological mechanisms that relates to employee perceptions of organisational fairness (De Cremer & Tyler, 2005).

The value individuals place on organisational procedural justice varies depending on their self-concept; as such individuals with a collective self-concept will place more value on the fairness they receive from the organisation (Johnson, Selenta & Lord, 2006), and those with an individual self-concept will show lower levels of concern of procedural justice. To support this idea, Lord and Brown (2004) suggested that procedural justice is salient for those with a collective self-concept as it implies that all the members in the group will benefit, and that distributive justice is salient for those with an individual self-concept due to their self-interest and concern for gaining more than their colleagues. In addition, Johnson and Lord (2010) imply high procedural justice activates interdependent self-identity and that low procedural justice, and exposure to exploitation and risk (Lind, 2001), activates independent self-identity. In summary, Johnson and Lord (2010) suggested that the activation of interdependent and independent identities were higher when people experienced organisational fairness and unfairness, respectively.

## **Conclusion**

This chapter has presented the key literature in the research areas of procedural justice, social identity theory, the group engagement model, social exchange theory and self-concept theory. The main areas discussed allow the conclusion to be drawn that perceptions of procedural justice are an important factor in influencing positive employee behaviour at work. It can be concluded that this relationship occurs through a variety of mechanisms; including social identity, social exchange and collective self-concept. These theoretical frameworks will be used and applied in the respective studies in this thesis.

## Chapter 3 Methodological Overview

This chapter will start by exploring the research philosophies and paradigms of social science, and will follow with a discussion of the research design adopted in this thesis. Common method variance and ethical issues faced in the research will also be discussed. This chapter will end with the statistical methods applied in this study.

### Research Philosophies and Paradigms

When analysing social science theory, it is important to consider the scheme for analysing assumptions about the nature of social science by utilising the relevant paradigm and philosophies as this will provide researchers with understanding of what methods should be applied to their practice. A research paradigm can be considered as an amalgamation of beliefs, values and approaches that are used to conceptualise reality (Kuhn, 1970). In the arena of social science, it is suggested that different research paradigms are understood through consideration of philosophies of knowledge which underpin the research strategy, methods and procedures, and impacts how we understand and investigate research questions; these philosophies include ontology, epistemology and methodology (Guba & Lincoln, 1994).

### **Ontology**

Ontology refers to beliefs about reality; it implies the nature of existence and the truth. What we think the truth is shapes how we think about reality, meaning that the way truth is perceived influences the extent to what can be known about the truth/reality. Ontology is based on what individuals believe about reality. The type of ontology adopted in this thesis is realism. Under the realism stand-point, individuals view the world and people's



appreciation of it as separate, as they believe the world has its own reality (Burrell & Morgan, 1979). Realists believe one truth exists and that it does not change, meaning it can be applied generally across various contexts. This truth is believed by realists to be obtained by objective measurements. The ontological approach taken influences the subsequent philosophies of research, as discussed below.

### **Epistemology**

Epistemology considers the relationship between the observer and the knowledge of reality, and how this knowledge is acquired. The epistemological beliefs are dictated by the ontological positioning of the research. An etic epistemological approach is adopted in this thesis, which follows the ontological approach of realism. An etic approach involves utilising objective measurement from an outsiders' perspective. This ensures the data obtained from reality is captured, and is not disturbed or biased by the researcher (Saunders, Lewis & Thornhill, 2012).

### **Methodology**

Methodology refers to how knowledge is discovered and analysed in a systematic way, with the intention of understanding and investigating reality. The methodological approach, which involves establishing the relevant methods for how the data should be collected, is shaped by the research questions posed by the study, and the ontological and epistemological approaches taken. The ontological and epistemological approaches may also constrict the methodology and methods (quantitative or qualitative) of the study (Morgan, 2007).

The research questions posed in this thesis imply the methodological paradigm positivism should be adopted. Positivism is characterised by its intention to predict causal relationships in society (Burrell & Morgan, 1979). Positivists believe that reality exists beyond what the human mind considers. Positivistic research is conducted with the objective of unveiling further understanding of reality through adding to knowledge by considering reality in an objective manner, to reflect what humans experience (Weber, 2004).

## Research Design

Burrell and Morgan (1979) suggested there are four paradigms for the analysis of social theory (radical humanism, radical structuralism, interpretive and functionalist), used to help researchers clarify scientific and societal assumptions, and provide insight into how researchers should conduct their research. In this thesis, the functionalist paradigm is adopted. This paradigm is commonly applied to organisational research; this grounding comes from the nature of objective and positivist research (Burrell & Morgan, 1979). It is commonly applied to organisational research as it allows solutions to be identified for practical problems; this is achieved through the provision of rationales to understand society with a pragmatic focus.

The time horizon adopted is cross-sectional; the cross-sectional data collected was gathered through the strategy of surveys. The use of surveys was identified as the most suitable option due to its simplicity, efficiency and the nature of the field study, for example collecting large amounts of quantitative data from multiple sources. Moreover, this quantitative research can be considered as objective as samples from both studies came from across the entire workforce, these demographics consisted of variations in age, gender, tenure in the service, role, and rank/grade. This ensured the sample was

representative and unbiased. The research approach taken is deduction as the research started with theory, then variables were selected and hypotheses were formed and, finally, the data was tested. The proposed hypotheses are explored through Mplus path analysis (Muthén & Muthén, 2010) with the intention to support existing theory (Chen, 2011). A quantitative, explanatory study was most appropriate as it allowed the explanation of relationships between event and effect. This provided means to utilise serial and parallel mediation analysis to test the hypotheses and relationships between the variables measured.

### **Common Method Variance**

Podsakoff, MacKenzie, Lee & Podsakoff (2003: 879) define common method variance (CMV) as “variance that is attributed to the measurement method rather than to the constructs the measures represent” and they consider it as a main source of measurement error. This makes CMV a problem in behavioural research, as measurement error negatively impacts validity of data, and thus the correlations, predictions and conclusions they draw. Therefore, it is important to know where CMV comes from and how to minimise it, if possible. It is thought that the negative effects on data caused by CMV can vary, but the average level is substantial (Podsakoff et al., 2003). Further to this, Podsakoff et al. (2003) stressed the importance of ensuring the remedy used is relevant to the research setting. However, to contrast this, some scholars argue the concerns that are associated with CMV are overstated (Crampton & Wagner, 1994; Lindell & Whitney, 2001; Spector, 1987).

### **Sources of CMV**

Common measurement contexts, or having a common rater, are considered as sources of CMV which are often found in behavioural research (Podsakoff et al., 2003). This is

supported by Chang, Van Witteloostuijn and Eden (2010) who suggest that data collected from self-report surveys may suffer from CMV. Podsakoff, MacKenzie & Podsakoff (2012) suggest that self-report measures may suffer from inflation or deflation resulting in the accuracy of data being reduced, for example positive behaviours may suffer from inflation due to social desirability, leading to inaccurate results and linear relationships (Siemsen, Roth & Oliveira, 2010). Moreover, self-report measures pose the problem of consistency motif; which suggests that individuals have a tendency to remain consistent in their answering patterns, or what they perceive to be consistent (Podsakoff & Organ, 1986). Individuals are more likely to do this when they rely on the judgements of behaviour, attitudes, and their working environment. This implies there may be a difference between their responses and what actual happens in the real world, this is particularly the case when responses are asked to report on their attitudes and behaviours retrospectively. Moreover, Feldman and Lynch (1988) suggest that individuals will retrieve responses they make earlier in the survey to fabricate answers to following questions.

Podsakoff et al. (2003) suggested the most damaging source of CMV is collecting the predictor and the criterion data from the same source as this may lead to artificial covariance, and thus error in the relationships between the predictor and the behaviour variables. However, Podsakoff et al. (2003) proposed that collecting data from multiple sources involves a constraint; they suggest that individuals may perceive risk of loss of anonymity because the responses will need to be linked and in doing so will require an identifying variable which could compromise their preparedness to participate, or result in them biasing their responses in a more favourable manner. Therefore, prior to completing the survey, reinforcing the purpose of the research and reassuring individuals that

responses will be treated with the strictest confidentiality may be useful is minimising this proposed constraint.

When designing research, it is important to consider the potential sources of CMV so that appropriate remedies can be applied in the design stage (Podsakoff et al., 2003; Chang et al., 2010). This research follows the advice of Chang et al. (2010), who suggest applying remedies to overcome CMV in the design stage of the research process. Of note, is that the surveys administered in each study made use of a number of procedural remedies to control for CMV, they are discussed below. The procedural remedies used in Study 1 were applied because data was collected at a single point in time; opportunity to collect data from multiple sources or at different time points were limited due to reluctance from the sponsor organisation, the reluctance of which was informed by high levels of concern over respondent anonymity. The limitations of collecting data from a single time point in Study 1 are recognised. The strength of relationships may be inflated due to individuals responding in a more desirable and favourable manner when reporting their perceptions and behaviours at work, thus suggesting the data may involve social desirability. However, the results of this study will rely upon the opinions of other scholars who suggest CMV effects are overstated (Crampton & Wagner, 1994; Lindell & Whitney, 2001; Spector, 1987). In Study 2, procedural remedies were applied to the self-report measures, moreover due to support from the sponsor organisation, access was provided to collect data from co-workers. This allowed for ethical behaviour to be rated by a trusted co-worker; therefore, concerns regarding individuals reporting enhanced evaluations of their own ethical conduct with social desirability were minimised (Podsakoff et al., 2003).

## **Procedural Remedies Applied to Control for CMV**

### ***Multi-Source Data***

In Study 1, self-report questionnaires were used to obtain data from the same respondents at the same moment in time; therefore concerns exist regarding CMV (Podsakoff & Organ, 1986) and social desirability (Podsakoff et al., 2003). These concerns exist because when using self-report measures, we are often requesting individuals to summarise their judgements of themselves (Podsakoff & Organ, 1986), and these judgements often relate to their behaviour, attitudes and their working environment (Phillips & Lord, 1986). This has been recognised, as previously discussed, as a source of CMV. In Study 2, there was a possibility for the predictor and criterion variables to be acquired from different sources. Collecting data from multiple sources has been suggested by Podsakoff et al. (2003) as a remedy to minimise the effects of CMV. Grandey, Cordeiro and Crouter (2005) stated that confidence in relationships is higher when data is obtained from multiple sources. As procedural justice is derived from individuals' perceptions, it was important to obtain that data from the individual, thus a self-report measure was used. In contrast, ethical voice behaviour can be considered as a discretionary behaviour that involves individuals investing time and energy into talking with their colleagues regarding ethical issues; therefore this measure was co-worker rated as colleagues are able to accurately report on behaviours they have witnessed their colleagues exhibit at work. This suggests higher quality data was obtained in Study 2. This is supported by Fletcher and Baldry (2000), who suggest obtaining data from peers will strengthen the data.

### ***Protection of Respondent's Identity***

A cover letter to each survey was supplied to each respondent, the cover letter informed individuals as to the purpose of the research and explained that the study is anonymous and confidential, and that the results will be treated with the strictest confidentiality.

### ***Clear Instructions***

In order to enhance the probability of response and accuracy of answers, it has been suggested that respondents should be provided with clear instructions before completing a questionnaire (Podsakoff et al., 2012). Respondents in both Study 1 and Study 2 were informed, prior to completing the survey, that there are no right or wrong answers. Moreover, respondents were instructed that if they are unsure on how to answer a question, they should leave it blank. This is supported by Chang et al. (2010), who suggested the importance of assurance to the respondents participating in the research. Moreover, it has been suggested that providing clear instructions reduces apprehension of the respondents, making them less likely to alter their answers to become more socially desirable (Podsakoff et al., 2003). Social desirability was not tested in either study, therefore reliance and confidence is placed on Moorman and Podsakoff (1992) who suggested the impact of social desirability is not extensive on respondents' answers.

### ***Improvement of Scale Wording***

It has been suggested that the wording used in surveys should not be vague, unfamiliar or ambiguous (Chang et al., 2010) as it can negatively impact the accuracy of answers. This is supported by Podsakoff et al. (2012) who explained item ambiguity can cause respondents to be unsure how to answer, leading to less accurate answers. The scale items that comprise the selected measures were reviewed in each study to ensure no vague or ambiguous

terminology was used. The wording of Tyler and Blader (2003)'s organisational pride scale was slightly edited to ensure it aligned with the context in which it was tested, as such the scale items were edited to refer to the fire and rescue sector (see Appendix 2).

### ***Questionnaire Length***

Shortened versions of established scales were used in Study 1, for example to measure perceived organisational support the Snape and Redman (2010) 4-item scale, which is adapted and shortened from Eisenberger et al. (1986)'s 8-item scale, was used. Moreover, to measure engagement, Rich et al.'s (2010) 18-item scale was reduced to 9-items in Study 1 (see Parke, Weinhardt, Brodsky, Tangirala & DeVoe, 2017; Haynie, Mossholder & Harris, 2016; Barrick, Thurgood, Smith & Courtright, 2015 for shortened versions of this scale). The purpose of each reduced scale was to ensure the length of the survey was not excessive, as it has been suggested that respondents may suffer from fatigue if the survey is long or repetitive, which can result in respondents' cognitive effort and focus becoming depleted (Lindell & Whitney, 2001).

Moreover, Feldman and Lynch (1988) imply that the order of questions can influence individuals' answers, as previous questions prime subsequent responses. They suggest a number of questions should separate the measures of interest. In each study, this advice was taken and scales were placed in between the independent, mediating and dependent variables to ensure that the influence from previous answers was minimised. Furthermore, following the guidance of Lindell and Whitney (2001), the demographic questions were located at the end of each questionnaire.



To summarise, for Study 1, confidence in the data is based on some scholars' argumentation that the concerns associated with CMV are overstated (Crampton & Wagner, 1994; Lindell & Whitney, 2001; Spector, 1987). Advice was followed from prior research (e.g. Lindell & Whitney, 2001; Feldman & Lynch, 1988; Podsakoff et al., 2012), regarding the implementation of procedural remedies in order to minimise the negative effects suggested to be caused by CMV, for example the provision of clear instructions to respondents prior to completing the survey, wording adapted where appropriate and questionnaire length being shortened where possible. Regarding Study 2, there is higher confidence in the quality of the data as it was collected from multiple sources, suggesting the data collected for Study 2 will suffer less from CMV and social desirability as behaviours were co-worker rated (Podsakoff et al., 2003).

To conclude, Podsakoff et al. (2012) suggest there is no simple universal solution to CMV, through emphasising that the solution should be dependent on study and source of method variance, and also the feasibility of solutions available and applicable. To support this, Podsakoff et al. (2003) suggest that the remedies should only be applied that specifically meet the needs of the research question. Although CMV has been viewed by some scholars as problematic (Podsakoff et al., 2003), others view the CMV problem as exaggerated (Crampton & Wagner, 1994; Lindell & Whitney, 2001; Spector, 1987). Within the behavioural science literature, a balanced middle-ground view on CMV has been reached in that CMV is accepted as a potential concern, and that researchers need to make an effort to remedy its effects where possible (Podsakoff et al., 2003; Chang et al., 2010). Chang et al. (2010) suggest using avoidance strategies to overcome CMV in the design stage of the research process. It is possible to consider approaches to remedy CMV after the implementation stage of the research, however, ideally remedies should be considered in

the design stage. Chang et al. (2010) recommend the use of multiple correction methods, in order to enhance the quality of the research. In addition, they suggest that the single most effective remedy to CMV is to collect data from multiple sources. Again, reinforcing the importance of correction methods being implemented in the design stage of research.

## **Ethical Issues**

Ethical standards were upheld in the research, and the ethical guidelines lay out by Durham University were met (see Appendix 1). The self-report survey included a cover letter which explained to participants the purpose of the research and confidentiality of the study. The cover letter also reinforced that completion was on a voluntary basis, and individuals were provided with protected time in working hours to complete the survey/s. Further to this, strict data protection standards were ensured through the use of encrypted hard drives and ensuring research assistants in the research team upheld relevant vetting statuses. The vetting process involved police personnel conducting background checks on the research assistants to assess their reliability and integrity. This highlights that the research team work to data protection rules that are consistent with the requirements of the police and fire services.

## **Statistical Methods**

### **Outliers**

Detection of outliers is recognised as important due to the negative effects outliers have on analysis. Following the detection of outliers, it must be decided if they require retention, modification or deletion. A method of detecting outliers can be seen through the examination of scatterplot of standardised residuals. It has been suggested that if a standardised residual is more than 3.3 (or fewer than -3.3 if sample size is below 1000) and

if  $p = .001$ , then these cases can be considered as outliers (Tabachnick & Fidell, 2007). It has been argued that it can be expected that outliers will be evident in larger data sets, and therefore the effects of outliers should be accepted, and treatment of modification or deletion is not necessary, instead the cases may be retained (Pallant, 2013). Furthermore, it has been suggested that if cases are identified as outliers they should be retained, unless negative consequences on the population can be evidenced (Hair, Black, Babin, Anderson & Tatham, 2006). In both samples, a very small number of outlier cases were identified; these few cases were checked to ensure they had not resulted through data entry error. The checked identified outliers were retained following the advice, previously stated, from Pallant (2013) and Hair et al. (2006).

### **Statistical Approach**

Structural equation modelling was adopted to conduct confirmatory factor analysis (CFA); CFA is used to establish dimensionality and discriminant validity of the hypothesised intended measures (Kelloway, 2015; Geiser, 2013). The CFA is argued to be more parsimonious and rigorous than other classical statistical methods, such as exploratory factor analysis (Kelloway, 2015; Brown, 2006). For example, CFA in Mplus assumes measurement error when analysing data; this makes the analysis is more robust (Schumacker & Lomax, 1996). In Study 1, the hypothesised model comprised five factors: procedural justice, organisational pride, perceived organisational support, engagement and voice behaviour. In Study 2, the hypothesised model contained five factors: procedural justice, individual self-concept, relational self-concept, collective self-concept and ethical voice behaviour. To check the absolute fit of each measurement model, I considered root mean square error of approximation (RMSEA) and standardized root mean residual (SRMR).

A RMSEA value of below 0.10 shows a good fit to the data (Steiger, 1990), and a SRMR value of less than 0.08 suggests good fit to the data (Hu & Bentler, 1999). In addition, comparative fit index (CFI) and Tucker-Lewis index (TLI) were considered, both of which are ideally larger than 0.95 (Geiser, 2013). The results from the measurement model provide support for the distinctiveness of the measures used in each study. To support this further, Cronbach alpha's were checked which also confirmed scale reliability (Pallant, 2013). Path analysis in Mplus was employed using manifested variables to test the serial and parallel mediation hypothesised in Study 1 and Study 2 (Muthén & Muthén, 2010). This method is prevalent in social science research (Li, Hou & Jia, 2015; Basford, Offermann & Behrend, 2014; Benzer & Horner, 2015).

### **Justification for the use of Bootstrapping**

Bootstrapping is a resampling method used for estimations. By taking into account the non-normal shape of sampling distributions of indirect effects, bootstrapping is one of several resampling strategies for estimation and hypothesis testing that has been recommended (Field, 2013). Bootstrapping provides estimates for the sampling distribution, this is achieved through treating the sample as a total population and from it drawing random smaller samples. Because bootstrapping relies on extracting random smaller samples from the data sample collected, the estimates it calculates will differ. Bootstrapping calculates the mean scores, otherwise known as parameter estimates, for each bootstrap sample before returning it to the main sample, this process is repeated thousands of times (Preacher & Hayes, 2008). In Study 1 and 2, 10,000 parameter estimates per sample were used when testing the indirect effects between procedural justice and employee behaviour. The significance level of estimates is presented as lower and upper 95 percent confidence

intervals (CI). The CI must not contain zero, otherwise an indirect effect cannot be found and the mediation between the independent variable and dependent variable cannot be supported.

## **Chapter 4 (Study 1) Does Organisational Fairness Influence Employee Behaviour through Enhancing Social Identity or Social Exchange Effects?**

### **Introduction**

Social justice literature can be used to illustrate the importance of workplace fairness and its ability to change the way people think, feel and behave (Tyler & Blader, 2003). Prior research has found procedural justice to have positive impacts on employee outcomes, including job satisfaction (McFarlin & Sweeney, 1992), organisational commitment (Colquitt et al., 2001), social identity (Tyler & Blader, 2003), perceived organisational support (Lavelle et al., 2007), organisational citizenship behaviours (OCBs) (Cohen-Charash & Spector, 2001) and discretionary effort (Tyler & Blader, 2000). In addition, it has been suggested that individuals use fairness perceptions to evaluate the organisations' attitude towards them, for example when organisational fairness is evident this communicates inclusion and safety to employees, whereas when organisational fairness is absent individuals believe they are not valued and as a result will be exploited and excluded (Lind, 2001; Greenberg & Cropanzano, 1993).

The employee behaviours of interest in this study are engagement and voice behaviour. Engagement, as tested in this study, is defined as an individuals' full investment of themselves in their work role, in terms of their emotional, cognitive and physical energies (Kahn, 1990; Rich et al., 2010). Employee engagement has been recognised as an important motivational concept that has been linked to performance (Rich et al., 2010). For individuals to be engaged in their work, it is suggested that they must feel their job has meaning, that their workplace is psychologically safe, and that they have the resources required to

complete their work (Kahn, 1990). In addition, voice behaviour can be defined as “promotive behaviour that emphasizes expression of constructive challenge intended to improve rather than merely criticize” (Van Dyne & LePine, 1998: 109). It can be thought of as individuals sharing information and knowledge (Collins & Smith, 2006), speaking up with work-related suggestions for organisational improvements (Detert & Burris, 2007; Liang et al., 2012; Morrison, 2011) and taking initiative to develop new products and services (Baer & Frese, 2003). This leads to organisations increasing their performance through facilitating learning, developing and innovation (Morrison & Milliken, 2000). The intention of this discretionary effort is to make improvements to existing practices and procedures, which in turn will benefit the organisation’s functioning (Organ, 1990) and enhancing service to the public (Detert & Burris, 2007).

Some research has explained the impacts of procedural justice through a social identity perspective. For example, Tyler and Blader's (2000) group engagement model (GEM) suggests that positive perceptions of procedural justice result in higher perceptions of group status. Further, it has been suggested that fair treatment determines group identification and leads to positive relations with the group, which primes their discretionary behaviours that contribute to and benefit the group (Tyler & Blader, 2001). Some other scholars explain the effectiveness of procedural justice through a social exchange process. Specifically, Organ (1990) suggested that perceptions of organisational fairness are predictive of social exchange relationships that lead to discretionary behaviours. In addition, Lavelle et al. (2007) suggest that organisations initiate social exchange relations by treating their employees fairly. However, a comparison test of these two processes remains untested. Therefore, I propose a model that incorporates two competing paths; organisational pride and perceived organisational support. The model aims to explore the processes through

which procedural justice leads to engagement and voice behaviour by examining this relationship from a social identity and social exchange perspective simultaneously.

The purpose of Study 1 is twofold: (1) to explore the relative mediating roles of organisational pride (social identity mediator) and perceived organisational support (social exchange mediator) on the relationship between procedural justice and engagement and voice behaviour; (2) to add to Tyler and Blader's (2003) GEM through the addition of a competing route of social exchange. This suggests that this study will add to the work of Tyler and Blader (2003) who suggested organisational pride is a predictor of engagement and will also add to the work of Eisenberger et al. (1986) who developed and suggested perceived organisational support to be a process of social exchange which is an important predictor of engagement at work.

The proposed model is tested in a sample of a fire and rescue service. This sample offers several advantages. First, procedural justice is recognised, by both scholars and public-sector organisations, as an important organisational factor that has the ability to influence individuals' discretionary effort (e.g. Tyler & Blader, 2000; Bradford et al., 2014; HMIC, 2014a). Following the HMICFRS's (2017) announce regarding the government's intention to transfer Fire and Rescue Services to the Home Office in order to encourage collaborations between police and fire services, the results of this study will be of use in providing evidence to support the importance of organisational fairness across multiple emergency service organisations. Second, voice behaviour is important as there is a growing concern within the fire and police community of how to encourage increased engagement and discretionary effort from employees to maintain service delivery. Prior research suggests that in order to increase discretionary effort in work teams, individuals must perceive the workplace to

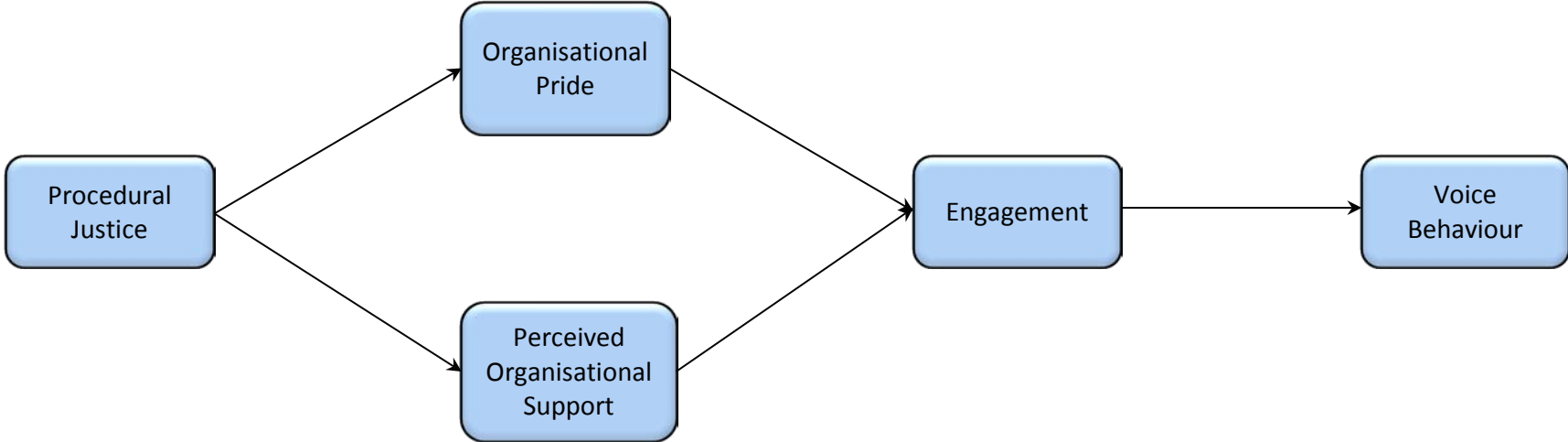


demonstrate fairness; in turn, this will encourage individuals to exhibit cooperative behaviours (Lind, 2001). This study aims to provide evidence for the understanding of how fair treatment cultivates engagement and voice behaviour. Therefore, this sample provides a solid basis for examining this model.

This study makes several contributions to the existing literature. Firstly, the additions this study makes to the GEM are two-fold; this study measures engagement whereas an engagement measurement was absent from the original GEM, moreover this study adds to the social identity literature through adding a competing path to the GEM, by applying social exchange theory. Social identity theory is a dominant theory in policing through the application of the GEM (see Bradford et al., 2014), less applied to emergency service contexts is social exchange theory. Study 1 will highlight the importance of perceived organisational support relative to organisational pride, with the intention of developing practitioner knowledge on the importance of organisational fairness in influencing pride at work and also in increasing perceptions of organisational support for the achievement of positive employee behaviour. An important aspect of perceived organisational support is the idea of providing 'top cover' to employees when they are in need or in difficult circumstances, which has been recognised as a key condition of the emergency service organisational setting by Chief Constable Barton (2017). Therefore, testing the competing paths of organisational pride and perceived organisational support will aim to identify the stronger effect through which procedural justice leads to engagement and voice behaviour. To my knowledge, there has been no research that has examined social exchange and social identity together in a competing model, therefore this research is addressing an unexplored area in the literature. Secondly, this study will investigate this relationship in the context of fire and rescue, thus consolidating the importance and utility of organisational fairness for

the achievement of discretionary effort in emergency services (e.g. Bradford et al., 2014). Finally, the most commonly used scale to measure work engagement is the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). However, the anti-burnout conceptualisation of UWES has been criticised (Newman & Harrison, 2008; Rich et al., 2010). Rich et al. (2010) developed an 18-item scale and argued that their scale is more appropriate as it is based on the original conceptualisation of work engagement of Kahn (1990), who suggests engagement is made up of cognitive, emotional and physical energies which individuals invest in their work. In this study, a shortened version of Rich's et al.'s (2010) scale was tested and found to be valid.

Figure 1. Study 1 – Hypothesised Model



## Theoretical Frameworks and Hypotheses

### ***Procedural Justice and Engagement***

Kahn (1990) defined engagement as a crucial motivational concept that can be characterised by physical, cognitive and emotional energy that individuals invest in their role at work. The recognised three antecedents of engagement, as suggested by Kahn (1990), are meaning of work, psychological safety and resources.

Procedural justice has been viewed as a key organisational resource, which improves employee job engagement. For example, Tyler and Blader (2003) suggest that people's preparedness to engage in their work comes from their evaluations of the information provided by organisations, and it is this information that is used by individuals to evaluate organisational fairness. Haynie et al. (2016) suggest that fair procedures motivate individuals to engage themselves at work, implying that fair working procedures facilitate employee effort (Blader & Tyler, 2009; van Dijke, De Cremer, Brebels & Van Quaquebeke, 2015). This supports the literature that suggests organisational resources are positively related to the enhancement of employee job engagement (Crawford, LePine, & Rich, 2010; Freeney & Fellenz, 2013). It has been suggested that in order for individuals to fully engage themselves at work, they must perceive those in authoritative positions to practice fair policies and procedures (Macey & Schneider, 2008) as this reduces the threat of exploitation (Lind, 2001; Greenberg & Cropanzano, 1993); this implies that procedural justice facilitates willingness of employees to invest their energies into their job (Haynie et al., 2016).

Empirical studies also support the positive relationship between procedural justice and engagement (e.g. Lawler, 2001; Meyer & Gagne, 2008; Ryan & Deci, 2000). Consistent with past research, I propose:

***Hypothesis 1: Procedural justice relates positively to engagement.***

### ***The Mediating Role of Organisational Pride***

Social identity theory suggests that individuals use groups they are associated with to define themselves and evaluate their self-worth (Tajfel & Turner, 1979). Moreover, Hogg and Abrams (1988) found that, according to social categorisation theory, individuals interpret active dimensions of their group to define active dimensions of themselves. Doosje, Ellemers and Spears (1999: 86) stated that “people strive to maintain and enhance a positive self-esteem.” As a result, individuals desire to associate with a high-status group as they provide members with increased self-esteem and a positive self-image of self, and thus avoid groups with a low status that would threaten their self-esteem. Groups are perceived as high status when they exhibit fair procedures towards their members. Prior research (Lind, 2001) supports this by suggesting that positive perceptions of procedural justice prime individuals’ social identity. This social identity process can be used to explain people’s motivation to cooperate and engage in groups. This may also explain the extent to which individuals are willing to cooperate in a group, for example the higher the status of the group the higher the level of behavioural engagement. Social identities are responsible for cultivating cooperation, this is because a fair working environment signals to employees that their efforts will not be exploited (Colquitt et al., 2012). Further to this, self-evaluation is a function of social identity, anchored in group membership (Tyler & Blader, 2001). The stronger an individual identifies with a group, the more important the success of the group

becomes, and the more they will be willing to invest their time and energies into ensuring the group succeeds (Tyler & Blader, 2001), and as a way of maintaining the close connection with the group. As such, it can be anticipated that perceptions of procedural justice will activate social identity, that in turn will lead to higher levels of engagement. This is supported by Tyler and Blader (2003) who suggest identity evaluations mediate the relationship between organisational fairness and engagement. In addition, Haynie et al. (2016) proposed that work engagement can be considered as a product of the identity, as predicted by organisational justice. Therefore, consistent with prior research I propose:

***Hypothesis 2: The relationship between procedural justice and engagement is mediated by organisational pride.***

### ***The Mediating Role of Perceived Organisational Support***

Prior research states that procedural justice should positively relate to POS, as fair treatment signals to individuals that the organisation has concern for their welfare and contributions at work (Shore and Shore, 1995; Fasolo, 1995). It is believed that procedural justice leads to individuals feeling supported and cared for by their organisation; as such organisations can initiate positive relationships with their employees by exhibiting fair treatment (Lavelle et al., 2007; Lavelle et al., 2009b). To support this, Ambrose and Schminke (2003) suggest social exchange relationships, as evidenced by POS, are established on the basis of procedural justice. They explained this linkage to occur through procedural justice communicating relevant information to the individual that is important for the establishment social exchange relationships (Organ & Konovsky, 1989). Therefore, it can be assumed that procedural justice is an antecedent of perceived organisational support (see

Ambrose and Schminke, 2003; Cropanzano & Rupp, 2008; Konovsky & Pugh, 1994; Moorman et al., 1998; Masterson et al., 2000).

Employees require a safe, supportive working environment before feeling confident that their physical, cognitive, and emotional energies will not be at risk of negative outcomes, such as exploitation (Kahn, 1990). In other words, when a trustworthy and supportive working environment is evident, employees experience psychological safety and become more prepared to show their authentic self in their role, without being overshadowed by the fear of negative consequences (Kahn, 1990). Such supportive working environments can be depicted through consideration of POS (Rich et al., 2010). POS relates to employees deeming their organisation to have concern for their contributions at work (Shore & Shore, 1995; Eisenberger et al., 1986), this implies that any consequences that may result from work engagement will be minimised as it is believed that the organisation will respond in positive ways to employee effort (Rich et al., 2010; Edmondson, 1999).

Scholars have investigated how procedural justice influences employee work attitudes and behaviours through an implication of social exchange theory (Konovsky & Pugh, 1994; Masterson et al., 2000). For example, Moorman et al. (1998), drawing upon social exchange theory, suggested that POS mediates the relationship between procedural justice and extra effort at work. It is understood that when organisational support is evident, individuals will feel obligated to reciprocate through increased engagement (Moorman et al., 1998). In summary, the amount of energy an individual invests, and is prepared to invest, in their role is dependent on the treatment and socio-emotional and economic resources the organisation provides (Saks, 2006). In summary, a positive mediating effect between

procedural justice and engagement can be transferred through POS; therefore it is proposed that:

***Hypothesis 3: The relationship between procedural justice and engagement is mediated by perceived organisational support.***

### ***Engagement and Voice Behaviour***

Kahn (1990) suggested engagement involves the investment of personal resources towards role performance, and how strongly those resources are invested (Kanfer, 1990). As a result, engagement is used to explain the variability of individuals' work performance. Individuals who are engaged are thought to be psychologically present, attentive, and connected to their role (Rich et al., 2010; Kahn, 1990). All of which, aid the achievement of organisational goals (Rich et al., 2010). In contrast, individuals who are disengaged in their work are described as being unresponsive and passive (Goffman, 1961; Kahn, 1990).

In this study, I suggest that engagement is positively related to voice behaviour. Voice behaviour is an example of a discretionary behaviour that is not required by the organisation but is necessary to facilitate good organisational functioning (Organ, Podsakoff, & MacKenzie, 2006; Organ, 1990). Voice behaviour can be described as the contribution of ideas and actions to a shared enterprise (Edmondson & Lei, 2014). It can be thought of as individuals sharing information and knowledge (Collins & Smith, 2006), speaking up with work-related suggestions for organisational improvements (Detert & Burris, 2007; Liang et al., 2012; Morrison, 2011) and taking initiative to develop new products and services (Baer & Frese, 2003).



High engagement is characterised by individuals investing high levels of intensity and vigour into their work tasks (Salanova & Schaufeli, 2008). It has been suggested that when individuals are engaged in their work, they show increased levels of discretionary, altruistic behaviour with the intention of helping the organisation (Babcock-Roberson & Strickland, 2010; Blader & Tyler, 2009). This implies that when individuals are engaged in their role, they will be motivated to exhibit voice behaviour. Prior research suggests that when individuals are willing to immerse themselves fully in their work and have invested their physical, emotional, and psychological resources into their role (Kahn, 1990), they will be more willing to take initiative and speak up with the intention of improving current working circumstances (Salanova & Schaufeli, 2008). Similarly, it has been suggested that discretionary voice behaviour is most prevalent among individuals who have higher physical, emotional, and psychological energy (see Van Dyne & LePine, 1998; Tims, Bakker & Derks, 2012). Therefore, it can be proposed that:

***Hypothesis 4: Engagement relates positively to voice behaviour.***

The hypothesised model in this study involves serial mediation and considers engagement as an additional mediating factor. Below is a discussion that elaborates on the mediating role of engagement, though not explicitly hypothesised.

### ***The Mediating Role of Engagement***

The conceptualisations of work engagement, as posed by Kahn (1990), suggests that engagement is characterised when individuals harness and invest their physical, cognitive, and emotional energies into work performance simultaneously. It is suggested that when individuals are engaged they have increased focus, connection and investment in their role

and work-related goals (Kahn, 1990), which in turn, results in increased job performance. In summary, when individuals are engaged in their work role, they are considered to invest their “hands, head & heart” concurrently into their work performance (Ashforth & Humphrey, 1995: 110). Though prior research has suggested that job resources positively relate to job performance (e.g. Brown & Leigh, 1996), more recent studies have built upon this work and argued that work engagement acts as a mediator in such relationships (e.g. Rich et al., 2010; Saks, 2006; Ram & Prabhakar, 2011). For example, Rich et al. (2010) argue that POS results in increased work performance through the cultivation of work engagement, in that employees become more willing to investment their cognitive, emotional and physical energy into the role performance when they perceive their organisation to be supportive and considerate of their efforts; thus highlighting the mediating role of engagement.

## Methods

### Sample and Procedure

The research strategy adopted in this study is self-completion surveys. The target population composed of 592 individuals employed by a fire and rescue service. The total sample of returned responses was 347 (response rate 58.6%). The male to female ratio of the returned sample was 267:71.

The majority of individuals who completed the survey were over the age of 45 (160 individuals equaling 47.8% of total responses), followed by 108 respondents who identified as 35-44 years old, and a further 67 respondents who indicated they were 18-34 years old (32.2% and 20% of the total sample, respectively). The majority of respondents selected their tenure in service as 10-19 years (123 individuals and 36.7% of the total sample), the minority of respondents indicated 6-9 years in service (51 individuals and 15.2% of the total sample).

During an initial meeting with the fire and rescue service, research needs and interests were identified. Following the meeting, a proposal for key variables to be measured was presented. The variables relevant to this study were part of a larger study.<sup>1</sup> After the proposal was approved, the paper surveys were administered across the fire service's workforce. Upon the return of the surveys, responses were collated, and the data was manually entered into an SPSS data sheet to allow analyses. The average scores and relationships between variables were tested and analysed using SPSS Statistics and Mplus 8. A model (see Figure 1) and four hypotheses were constructed based on the proposed variables.

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<sup>1</sup> Access to data was obtained through the Durham University Business School Policing Research Unit.

## Measures

The details of the items used in each of the measures are presented in Appendix 2. All measures were rated on a seven-point likert scale, ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Cronbach alpha's were calculated for each measure to establish scale reliability. Each measure obtained an alpha greater than .7, suggesting reliability of the measure (Pallant, 2013) (see Table 1 for means, standard deviations, correlations and scale reliabilities).

***Procedural Justice.*** Procedural justice was measured using Colquitt's (2001) seven-item scale. A sample item is: "The organisation's decisions are consistent". The Cronbach's alpha for this scale was 0.91.

***Perceived Organisational Support.*** The four-item Snape and Redman's (2010) adaption of Eisenberger et al.'s (1986) eight-item POS scale was used. Sample item "The organisation really cares about my well-being". The Cronbach's alpha for this scale was 0.90.

***Organisational Pride.*** Blader and Tyler's (2009) five-item organisational pride scale was used with minor amendments made to the terminology to suit the research context. Sample item "I am proud to tell others where I work". The Cronbach's alpha for this scale was 0.88.

***Engagement.*** Engagement was measured using a shortened version of Rich et al.'s (2010) 18-item engagement scale. Rich et al.'s (2010) engagement scale comprises three dimensions (physical engagement, cognitive engagement, and emotional engagement). Consistent with the work of Rich et al. (2010) and Zhong, Wayne and Liden (2016), the three dimensions of job engagement were aggregated to form an overall measure of job engagement. Due to practical reasons for data collection, in this study a shorter 9-item

version of this scale was used. The highest factor loadings of the original 18-items were considered, as per Rich et al. (2010), alongside discussion with practitioners in emergency services to ensure the most relevant and appropriate items were used (see Appendix 2 for further details of the scale). The Cronbach's alpha for this scale was 0.94.

**Voice Behaviour.** The scale used to measure voice behaviour was the six-item voice scale from Van Dyne and LePine (1998). Sample item "I speak up in my team with ideas for new projects or changes in procedures". The Cronbach's alpha for this scale was 0.89.

**Control Variables.** Age (1 = 18-34 years; 2 = 35-44 years; 3 = Over 45), gender (0 = male; 1 = female), and tenure in service (1 = 0-5 years; 2 = 6-9 years; 3 = 10-19 years; 4 = Over 20 years) were identified as the control variables, as it has been suggested that demographics may have an effect on individuals' work attitudes and behaviours (Tsui, Egan & O'Reilly III, 1992), specifically voice behaviour (Stamper & Van Dyne, 2001). Control variables are measured to mitigate the influencing effect on the predictive analysis. In simpler terms, using control variables in the analysis of data removes their effect on the relationship between the independent variables and dependent variables, resulting in more reflective and accurate results.

**Statistical Methods.** Path analysis in Mplus 8 was employed to examine the indirect effects between procedural justice and voice behaviour (through POS, organisational pride and engagement). The root mean square error of approximation (RMSEA), fit index (CFI), the Tucker-Lewis coefficient (TLI), and the standardized root mean square residuals (SRMR), are used as indicators of overall model fit (Geiser, 2013).

## Results and Analysis

### Preliminary Analysis

Table 1 presents the descriptive statistics, reliability and correlation analysis for the measures and control variables in Study 1. As expected, procedural justice is positively correlated with organisational pride ( $r = .54, p < .01$ ), and with POS ( $r = .81, p < .01$ ). Organisational pride and POS are positively correlated with engagement ( $r = .50, p < .01$ , and  $r = .43, p < .01$ , respectively). Finally, engagement is found to positively correlated with voice behaviour ( $r = .41, p < .01$ ). These results provide initial supports for the hypotheses.

### Confirmatory Factor Analysis

Before testing the hypotheses, a series of confirmatory factor analyses (CFAs) were conducted, the purpose of this was to examine the validity of the measurement model. As shown in Table 2, the model fit indices of the hypothesised five-factor model (procedural justice, organisational pride, perceived organisational support, engagement and voice behaviour) provide a superior model fit ( $\chi^2 = 1228.72, df = 422, RMSEA = 0.07, CFI = 0.90, TLI = 0.89, SRMR = 0.06$ ), this offers supports for the distinctiveness of the measures used.

The results from the model fit for the original model was less desirable ( $\chi^2 = 1435.63, df = 424, RMSEA = 0.08, CFI = 0.87, TLI = 0.86, SRMR = 0.06$ ). The model modification showed that the model could become superior by correlating items 1 and 2 of the engagement scale, and correlating items 2 and 3, similarly.<sup>2</sup> Items 1, 2 and 3 were formed by Rich et al. (2010) to capture emotional engagement; therefore, correlating items 1 and 2, and items 2 and 3, was adopted as it aligns with the emotional dimension of engagement and compliments the theory as suggested by Rich et al. (2010).

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<sup>2</sup> See Appendix 2 for full scale items.

**Table 1. Study 1 - Means, Standard Deviations, Correlations and Reliabilities**

Variables	Means	S.D.	1	2	3	4	5	6	7	8
1. Age	2.28	.78	-							
2. Gender	1.79	.41	-.02	-						
3. Tenure in Service	2.86	1.04	.64**	.12*	-					
4. Procedural Justice	3.64	1.35	-.15**	.01	-.27**	(.91)				
5. Perceived Organisational Support	4.13	1.52	-.09	-.06	-.20**	.81**	(.90)			
6. Organisational Pride	5.71	1.05	-.10	-.11	-.15**	.54**	.56**	(.88)		
7. Engagement	5.47	1.04	-.11	-.05	-.18**	.35**	.43**	.50**	(.94)	
8. Voice Behaviour	5.47	0.82	.04	.03	.14	.09	.16**	.24**	.41**	(.89)

Notes.  $N = 347$ ;

Scale reliabilities are on the diagonal;

Age is coded 1 = 18-34 years, 2 = 35-44 years, 3 = Over 45; Gender is coded 1 = female, 0 = male; Tenure in Service is coded 1 = 0-5 years, 2 = 6-9 years, 3 = 10-19 years, 4 = Over 20 years;

\* $p < .05$ . \*\* $p < .01$ .

**Table 2. Study 1 - Fit Comparisons of Alternative Factor Models**

	$\chi^2$	<i>Df</i>	$\Delta\chi^2 / df$	RMSEA	CFI	TLI	SRMR
Hypothesised Model (5)	1228.72	422	-	.07	.90	.89	.06
Model A	1325.10	426	24.10**	.08	.89	.88	.07
Model B	1875.63	429	183.51**	.10	.82	.80	.09
Model C	3343.47	431	733.92**	.14	.64	.61	.15
Model D	4307.01	432	963.54**	.16	.52	.48	.17

*Notes.*  $N = 347$ .

Model A: 4-factor model combining procedural justice and perceived organisational support as one factor; Model B: 3-factor model combining procedural justice, perceived organisational support and organisational pride as one factor; Model C: 2-factor model combining procedural justice, perceived organisational support, organisational pride and engagement as one factor; Model D: 1-factor model combining all variables.

\* $p < .05$ , \*\* $p < .01$ .



## Hypothesis Testing

The first step conducted in the analysis was to regress engagement on procedural justice, the analysis found that the relationship between procedural justice and engagement is significant ( $b = 0.26, p < 0.01$ ). Therefore, Hypothesis 1 is supported.

Figure 2 shows that procedural justice is significantly related to organisational pride ( $b = 0.41, p < 0.01$ ). In addition, procedural justice is found to be significantly related to POS ( $b = 0.92, p < 0.01$ ), and organisational pride and POS are found to be significantly related to engagement ( $b = 0.42, p < 0.01$  and  $b = 0.15, p < 0.05$ , respectively).

In terms of testing the mediating effects, the bootstrap analysis with 10,000 samples indicated that organisational pride has a significant indirect effect on the relationship between procedural justice and engagement, as suggested by the 95% confidence intervals (CIs) of organisational pride (see Table 3;  $b = 0.174, [0.117, 0.239]$ ). Thus, providing support for Hypothesis 2. Similarly, the bootstrap analysis indicated that POS has a significant indirect effect on the relationship between procedural justice and engagement, as suggested by the 95% confidence intervals (CIs) of POS (see Table 3;  $b = 0.142, [0.020, 0.277]$ ). Therefore, Hypothesis 3 is supported.

Moreover, engagement was found to be positively related to voice behaviour ( $b = 0.31, p < 0.01$ ), therefore Hypothesis 4 is supported.

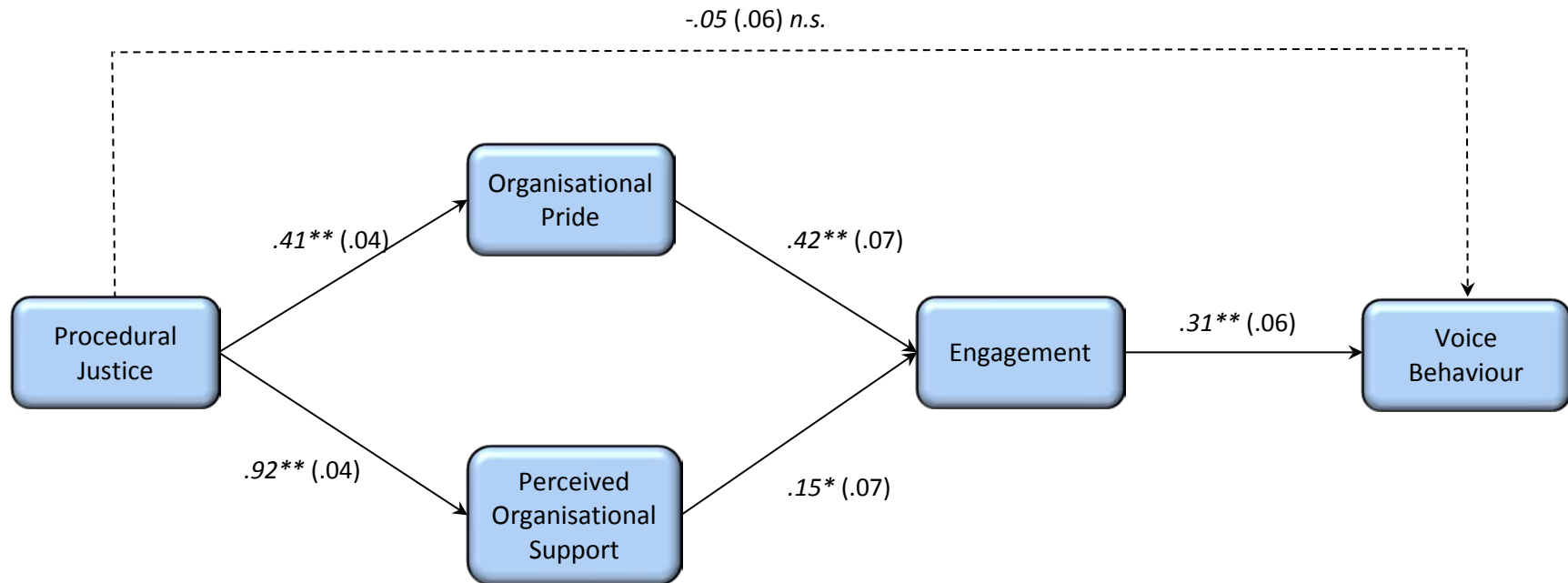
Table 3 presents the results for the serial mediation analysis. It shows that the relationship between procedural justice and voice behaviour, sequentially mediated by organisational pride and engagement, is significant ( $b = 0.054, [0.032, 0.087]$ ). Similarly, the relationship between procedural justice and voice behaviour, sequentially mediated by POS and

engagement, is significant ( $b = 0.044$ , [0.007, 0.093]). Additional analysis was conducted in order to establish the stronger indirect path. It can be concluded that both of the indirect routes are at a similar level, with the route via organisational pride showing to be slightly higher. However, the difference between the two indirect routes was found to be non-significant as suggested by the 95% confidence intervals (CIs) ( $b = -0.010$ , [-0.058, 0.037]).

### **Supplementary Analysis**

Prior research has suggested that POS is predictive of organisational identification (e.g. see Lavelle et al., 2007; Edwards, 2009; Sluss, Klimchak & Holmes, 2008), therefore supplementary analysis was conducted compare the model fit to understand which model fits the data better and to test the serial mediation between procedural justice and voice behaviour through POS, organisational pride and engagement (see Figure 3). The alternative proposed serial mediation effect is significant ( $b = 0.032$ , [0.016, 0.060]). These results suggest that procedural justice leads to increased perceptions of organisational support, which in turn leads to individuals identifying with the organisation. In addition, as shown in Table 3 all the hypothesised mediation effects still hold.

Figure 2. Study 1 – Tested Model



Notes. Dotted lines indicate the non-significant direct relationships between procedural justice and voice behaviour when the mediation model was analysed.

The numbers in italics represent the unstandardised coefficients; numbers in parentheses are standard errors;

\* $p < .05$ ., \*\* $p < .01$ .

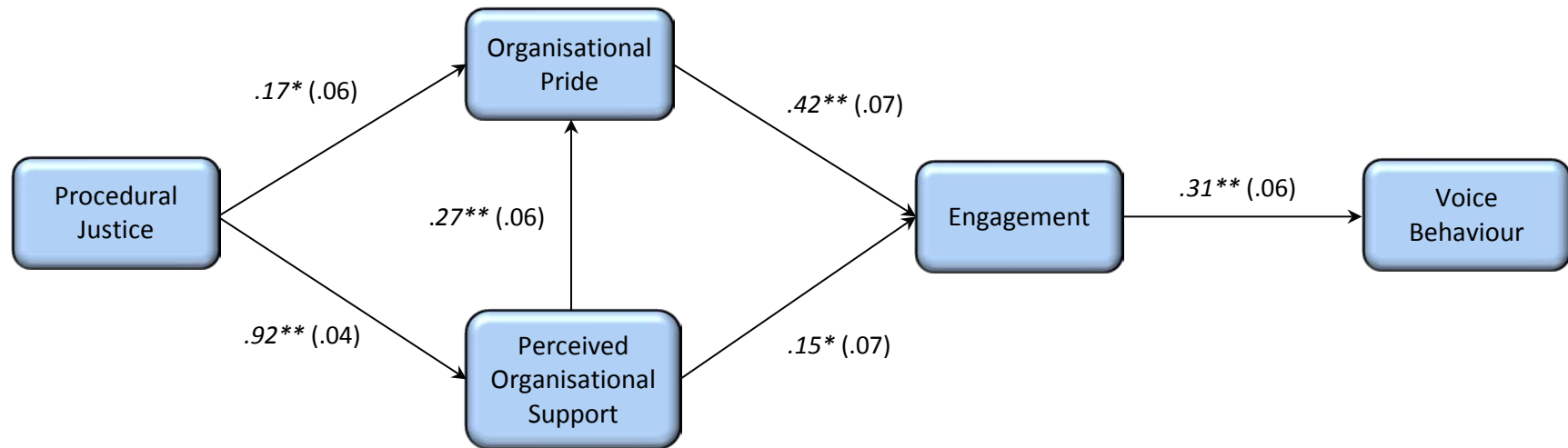
$N = 347$ .

**Table 3. Study 1 - (Manifest calculated)**  
**Indirect Effects from Procedural Justice to Voice Behaviour via Organisational Pride, POS and Engagement**

Indirect Effects	Estimate	Bootstrap 95% Confidence Interval
<b>Hypothesised Model</b>		
Procedural Justice → Organisational Pride → Engagement	<b>0.174</b>	<b>[0.117, 0.239]</b>
Procedural Justice → POS → Engagement	<b>0.142</b>	<b>[0.020, 0.277]</b>
Procedural Justice → Organisational Pride → Engagement → Voice Behaviour ( <i>Indirect 1</i> )	<b>0.054</b>	<b>[0.032, 0.087]</b>
Procedural Justice → POS → Engagement → Voice Behaviour ( <i>Indirect 2</i> )	<b>0.044</b>	<b>[0.007, 0.093]</b>
Difference (Indirect 1 - Indirect 2)	-0.010	[-0.058, 0.037]
<b>Alternative Proposed Model (<i>Supplementary Analysis</i>)</b>		
Procedural Justice → POS → Organisational Pride → Engagement → Voice Behaviour	<b>0.032</b>	<b>[0.016, 0.060]</b>
Procedural Justice → Organisational Pride → Engagement → Voice Behaviour	<b>0.022</b>	<b>[0.006, 0.046]</b>
Procedural Justice → POS → Engagement → Voice Behaviour	<b>0.044</b>	<b>[0.007, 0.093]</b>
Procedural Justice → Organisational Pride → Engagement	<b>0.070</b>	<b>[0.021, 0.132]</b>
Procedural Justice → POS → Engagement	<b>0.142</b>	<b>[0.020, 0.277]</b>

*Notes.*  $N = 347$ . Unstandardised estimates are reported. All estimates were tested for significance using bootstrap confidence intervals by 10,000 resampling. Bold numbers indicate the estimates are significant. Difference between indirect 1 and indirect 2 was calculated to establish if they were significantly different to one another.

**Figure 3. Study 1 – Alternative Proposed Model**



*Notes.* Dotted lines indicate the non-significant direct relationships between procedural justice and voice behaviour when the mediation model was analysed.

The numbers in italics represent the unstandardised coefficients; numbers in parentheses are standard errors;

\* $p < .05$ ., \*\* $p < .01$ .;

$N = 347$ .

## Discussion

Study 1 examined a number of relationships; firstly the relationship between procedural justice and engagement, secondly this study investigated two competing mechanisms through which procedural justice leads to engagement and in doing so established if the routes were significantly different, and thirdly the relationship between engagement and voice behaviour was examined.

The data supports the hypotheses suggesting that the relationship between procedural justice and engagement is mediated by social identity and social exchange. When considering the two competing mechanisms, social identity and social exchange, a stronger route was not hypothesised; however, an interesting finding is that the path via social identity was found to be slightly higher than that of social exchange, albeit the difference between the routes is not significantly different. The non-significant difference of the two proposed routes implies that social identity and social exchange processes are equally important to individuals within the fire and rescue community for the cultivation of work engagement and voice behaviour. This suggests that employees utilise perceptions of procedural justice to equally inform their social identification and social exchange relationships with their organisation, and this leads to work engagement and voice behaviour. Future research could investigate this comparison further and include moderating variables to examine when to adopt the social identity or social exchange model to explain the effectiveness of procedural justice.

The results of this study support the idea that perceptions of procedural justice positively predict psychological responses from individuals, in particular, organisational pride

(Edwards & Kudret, 2017). This implies that when organisations exhibit fair treatment towards employees they will feel valued and respected, which in turn will activate a positive sense of the organisation, resulting in organisational pride. To support this, Lind (2001) defined justice perceptions as pivotal cognitions that prime identity levels, which are responsible for cultivating cooperation. He explained that fair working environments signal to employees that their social identity and cooperative behaviours will not be exploited (Colquitt et al., 2012). The results of this study provide support for this statement.

The GEM was drawn upon in this study to inform Hypothesis 2. GEM theorises that procedural justice is influential in impacting individuals' group identification, this is because fairness perceptions are evaluations of the treatment they receive from the organisation, and this treatment holds information highly relevant for forming social identity (Tyler and Blader, 2003). Additionally, the results support Tyler and Blader (2003) who suggest procedural justice provides individuals with a security identity, as such when people feel a sense of security they are more likely to engage and identify with their group as they believe it to be safe from exploitation and exclusion (Colquitt et al., 2012).

Social exchange theory informed Hypothesis 3, which posited POS as a mediator for the relationship between procedural justice and engagement. The results support the work of Ambrose and Schminke (2003) who suggest organisational social exchange relationships, as evidenced by POS, are established on the basis of procedural justice. They explained this relationship occurs as procedural justice communicates relevant information to the individual that is important for the establishment social exchange relationships. To support this further, it has been suggested that fairness is an antecedent of social exchange relationships (Organ & Konovsky, 1989). The results of this study imply that individuals use

fairness perceptions to decide if the organisation is trustworthy, and whether it is safe to engage in the exchange process (Lind, 2001). Prior research states that procedural justice positively relates to POS (Cropanzano et al., 2002; Cropanzano & Rupp, 2008; Konovsky & Pugh, 1994; Moorman et al., 1998; Masterson et al., 2000; Shore & Shore, 1995). Similarly, the results support the idea that individuals assess organisational support based on the fairness of organisational decisions, policies and practices, as they are believed to reflect the organisations' intent, implying that perceptions of fairness and organisational support are positively related (Fasolo, 1995).

The supplementary analysis was conducted to test the alternative model of the serial mediation between procedural justice and voice behaviour, through POS, organisational pride and engagement, sequentially (see Figure 3). The results show that the alternative model is significant, suggesting that procedural justice leads to organisational pride through POS. This result is consistent with prior research which suggests perceptions of organisational support are considered to meet employee needs of esteem and affiliation which, in turn, leads to employees welcoming the organisation into their identity (e.g. see review by Lavelle et al., 2007; Rhoades, Eisenberger & Armeli, 2001). It has been suggested that individuals incorporate their organisation into their own self-identity when the organisation fulfils employee socio-emotional needs, such as esteem and approval, which creates a positive emotional bond between the employee and organisation (Eisenberger et al., 1986; Eisenberger, Fasolo, & Davis-LaMastro, 1990). When an organisation fulfils employee psychological needs, not only are employees expected to develop a positive bond with the organisation, but also this will lead to identification with the organisation and the internalisation of organisational goals (Meyer & Allen, 1997; Eisenberger et al., 2001). The



supplementary analysis conducted takes prior research further by including the mediation effects of POS and adding it to a serial mediation path (see Figure 3). Therefore, a strength of the alternative model is the additional insight it provides when understanding the important role POS plays in the workplace, particularly its mediating qualities of the relationship between procedural justice and organisational identification, which then leads to engagement and discretionary effort.

In addition, it is acknowledged that POS may moderate the relationship between procedural justice and organisational pride. In that, individuals are likely to respond differently to procedural justice depending on their perceptions of organisational support. More specifically, the contribution of procedural justice on organisational pride is subject to the extent to which individuals perceive their organisation to be supportive. POS is thought to meet individuals' need for esteem and affiliation (Lavelle et al., 2007); when these needs are met, individuals are more willing to incorporate their organisation into their social identity (Rhoades et al., 2001). A supportive working environment provides employees with security and makes them feel valued and respected (Edwards, 2009), such environments allow the impact of procedural justice to thrive, and accentuates its positive relationship with social identity. A consideration for future research would be to test the moderating effects of POS on procedural justice and organisational pride; this would lead to increased understanding the role and importance of POS in the workplace.

The intent of this study was to investigate the relationship between procedural justice and employee engagement and voice behaviour in the context of a fire and rescue service, thus consolidating the importance and utility of organisational fairness across emergency services (e.g. Bradford et al., 2014). The aim of this study was to examine procedural justice

and its ability to explain employee engagement and discretionary behaviour through better understanding the mechanisms through which this occurs. The results will provide increased practitioner knowledge on the important of fairness in the workplace. This study has contributed to existing organisational justice, social identity and social exchange literature, as well as adding to the body of evidence to support the statement from the HMIC which expresses the importance of fairness for enhancing performance in police forces (HMIC, 2014a). The results in this study support the work of justice, social identity and social exchange scholars, through further establishing the processes through which organisational fairness leads to discretionary behaviour. To summarise, the results are congruent with other justice literature, by showing that when individuals receive fair treatment at work, the feel a duty to reciprocate and engage in discretionary behaviours that benefit the organisation. Further, the results show that fair treatment leads to individuals identifying with the organisation through a sense of organisational pride, and as a result will become engaged and demonstrate discretionary voice behaviour with the intention of improving their organisation.

This study has made a number of theoretical impactions. Firstly, in Tyler and Blader's (2003) GEM they suggest that when a social identity is activated, individuals will engage more of their efforts into their job. However, a work engagement variable was absent from their model. This study contributes to GEM theory by measuring procedural justice, social identity and work engagement, and testing the relationships between them. Secondly, prior research in the emergency services has consolidated the importance of fair treatment towards the public. However, there is limited attention examining the impact of fairness on emergency service personnel (for an exception, see Bradford et al., 2014). This study builds

on the work of Bradford et al. (2014), who investigates the importance of organisational fairness for police officer extra-role activity and explores the impact of organisational procedural justice on engagement and organisational-focused discretionary behaviour. Thirdly, the GEM examines the impact of organisational fairness on employee discretionary effort using social identity theory. In Study 1, both social identity theory and social exchange theory is drawn upon to investigate and compare the impact of these two different mechanisms on engagement. Specifically, the strength of mediation effects for organisational pride (Tyler & Blader, 2003) and perceptions of organisational support (Eisenberger et al., 1986) are compared, for the relationship between procedural justice and engagement. Finally, the most commonly used scale to measure work engagement is the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). However, the UWES has been criticised as it is conceptualised as the opposite of burnout, as opposed to following the conceptualisation from Kahn (1990) (Newman & Harrison, 2008; Rich et al., 2010). Rich et al. (2010) developed an 18-item scale and they argue that this scale is more appropriate as it is based on the original conceptualisation of work engagement of Kahn (1990). Kahn (1990) conceptualised work engagement as being made up of cognitive, emotional and physical energies which individuals invest in their work holistically; therefore this scale was adopted. In this study, a shortened version of Rich's et al.'s (2010) scale was tested and found to be valid.

This study has a number of strengths; including the addition of an engagement scale to be tested in the GEM and the engagement scale selected was that of Rich et al. (2010). A further strength is that this study explored two competing paths which drew upon social identity and social exchange theory. And finally, engagement and voice behaviour were

investigated within an emergency service setting, thus consolidating the importance of procedural justice in the workplace. Although this study held strengths, of note is the limitation of the reliance the study places on the common-method data. The strengths and limitations of this study are discussed in further detail in Chapter 6.

In sum, support was provided for the posed hypotheses; in that procedural justice was found to be positively related to engagement, supporting Hypothesis 1. Moreover, this relationship was found to be mediated by two competing routes, which drew upon social identity and social exchange theory. The results imply that organisational pride mediates the relationship between procedural justice and engagement, therefore supporting Hypothesis 2. Similarly, POS was found to mediate the relationship between procedural justice and engagement, supporting Hypothesis 3. Finally, engagement was found to be positively related to voice behaviour, thus supporting Hypothesis 4.

## Chapter 5 (Study 2) The Effects of Justice Perceptions on Self-Identity and Ethical Behaviour

### Introduction

Due to austerity, the policing sector has found itself in a challenging environment characterised by reduced resources and restructuring. However, overstretched police forces are still expected to perform at the same, if not higher levels, whilst tackling growing demand and maintaining high ethical standards (HMIC, 2014a). There is concern over how these factors, and the pressure that follows, will influence individuals' attitudes and behaviours, and the service they deliver to the public (HMIC, 2014b). This suggests the high importance of individuals going beyond their role requirements and behaving ethically, in order to maintain and increase public service. As previously discussed, prior research suggests that to increase discretionary effort in work teams, individuals must perceive the workplace to demonstrate fairness; in turn, this will encourage individuals to exhibit positive behaviours (Lind, 2001). This idea will be investigated further in this study through examining ethical behaviour as an outcome of organisational procedural justice.

Procedural justice is defined as "the perceived fairness of the process by which outcomes were arrived" (Cohen-Charash & Spector, 2001: 279). Procedural justice captures the procedural elements of decision making across an organisation by its senior leaders.

The literature has long suggested that procedural justice has a positive impact on employee workplace ethics. Crawshaw et al. (2013) reviewed the current literature and discussed how justice connects with ethical behaviour. They called for future studies to examine the relationship between organisational justice and behavioural ethics. Cropanzano and Stein

(2009) suggest that the behavioural ethics literature has utility in understanding how people react to the right and wrong behaviour of others, in that perceptions of fairness inform ethical behaviour. Therefore, it is recognised that further investigation between organisational justice and the effect it has on individuals' ethical conduct at work will be beneficial but is still lacking. To address this gap, I propose a model which suggests that procedural justice increases employee ethical voice behaviour.

Ethical voice behaviour refers to a discretionary communication between individuals and other members of their work teams, with a particular focus on ethical behaviour (Hannah & Avolio, 2010; Lee et al., 2015). It investigates the extent to which individuals are willing to approach and talk to their colleagues if they perceive them to be acting unethically or with a lack of integrity. As discussed above, ethical behaviour is important in policing as there is growing pressure for police forces to perform at higher levels with high integrity, whilst facing the challenges of their environment brought on by austerity (HMIC, 2014a). The aim of ethical voice behaviour is to ensure unethical behaviour is minimised and to ensure work teams operate in a more ethical manner, thus suggesting its high importance for organisational functionality and ethical standards. As such, this measure was included as a proxy of ethical behaviour demonstrated by employees.

It is believed that the examination of the relationship between procedural justice and ethical behaviour will expand understanding of the impact of procedural justice in the workplace. The relationship between procedural justice and ethical behaviour has been studied in a laboratory experiment (see Johnson and Lord, 2010), but to the best of my knowledge not in a field study in an occupational context and there are limited studies investigating the psychological mechanisms of procedural justice on ethical behaviour. I

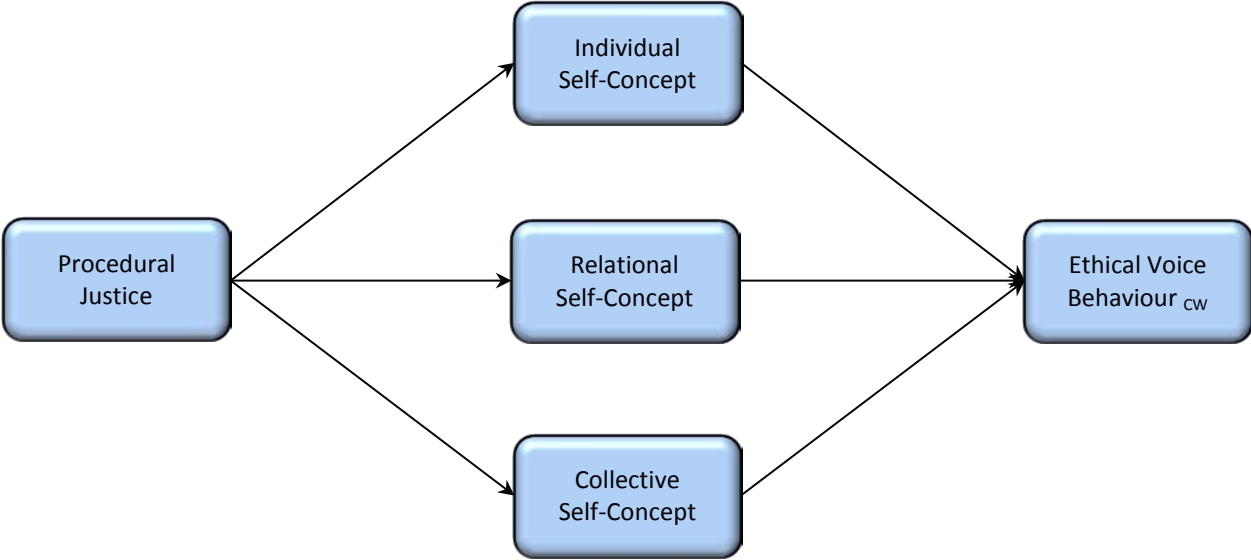
draw upon self-concept theory and suggest that individuals' collective self-concept underlies the relationship between procedural justice and ethical voice behaviour. It has been recognised that different contexts have the ability to inform processing units that make up the self (Epitropaki et al., 2017); specifically, Lord and Brown (2004) suggest that information provided in the broader social environment affects individuals' self-concept. It has further been suggested that the information in the broader social environment is influenced by procedural elements (Tyler & Blader, 2003). This reinforces the importance of procedural justice in the workplace and its ability to inform self-identity. Moreover, prior research has found procedural justice to affect individuals' self-concept (Lind, 2001; Johnson & Lord, 2010; Johnson et al., 2006).

This study makes several contributions. Firstly, it contributes to the procedural justice literature by identifying ethical voice as a behaviour it is related to, thus it provides an initial step to aid the understanding of the relationship between procedural justice and ethics in the workplace. While much prior research has demonstrated procedural justice as an important organisational factor that increases positive employee work behaviours, the inclusion of ethical behaviour has somewhat been absent. In this study, this gap is addressed, and procedural justice is investigated as a predictor of ethical conduct. This further adds empirical support in demonstrating the positive influence procedural justice has on employees' conduct at work. Secondly, this study contributes to the existing literature by adding a new substantive mediator, through drawing upon self-concept theory, to explain how procedural justice is related to employee ethical behaviour. In this study, self-concept is explored as a mechanism through which organisational procedural justice leads to ethical behaviour. Thus, the results of this thesis will add to the understanding of

the mechanics between procedural justice and ethical behaviour in the context of emergency services. And thirdly, the results of this study will provide robust evidence for the HMIC legitimacy audits and their assertion surrounding fairness as an important factor that has the ability to influence police officer and staff behaviours at work, which will ultimately enhance performance across policing (HMIC, 2014a). It is hoped the results of this study will add to practitioner knowledge of the importance of organisational justice and to contribute to existing theory in justice, self-concept and behavioural ethics literature.



Figure 4. Study 2 – Hypothesised Model



*Note: cw signifies that ethical voice behaviour was rated by a colleague.*

## Theoretical Frameworks and Hypotheses

### *Fairness and Self-Identity*

Different contexts activate the processing units that make up the self, which then lead to emotional behavioural and motivational responses (Lord & Brown, 2004). To support this, Epitropaki et al. (2017) suggest that individual self-concept, relational self-concept, and collective self-concept are activated by different contexts and inform an individual's self-identity, and that the variation of the self-identity may differ over time. Furthermore, it has been suggested that self-identity becomes salient when it is threatened (Lord & Brown, 2004). This highlights the dynamic nature of the self-concept. When a specific identity becomes salient, this leads to individuals' knowledge structures becoming more dominant and accessible in their minds (Lord & Brown, 2004). The knowledge that comes to a person's mind first is what is known to motivate and guide behaviour (Bargh et al., 1996). Social communications prime identity levels and the salience of social justice dimensions (Baker, 1998). Lord and Brown (2004) suggest that information provided in the broader social environment affects individuals' self-concept, and that self-concept is developed and regulated by social interactions. Social interactions hold contextual cues, the self-concept helps translate these cues into behaviour and goals (Lord & Brown, 2004). To support this, prior research has suggested procedural justice is more salient for those individuals with collective motives, implying a linkage between procedural justice and collective self-concept (Johnson et al., 2006). In addition, it has been posited that the activation of interdependent identities are higher when individuals perceive the treatment they receive at work to be fair (Johnson & Lord, 2010). Other researchers reinforce the importance of fairness when considering self-concept through explaining that self-concept can be thought of as a

psychological mechanism that is influenced by perceptions of procedural justice (De Cremer & Tyler, 2005).

Organisations can influence their employees' self-concepts through the organisational contexts they create. Therefore, it is in the organisations' best interests to initiate contexts at work which activate a positive sense of self in its employees, as in turn this will positively impact their thoughts, attitudes and behaviour, which will enhance organisational functioning (Lord & Brown, 2004). Simply, it is important organisations treat their people well, in doing so, they will be able to positively influence their employees' cognition and self-schemas.

Those with a collective self-concept will internalise communal values and have high interest in the welfare of the collective (e.g. the organisation), therefore they will place more value on receiving fair treatment from their organisation. In contrast, those with an individual self-concept will have interest in their own values and needs, and those with a relational self-concept will have concern of appraisals they receive from significant others, such as their supervisors (Johnson & Lord, 2010), and therefore will place less salience on the fair treatment they receive from the organisation. To support this, Johnson et al. (2006) suggests the value that individuals place on procedural justice varies depending on their self-concept; as such individuals with a collective self-concept will place more value on the procedural fairness they receive from the organisation because procedural justice implies that the group will benefit which aligns with their communal values, whereas those individuals with an individual self-concept will show lower levels of concern of procedural justice. In line with previous findings (see Johnson & Lord, 2010; De Cremer & Tyler, 2005; Johnson et al., 2006) it is therefore proposed that:

***Hypothesis 1: Procedural justice relates positively to collective self-concept.***

### ***Self-Identity and Ethical Behaviour***

Ethical voice behaviour refers to the communication between individuals and their work teams, with a particular focus on speaking up against unethical behaviour (Hannah & Avolio, 2010; Lee et al., 2015). It investigates the extent to which individuals are prepared to correct unethical conduct by approaching colleagues they perceive to be acting unethically or with a lack of integrity at work; suggesting ethical voice is a change-orientated and self-initiated behaviour that is motivated by intrinsic motivations (Parker, Bindl & Strauss, 2010). The purpose of this type of ethical behaviour is to ensure the organisation operates more ethically, particularly at an employee level. Motivations of ethical voice behaviour can be considered as stemming from having concern for the work team and those within it (Frazier & Bowler, 2015; Walumbwa, Morrison & Christensen, 2012); this suggests that individuals who engage in this ethical behaviour are encouraged to do so through their concern and communal interests for their group as they will want to ensure the groups' success, status and ethical conduct.

Prior research suggests that concern for group members is salient to individuals with a collective self-concept (Johnson & Saboe, 2010), and because the welfare of others becomes a higher priority they will engage in behaviours that benefit the group. The collective self-concept emphasises the importance of prosocial goals (Lord & Brown, 2004), implying that when collective self-concept is active individuals will act on the values and goals of the collective. In this situation, employees are likely to speak up with constructive opinions or suggestions for the benefit of their organisation.

***Hypothesis 2: Collective self-concept relates positively to ethical voice behaviour.***

### ***The Mediating Role of Self-Identity***

Prior research indicates that self-identity, which is central to individuals' self-concepts, acts as a mediator between the relationship of procedural justice and cooperative behaviour (Johnson & Lord, 2010); suggesting fairness perceptions prime self-identity levels, and that cooperative behaviour is a product of group-based identity. Johnson and Lord (2010) continued to suggest procedural justice perceptions are utilised by individuals to evaluate the trustworthiness of their employer, and that these perceptions activate the collective self-concept. Once the collective self-concept is activated, the concerns of other members' welfare within the group will become high in importance (Johnson & Saboe, 2010), and prosocial goals will become more dominant, thus leading to positive employee behaviour that benefit the group (Lord & Brown, 2004). As such, those with a collective self-concept are more willing to engage in group-orientated behaviours, as they have a desire to behave in ways that benefit the group, and because they perceive lower levels of risk in doing so.

To support this, Moorman and Blakely (1995) reinforce the importance of procedural justice for the achievement of positive behaviour at work; they suggest perceptions of fairness provide individuals with an orientation towards the group and the group's interests. They go on to suggest that individuals are likely to reciprocate fair treatment they receive from their work organisation by exhibiting behaviour that benefits the collective's interests (Moorman, 1991). The motivation behind engaging in this behaviour is believed to come from the individual and their identification with the values and norms of the collective group (Moorman & Blakely, 1995). Further, it has been suggested that procedural justice and behaviour directed towards helping the group are positively related because they are both

implicitly concerned with the interests of the collective (Moorman & Blakely, 1995). When thinking about implicit concerns in relation to ethical behaviour, Crawshaw et al. (2013) recognise that procedural justice involves an ethical appraisal, and that treatment can be considered as fair when it upholds an ethical standard (Leventhal, 1980). This implies that individuals' perceptions of procedural justice are based on concern for ethical treatment, and that this concern aligns with that evident in ethical voice behaviour, in that both procedural justice and ethical behaviour involve upholding ethical norms. It is expected that the relationship between procedural justice and ethical voice behaviour is mediated by collective self-concept, as individuals with an activated collective self-concept will intend to help others and have interest in others' needs, therefore they will be willing and prepared to engage in ethical voice behaviour to enhance ethical conduct of their group.

***Hypothesis 3: Collective self-concept mediates the relationship between procedural justice and ethical voice behaviour.***

The outcome of the model in this study is ethical voice behaviour, the aim of which is to improve performance and ethical conduct of the collective, therefore it is predicted that the individual self-concept (interest in self), and relational self-concept (interest in significant others, e.g. supervisors) will have a non-significant influence on ethical voice behaviour, and that a larger effect will be seen through the collective self-concept (interest in the collective, e.g. the organisation).

## Methods

### Sample and Procedure

To ensure common method variance was minimised in this study, data was collected from different sources; self-completion paper surveys (measuring procedural justice and self-concept) and co-worker-rated surveys (measuring ethical voice behaviour). The target population of the selected police service comprised approximately 1,650 people.

The total sample of returned responses was 367 main surveys and 273 co-worker-rated surveys (response rates 22.2% and 16.5%, respectively). It is worth noting the dyadic matched response was 239. The demographics of the responses were 224 males and 142 females. Of the total sample of returned responses, 66% were police officers and 34% were police staff. The mean age is 42.6 years, and the mean tenure in service is 12.8 years.

All individuals employed by the selected police service received the main survey to complete, with the 'colleague' survey enclosed for individuals to distribute to their chosen co-worker.<sup>3</sup> The instruction given to individuals was to ask a colleague whom they know well to complete the shorter 'colleague' survey on their behaviours at work and to return the survey directly to Durham University in the separate self-addressed envelope provided. In order to match the responses from the two sources, each pair of surveys was coded with an assigned identification number.

A model (see Figure 4) and three hypotheses were constructed based on the variables. The returned responses were collated and entered into Microsoft Excel before being transferred into SPSS Statistics for preliminary analysis and hypothesis testing.

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<sup>3</sup> This data was collected as part of the collaborative research project conducted by the Policing Research Unit at Durham University Business School.

## Measures

The following section presents the scales that were used in Study 2 (see Appendix 2 for the details of each scale). All measures used a seven-point likert scale, with anchors ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Cronbach alpha's were calculated to assess the reliability of the scales. Each measure achieved an alpha of above .7, suggesting acceptability of the scales (Pallant, 2013). Table 4 presents the means, standard deviations, correlations and scale reliabilities.

***Procedural Justice.*** The procedural justice measure used was the seven-item scale from Colquitt (2001). Sample item "The organisation's decisions uphold ethical and moral standards". The Cronbach's alpha for this scale was 0.92.

***Self-Concept.*** The Selenta and Lord (2005) levels of self-concept scale (LSCS) was used. The LSCS is a multi-dimensional scale, comprising individual self-concept, relational self-concept and collective self-concept. Each dimension was measured using 5 items. An example of the individual self-concept sample item is "I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people". For the relational self-concept a sample item is "Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person". For the collective self-concept a sample item is "When I become involved in a group project, I do my best to ensure its success". The Cronbach's alphas for these three dimensions were all above .7 (0.86, 0.80 and 0.82, respectively). As collective self-concept is the focus of this study, the other two dimensions (individual self- and relational self-concept) are included and used as control variables in the analyses.



**Ethical Voice Behaviour.** The scale used to measure ethical voice behaviour is developed by Graham, Wu, & Zheng (*forthcoming*) adapted from Tucker, Chmiel, Turner, Hershcovis and Stride (2008)'s safety voice measure. Sample item "She / he is prepared to talk to co-workers who fail to behave ethically". The Cronbach's alpha for this measure was 0.93.

**Control Variables.** The control variables used in this study were role (0 = police officer and 1 = police staff), gender (0 = male and 1 = female), age (measured in years), and tenure in the force (measured in years). Control variables are used to enhance the accuracy of the predictive analysis, as controlling for role, gender, age and tenure in service mitigates the influencing effects on the relationship between the independent variables and dependent variables (Tsui et al., 1992). For example, it has been suggested that gender, age and tenure are factors that influence individuals' willingness to exhibit voice behaviour (see Stamper & Van Dyne, 2001).

**Statistical Methods.** To test the hypotheses, Mplus 8 was employed to conduct path analysis. The root mean square error of approximation (RMSEA), fit index (CFI), the Tucker–Lewis coefficient (TLI), and the standardised root mean square residuals (SRMR), are used as indicators of overall model fit (Geiser, 2013).

## Results and Analysis

### Preliminary Analysis

Table 4 presents the descriptive statistics, reliability and correlation analysis for the measures and control variables. As anticipated, procedural justice is positively correlated with collective self-concept ( $r = .28, p < .01$ ). Moreover, collective self-concept is positively correlated with ethical voice behaviour ( $r = .34, p < .01$ ). These results provide initial supports for the hypotheses.

While the following results were not hypothesised, it is noteworthy that procedural justice is not correlated with individual self-concept ( $r = .03, p = .595$ ). Similarly, procedural justice is not correlated with relational self-concept ( $r = .07, p = .185$ ). Individual self-concept is not correlated with ethical voice behaviour ( $r = -.01, p = .905$ ). In contrast, relational self-concept is positively correlated with ethical voice behaviour ( $r = .24, p < .01$ ).

### Confirmatory Factor Analysis

Before testing the hypotheses, a series of confirmatory factor analyses (CFAs) were conducted, the purpose of this was to examine the validity of the measurement model. As shown in Table 5, the model fit indices of the hypothesised five-factor model (procedural justice, individual self-concept, relational self-concept, collective self-concept and ethical voice behaviour) provide a superior model fit ( $\chi^2 = 671.99, df = 289, RMSEA = 0.06, CFI = 0.93, TLI = 0.92, SRMR = 0.06$ ), this offers supports for the distinctiveness of the measures used in Study 2.

**Table 4. Study 2 - Means, Standard Deviations, Correlations and Reliabilities**

Variables	Means	S.D.	1	2	3	4	5	6	7	8	9
1. Role	.34	.47	-								
2. Tenure in Service	12.80	8.22	-	-							
3. Age	42.57	8.78	.03	.22**	-						
4. Gender	.39	.49	.37**	-.15*	-.27**	-					
5. Procedural Justice	3.71	1.33	.25**	.29**	-.07	.05	.92				
6. Individual Self-Concept	3.43	1.27	-.61	-.04	-.02	-.08	.03	.86			
7. Collective Self-Concept	5.58	.95	.01	.22**	-.04	.09	.28**	.24**	.82		
8. Relational Self-Concept	5.88	.78	-.12*	.05	-.06	.13*	.07	.10	.58**	.80	
9. Ethical Voice Behaviour <sub>cw</sub>	5.98	.95	-.10	.20*	-.06	.04	.15*	-.01	.34**	.24**	.93

Notes.  $N = 367$ ;

Scale reliabilities are on the diagonal;

Role is coded 0 = police officer, 1 = police staff; Gender is coded 0 = male, 1 = female;

Tenure in Service is for Police Officers only;

cw signifies the colleague-rated measures;

\* $p < .05$ . \*\* $p < .01$ .

**Table 5. Study 2 - Fit Comparisons of Alternative Factor Models**

	$\chi^2$	<i>Df</i>	$\Delta\chi^2 / df$	RMSEA	CFI	TLI	SRMR
Hypothesised Model (5)	671.99	289	-	.06	.93	.92	.06
Model A	878.06	293	51.52**	.07	.89	.88	.07
Model B	1354.27	293	170.57**	.10	.80	.78	.13
Model C	1651.91	296	139.99**	.11	.74	.72	.11
Model D	2484.81	298	201.42**	.14	.59	.55	.14
Model E	3868.81	299	319.68**	.18	.32	.26	.20

*Note.* *N* = 239.

Model A: 4-factor model combining relational self-concept and collective self-concept as one factor; Model B: 4-factor model combining individual self-concept and relational self-concept as one factor; Model C: 3-factor model combining individual self-concept, relational self-concept and collective self-concept as one factor; Model D: 2-factor model combining individual self-concept, relational self-concept, collective self-concept and ethical voice as one factor. Model E: 1-factor model combining all variables.

\**p* < .05, \*\**p* < .01.

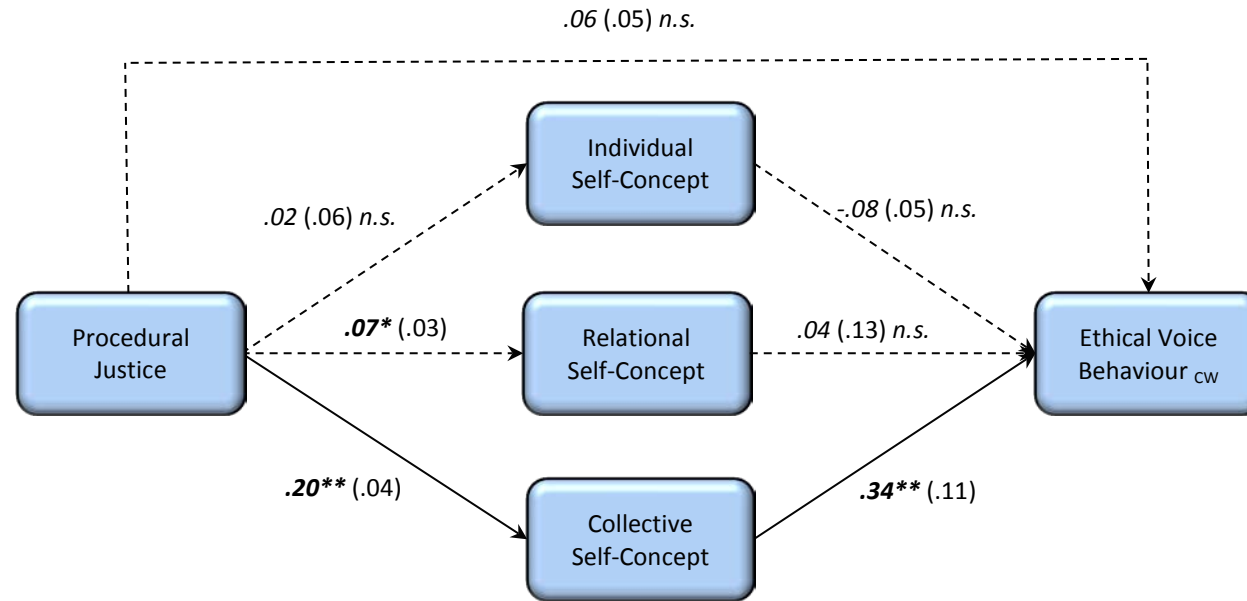
## Hypothesis Testing

Path analysis using Mplus 8 was conducted to test the hypotheses. As shown in Figure 5, the relationship between procedural justice and collective self-concept is significant ( $b = 0.20$ ,  $p < 0.01$ ). Therefore, Hypothesis 1 is supported. The analysis also found the relationship between collective self-concept and ethical voice behaviour is significant ( $b = 0.34$ ,  $p < 0.01$ ), this result shows that Hypothesis 2 is supported.

The mediation effects of procedural justice on ethical voice behaviour through self-concept were tested. The bootstrap analysis with 10,000 samples indicated that collective self-concept has a significant indirect effect on the relationship between procedural justice and ethical voice behaviour, as suggested by the 95% confidence intervals (CIs) of collective self-concept (see Table 6;  $b = 0.067$ , [0.02, 0.14]), thus supporting Hypothesis 3.

In contrast, the bootstrap analysis indicated that individual self-concept has a non-significant indirect effect on the relationship between procedural justice and ethical voice behaviour (see Table 6;  $b = -0.002$ , [-0.02, 0.01]). Similarly, the bootstrap analysis indicated that relational self-concept has a non-significant indirect effect on the relationship between procedural justice and ethical voice behaviour (see Table 6;  $b = 0.003$ , [-0.02, 0.03]).

Figure 5. Study 2 – Tested Model



Notes. Dotted lines indicate the non-significant direct relationships between procedural justice and ethical voice behaviour when the mediation model was analysed. The numbers in italics represent the unstandardised coefficients; numbers in parentheses are standard errors. Bold numbers indicate the estimates are significant.

*cw* signifies that the measure was rated by the colleague

\* $p < .05$ ., \*\* $p < .01$ .

$N = 239$ .

**Table 6. Study 2 - (Manifest calculated)**  
**Indirect Effects from Procedural Justice to Ethical Voice Behaviour via Self-Concept**

Indirect Effects	Estimate	Bootstrap 95% Confidence Interval
Procedural Justice → Individual Self-Concept → Ethical Voice Behaviour	-0.002	[-0.02, 0.01]
Procedural Justice → Relational Self-Concept → Ethical Voice Behaviour	0.003	[-0.02, 0.03]
Procedural Justice → Collective Self-Concept → Ethical Voice Behaviour	<b>0.067</b>	<b>[0.02, 0.14]</b>

*Notes.*  $N = 239$ . Unstandardised estimates are reported. All estimates were tested for significance using bootstrap confidence intervals by 10,000 resampling. Bold numbers indicate the estimates are significant.

## Discussion

The findings of this study show that Hypothesis 1 is supported, in that positive perceptions of procedural justice are found to activate the collective self-concept. Similarly, Hypothesis 2, which suggested that collective self-concept will positively relate to ethical voice behaviour was also supported. Self-concept theory informed Hypothesis 3 and posed that collective self-concept would mediate the relationship between procedural justice and ethical voice behaviour, the results support this hypothesis and suggest the mediation effect is evident.

These findings provide support for the work of Johnson and Lord (2010) who suggest that perceptions of procedural justice prime the collective self-concept, and that once the collective self-concept is activated the concerns of others within the group become salient. Thus, implying when concern for group members is salient, individuals will be prepared to engage in ethical voice behaviour with the intention of increasing ethical conduct and performance of their group. This is in line with Tyler and Blader (2001) who suggested fair treatment determines group identification and leads to positive relations with the group, which in turn primes positive behaviour that is intended to benefit the group (Tyler & Blader, 2001). In addition, the results support Moorman and Blakely (1995) who suggest procedural justice provides individuals with an orientation towards the group and social inclusion, thus reinforcing the importance of procedural justice for promoting awareness of the groups' interests. In addition, when procedural justice is evident individuals will be willing to reciprocate by exhibiting behaviour that benefits the collective's interests (Moorman, 1991). Procedural justice and behaviour directed towards helping the group are positively related because they are both implicitly concerned with the interests of the



collective (Moorman & Blakely, 1995). The motivation behind individuals engaging in ethical voice behaviour can be suggested to come from the individual and their identification with the values and norms of the group (Moorman & Blakely, 1995). The results of this study support the work of identity scholars, who have suggested that cooperative behaviours in groups are fuelled by individual desires to develop a positive sense of self, through utilising identity relevant information supplied by membership of a collective and its members (Tyler & Blader, 2001).

Furthermore, the results of this study suggest that fair treatment in the workplace encourages employee ethical behaviour through activating the collective self-concept which aligns collective goals and values (Lord & Brown, 2004). To reiterate, the intent of ethical voice is to correct unethical behaviour by approaching team members who are perceived to be behaving unethically at work (Hannah & Avolio, 2010; Lee et al., 2015). Because the purpose of ethical voice behaviour is to ensure the organisation operates more ethically, particularly at an employee level, it can be considered that employees who engage in this behaviour will have concern of the perceived perpetrator; in that their attempt to correct a persons' unethical behaviour implies they want to ensure the perpetrator does not get into harm in their job. To support this, it has been suggested that individuals who engage in ethical voice behaviour are encouraged to do so through their concern and communal interests for their group and the group members as they will want to ensure the groups' success (Frazier & Bowler, 2015; Walumbwa et a., 2012).

It is considered that fairness perceptions carry an ethical appraisal element, in that if decisions made by organisational authorities uphold high ethical standards they are deemed as fair by employees (Crawshaw et al., 2013); therefore, individuals who experience fair

treatment from their organisation will endeavour to continue the ethical standard by exhibiting ethical behaviour amongst their colleagues. This implies that employees model ethical behaviour they experience from the organisation and use such experiences to inform their own ethical conduct. This suggests that organisations provide ethical and moral standards for employees to follow and emulate (Mayer, Kuenzi, Greenbaum, Bardes & Salvador, 2009).

This study has several implications. Firstly, the proposed model contributes to the procedural justice literature by identifying ethical voice as a behaviour it is related to. In recent years, interest has grown in the areas of organisational justice and behavioural ethics, and questions surrounding how perceptions of fairness inform ethical behaviour (see Cropanzano & Stein, 2009). The results of this study imply that perceptions of procedural justice relate to ethical voice behaviour, in doing so, this study provides an initial step to understand the relationship between procedural justice and ethics in the workplace. This further adds empirical support in demonstrating the positive influence procedural justice has on employees' conduct at work.

Secondly, this study identifies collective self-concept as a mediator for the relationship between procedural justice and ethical voice behaviour. This finding provides support for the work of Johnson and Lord (2010) who suggested that perceptions of procedural justice prime the collective self-concept, and that once the collective self-concept is activated the concerns of members' welfare within the group become salient.

And thirdly, from a practical view, the results of this study will add to the understanding of the mechanics between procedural justice and employee ethical conduct in the context of emergency services. Further, the investigation and discussion of the importance of

procedural justice for the achievement of employee ethical behaviour in this study is hoped to add to scholar and practitioner understanding, as well as providing support for HMIC's (2014a) statement that identifies fairness as an important workplace factor due to its ability to impact positive police officer and staff attitudes and behaviours at work.

## Chapter 6 Conclusions

This thesis has explored and identified multiple processes through which procedural justice leads to positive employee behaviour. Study 1 examined the processes of social identity and social exchange; the results support the work of procedural justice, social identity and social exchange theorists (e.g. Konovsky & Pugh, 1994; Moorman et al., 1998; Masterson et al., 2000). The results from Study 1 suggest that social identity and social exchange act as psychological processes for the relationship between procedural justice and engagement, which in turn leads to voice behaviour. When considering these two psychological processes together, the analysis suggests that the competing paths of organisational pride and POS were not significantly different. Furthermore, Study 2 explored the relationship between procedural justice and ethical behaviour, and focused on the process of self-identity. The results of Study 2 support the work of collective self-identity theorists (e.g. Johnson and Lord, 2010); in that collective self-identity was found to mediate the relationship between procedural justice and employee ethical conduct. The results from both studies highlight the importance of organisational procedural justice for the attainment of positive employee behaviour.

### **General Conclusions**

The aim of this thesis was to explore procedural justice and its role in explaining employee behaviour; as such, both studies have examined the relationship between procedural justice and positive employee behaviour in emergency service contexts. The results of Study 1 and Study 2 add to the work of previous scholars, e.g. Bradford et al. (2014), who have suggested the importance and utility of organisational fairness across 'blue light' emergency

services for the achievement of extra-role activity. Not only will the results of this thesis add to the academic organisational justice literature, but it will also add to practitioner knowledge regarding the importance of fairness in the workplace as well of increasing understanding of the mechanisms through which fairness leads to positive employee behaviour.

The results from Study 1 indicate that procedural justice was positively related to engagement. This is consistent with the findings of Saks (2006) and Tyler and Blader (2003). This finding suggests that motivation to engage in work stems from the fair procedures they perceive at work (Haynie et al., 2016). Moreover, this finding supports the work of Macey and Schneider (2008) who suggest that individuals use information communicated by management, regarding procedures, to decide whether to fully immerse themselves in their role; thus implying fair policies and procedures regulate positive behaviour and engagement at work (Lawler, 2001). In addition, the results show that procedural justice is found to be positively related to organisational pride and POS, further it was found that the relationship between procedural justice and engagement was separately mediated by these two variables. Therefore, Study 1 established two mechanisms through which procedural justice leads to engagement. Firstly, in relation to organisational pride as an established mediator, the findings suggest that discretionary behaviour and work engagement can be cultivated through social identity, which is informed by procedural justice. Study 1 drew upon the Group Engagement Model (GEM); the results concluded that when individuals perceive their workplace to be fair, their social identity becomes linked with their organisation, which then predicts individuals' work engagement and, subsequently, discretionary effort. In other words, the results show that positive perceptions of procedural justice prime individuals'

social identity with the organisation (Lind, 2001), and that social identity increases self-esteem and self-image, it is through this that engagement and discretionary behaviours are cultivated. Social identities are responsible for motivating cooperation, this is because a fair working environment signals to employees that their efforts will not be exploited (Colquitt et al., 2012). The stronger an individual identifies with a group, the more important the success of the group becomes, and the more they will be willing to invest their time and energies into ensuring the group succeeds (Tyler & Blader, 2001). Secondly, when considering POS as a mediator, the results suggest that social exchange acts as a mechanism through which procedural justice leads to positive behaviour (Konovsky & Pugh, 1994). Study 1 was built upon social exchange theory; the results conclude that when the workplace is perceived as fair, employees will feel supported by the organisation, in that it implies the organisation has consideration for their efforts and well-being at work (Shore & Shore, 1995). This will then lead to work engagement and, as a result, individuals will partake in voice behaviour with the intention of improving the organisation. This can be explained through reciprocation; the results show that if individuals perceive the organisation to treat them well, they will endeavour to respond positively, engage in their role and behave well in return (Moorman et al., 1998). In summary, the amount of energy an individual invests in their role is dependent on the treatment they receive from the organisation, and whether socioemotional resources are provided (Saks, 2006).

Moreover, the results suggest that the competing paths of organisational pride and POS were not significantly different, thus both were equal in their effect. Of note is that supplementary analysis showed that POS also acts as a mediator between procedural justice and organisational pride, thus supporting the work of Lavelle et al. (2007), Edwards (2009)

and Sluss et al. (2008), who suggests perceptions of organisational support lead to organisational identification.

Finally, engagement was found to be positively related to voice behaviour. This finding implies that when individuals are engaged in their job, cognitively, emotionally and physically holistically, they will accumulate and share ideas regarding improving practice and organisational learning (Detert & Burris, 2007).

The results from Study 2 show that procedural justice was found to be positively related to collective self-concept. This is consistent with the findings of Johnson and Lord (2010). This supports the idea that self-concept is a psychological mechanism that can be influenced by procedural justice (De Cremer & Tyler, 2005). In addition, the relationship between collective self-concept and ethical voice behaviour was investigated. Ethical voice behaviour can be considered as the communication within work teams regarding speaking up against unethical behaviour (Hannah & Avolio, 2010; Lee et al., 2015). It is believed that individuals engage in ethical voice behaviour when they share interest and concern for the work team and those within it (Frazier & Bowler, 2015; Walumbwa, Morrison & Christensen, 2012); this suggests that individuals who engage in ethical voice do so through having concern and communal interests for their group. The results of this study show that collective self-concept positively relates to ethical voice behaviour. This supports the work of Johnson and Saboe (2010) who suggested that when the collective self-concept is active, individuals will have concern for others and will act accordingly to address the concerns of others as benefitting the group becomes a high priority. As such, those with a collective self-concept are more willing to engage in positive behaviours as they have a desire to behave in ways that benefit the group, and because they perceive lower levels of risk in doing so. Finally,

collective self-concept was found to mediate the relationship between procedural justice and ethical voice behaviour. This supports the findings of Johnson and Lord (2010). The findings suggest that procedural justice perceptions prime the collective self-concept and that once the collective self-concept is activated; the concerns of members' welfare within the group will become dominant (Johnson & Saboe, 2010). This will lead to individuals engaging in discretionary behaviour with the intention of helping others, therefore they will be willing and prepared to engage in ethical voice behaviour to enhance ethical conduct of their group. In addition, the results imply that the relationship between procedural justice and ethical voice behaviour is only present when the collective self-concept is active, in that individual self-concept and relational self-concept were not found to be mediators. The results of this study can be viewed with confidence as multi-source data was obtained, as such ethical voice behaviour was co-worker rated. To conclude, the results from this study establish that collective self-concept is an evident mechanism through which procedural justice leads to employee ethical conduct at work.

In sum, this thesis has explored multiple processes through which organisational procedural justice leads to engagement, discretionary behaviour and ethical voice behaviour. The findings of this thesis support Cropanzano et al.'s (2001) idea that justice brings people together and promotes social inclusion, and Lind's (2001) sentiment that perceptions of justice are pivotal in their ability to cultivate positive behaviour. Study 1 examined the processes of social exchange and social identity. The results support the work of fairness, social exchange and social identity theorists (e.g. Konovsky & Pugh, 1994; Moorman et al., 1998; Masterson et al., 2000). Furthermore, Study 2 focused on the process of self-identity, the results of which support the work of collective self-identity theorists (e.g. Johnson &



Lord, 2010). Both studies illustrate the importance of procedural justice in predicting positive employee behaviour.

Further, the results of this thesis add to the body of evidence to support the assertion from the HMIC which states the importance of fairness for enhancing performance in police forces (HMIC, 2014a). HMIC expressed in the State of Policing (2017a) that police forces have reduced the size of their workforce in order to meet budget constraints, however they have done so without full understanding of reducing the numbers of police personnel affects capabilities and meeting demands (HMIC, 2017a). The results of this research provide insight to practitioners regarding maintain service delivery to the public whilst undergoing staffing reductions; simply, '*how to achieve more with less*'. In sum, the aims set out in this thesis have been met.

### **Strengths and Limitations of Study 1**

In the academic literature, the use of an engagement scale that encompasses emotional, cognitive and physical dimensions has somewhat been absent from consideration when investigating the mechanisms through which procedural justice leads to discretionary behaviour using the theoretical framework of GEM. This research addresses this, through using Rich et al.'s (2010) work engagement scale to add to the GEM theoretical model (Blader & Tyler, 2009). In relation to this, an additional strength is that the engagement scale utilised was that of Rich et al. (2010), and not the more commonly known Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). The UWES was not used in this study due to concerns regarding its conceptualisation of engagement. The more appropriate engagement scale for use in this study was decided to be Rich et al.'s (2010) scale, which is conceptualised based on the work of Kahn (1990).

An additional strength is that the proposed model in Study 1 comprised two competing routes (organisational pride and POS) as mechanisms through which procedural justice leads to positive behaviour. Through this, the difference between the two competing routes could be tested and the results showed that the difference was non-significant, implying that they are similar in their effect. Therefore, a strength of this study is highlighting that social identity and social exchange processes are both important and influential mechanisms for the achievement of engagement and positive employee behaviour.

A recognised strength of this study is that the results add to the work of previous scholars who have explored the linkage between procedural justice and police officer extra-role activity (see Bradford et al., 2014). This study explored engagement and voice behaviour as discretionary effort within an emergency service setting, therefore this study consolidates the important role procedural justice plays in the workplace and its relationship with positive organisational-focused discretionary behaviour.

A further strength of this study is that it was field-based; it investigated employees of a fire service. This ensured data was collected within a social setting regarding the organisational factors and user experiences at work. Moreover, an important strength is that appropriate statistical methods were used in this present study. Structural Equation Modelling was used in Mplus to conduct confirmatory factor analysis (CFA). When compared to exploratory factor analysis, CFA is considered to be more rigorous and parsimonious (Kelloway, 2015). A benefit of using CFA is that it confirms the data reflects the intended hypothesised constructs (Kelloway, 2015; Geiser, 2013). In this study despite the high correlation, procedural justice and POS were found to be distinct according to the results of the CFA. The CFA confirmed the hypothesised five-factorial dimensionality of the selected measures

and it confirmed model fit. Moreover, the SPSS macro Process (Hayes, 2013) was also used, as well as Mplus path analysis, to confirm indirect effects.

As in any research despite the studies having strengths, there are a number of limitations which should be noted when considering the findings and results. Firstly, Study 1 is cross-sectional in its design as self-report surveys were used by the same individuals at the same moment in time, meaning that concerns for common-method variance (CMV) exist. As procedural justice and POS are individuals' perceptions, it was important to retrieve this information from the individual directly, however it is acknowledged that as they are self-report measures they may suffer from social desirability. On reflection, gaining data for other variables from an additional source would have enhanced data quality and reduced the effects of social desirability and CMV. For example, individuals' behaviours such as engagement and voice behaviour could be considered from another source, such as a colleague or supervisor, as they are actions they are likely to have witnessed. However, this method was not adopted as it was not supported by the fire service. Attempts were made to minimise the negative effects of CMV following the recommendations of previous scholars (e.g. Podsakoff et al., 2012; Lindell & Whitney, 2001; Feldman & Lynch, 1988). Procedural remedies were implemented to minimise the effects suggested to be caused by CMV and social desirability; respondents were informed prior to completing the questionnaire the purpose to the study, they were told that there were no right or wrong answers and that confidentiality was assured, wording of scales were adapted where appropriate, and questionnaire length was shortened where possible.

Similar to the above, because the proposed model is comprised of variables that are reported by the same individuals at the same moment in time, concerns regarding causality

are evident. In order to overcome this limitation, multi-wave data should be collected in order to establish the causal direction of the relationships between variables.

### **Strengths and Limitations of Study 2**

A strength of Study 2 is the attainment of multi-source data. A main survey was used to measure the independent variables and mediators (procedural justice and self-concept, respectively), these measures were self-reported. An additional shorter survey was used to measure the dependent variable - ethical voice behaviour - this measure was co-worker rated. The aim of the second shorter 'colleague' survey was to enhance data quality by reducing CMV, as co-worker ratings will reduce social desirability effects. Collecting data from multiple sources has been considered as the single most effective way to remedy common-method variance (Chang et al., 2010). The use of multi-source data implies that the potential negative influences of measurement error, consistency motif and social desirability have been minimised (Podsakoff et al., 2003). Therefore, validity and accuracy of the data can be assumed, and the conclusions they draw can be viewed with confidence. A further strength was the size of the matched dyad sample; in total 239 matched dyads were achieved.

Despite these strengths, this study is not without limitations. A limitation of note is the use of same-source data for measuring the independent and mediating variables; because procedural justice and self-concept were measured at the same time by the same person, causal conclusions cannot be confirmed. Multi-wave data would resolve this limitation, as this would allow direction of the relationships between procedural justice, self-concept and ethical voice behaviour to be established.

Secondly, an additional limitation of Study 2 is that, since collective self-concept is theorised as a factor that is influenced or activated by external cues (i.e., high levels of procedural justice), a working or situation-specific level of self-concept should be captured in this study. However, because procedural justice and self-concept are measured simultaneously, it is difficult to specify the context-sensitivity of self-concept from the data collected. To address this issue, longitudinal data would be needed as a way of testing self-concept to better understand its context-sensitivity, and to confirm the mediating role of self-concept. Another direction for future research would be to measure the chronic collective self-concept and test it as a moderator between procedural justice and ethical voice behaviour; this interaction may occur because employees who see themselves as a member of a group tend to react more positively to organisation-related information (e.g. procedural justice) (Johnson et al., 2006).

### **Implications for Future Research**

This research has prompted further ideas for research. Firstly, the results of Study 1 should be replicated in a policing context as, although the two competing routes of organisational pride and POS are similar in their effect within a fire and rescue context, it would be interesting to test the competing routes within a policing sample. Organisational pride experienced by firefighters is found to be at high levels in comparison to that reported on average by police personnel.<sup>4</sup> It may be that POS is identified as the stronger route in policing, as the importance of POS has been suggested by Chief Constable Barton (2017) as extremely influential in guiding police personnel behaviour at work. Although both sectors are responsible for responding to emergency demands from the public, the environment

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<sup>4</sup> Comparison made based on access to data collected as part of the collaborative research project conducted by the Policing Research Unit at Durham University Business School.

and types of incidences they respond to, and have responsibility to prevent, differ. Therefore, it may be argued that police personnel require more POS than fire and rescue personnel due to the differing nature of the demands they face in their daily work. To support this, HMIC (2011:9) argued that police forces have to “respond to or proactively prevent a diverse range of incidents”, additionally HMIC (2017a) stated policing have contemporary demands in that demands are changing. Thus, implying the importance of a supportive organisation for the achievement of employee engagement.

Secondly, because of the reliance of self-report measures in Study 1, future research should attempt to collect multi-source data for the independent and dependent variables tested in the hypothesised model; this will consolidate the relationship between procedural justice and engagement. Multi-source data would enhance to quality of the data and the strength of evidence when investigating social identity and social exchange as mechanisms connecting procedural justice and engagement.

Thirdly, similar to the second recommendation, future research may consider repeating the hypothesised model in Study 2, with the addition of multi-wave time-lagged data for procedural justice and self-concept. In this thesis, causality is a limitation because procedural justice and self-concept were measured at the same time; therefore, causal conclusions cannot be drawn. The idea of self-concept predicting procedural justice may be unlikely, but it was unable to be confirmed in the study. Multi-wave data would answer this concern, as this would allow direction of the relationships between the independent, mediating and dependent variables to be established.

Limited attention was paid to the individual and relational self-concepts. As such, a full picture regarding the importance of self-concept was not concluded. This was due to the

outcome of ethical voice behaviour that was used in Study 2. Future research may consider self-interested unethical behaviours (e.g. counter productive work behaviours) to explore the impact individual self-concept has on unethical conduct. Similarly, if relational outcomes were measured (e.g. commitment towards supervisor) this may strengthened the knowledge of the impact of relational self-concept and whether it has mediating qualities.

### **Practical Implications of the Findings from these Two Studies**

As far as is possible, police organisations and fire and rescue services need to adopt a fair approach to their decision-making procedures. In that, decisions should uphold ethical standards, be transparent, consistent, and free from bias. This will lead to individuals feeling valued and respected by the organisation, and in turn they will identify with the organisation and feel supported, thus leading to higher levels of engagement, and discretionary and ethical behaviour. Engagement and voice are argued to be critical for organisational performance and success (e.g. Rich et al., 2010; Morrison & Milliken, 2000; Detert & Burris, 2007; Liang et al., 2012; Morrison, 2011), therefore organisations should treat their employees fairly as this will affect both their pride and their willingness to reciprocate.

HMIC (2014a) identify the importance of fairness in the workplace, and its ability to impact police personnel attitudes and behaviours. Furthermore, they acknowledge that organisations need to do more in order to reduce the perceptions of unfair treatment at work (HMIC, 2014a). Practical implications of this research would involve encouraging organisations to send signals of respect, either symbolic or concrete, to reinforce and enhance individuals' fairness perceptions (Lind, 2001) and to facilitate safe working environments for employees to speak up. In such cases, individuals' social identity may be

activated, and their social exchange relationships confirmed, and as a result their engagement and voice behaviour at work may increase. In addition, the results highlight that in order to encourage individuals to engage in ethical voice behaviour they must identify with a collective self-concept, which is activated by procedural justice. Therefore, the results aid the understanding and importance of procedural justice for the achievement of positive employee behaviour, thus supporting the work of HMIC whom reinforce fairness perceptions integral role in motivating individuals' positive attitudes and behaviours at work (HMIC, 2014a).

Additional publications, of note, issued by HMIC are their Police Effectiveness, Efficiency and Legitimacy (PEEL) Force Inspection Reports (e.g. see HMIC, 2017b). A number of recent editions of the PEEL reports identify the importance of an initiative implemented by a small number of forces across England and Wales – termed '100 Little Things'. The purpose of this initiative is to enhance employee cooperation and innovation by encouraging employees to speak up with daily issues, big or small, that cause frustration and act as barriers that prevent individuals from engaging in their roles; this type of employee behaviour is becoming increasingly important for police and fire services to encourage as it allows them to adapt to challenging conditions and to 'achieve more with less'. Thinking about this initiative regarding the results of this thesis, it is apparent that '100 Little Things' signals to employees that the organisation is supportive and that they value their employees and their opinions and contributions (e.g. see HMIC, 2017b). The nature of this initiative suggests that minimal resource is required to facilitate suggestions and implement solutions well; this is particularly important given the budget cuts the emergency services have endured in the recent years. In addition, '100 Little Things' is impactful in its ability to provide individuals



with a sense of respect and value within their organisation, further illustrated through the importance of signalling that the organisation is supportive, thus enhancing procedural justice and POS perceptions. This thesis recognises that POS is also a very important factor within the workplace which has the ability to influence important employee behaviour. Even though HMIC identifies procedural justice as important, and even through this thesis supports this statement, the results also imply that POS is highly influential and predictive of employee engagement and positive behaviour at work. Therefore, a practical implication is for organisations to ensure their people feel supported, and that emergency services may achieve this by adopting the '100 Little Things' initiative.

A further practical implication for organisation to consider would be to implement effective ethical codes and conduct, as Weaver (1995) suggested this will lead to enhanced perceptions of organisational justice, thus supporting the presence of individuals' deontic motives at work.

## References

- Adams, J. S., (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2, 267-299.
- Ambrose, M. L., (2002). Contemporary justice research: A new look at familiar questions. *Organizational Behavior and Human Decision Processes*, 89(1), 803-812.
- Ambrose, M. L., & Schminke, M., (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology*, 88(2), 295-305.
- Armeli, S., Eisenberger, R., Fasolo, P. & Lynch, P., (1998). Perceived organizational support and police performance: the moderating influence of socioemotional needs. *Journal of Applied Psychology*, 83(2), 288-297.
- Ashforth, B. E., & Humphrey, R. H., (1995). Emotion in the workplace: A reappraisal. *Human Relations*, 48(2), 97-125.
- Aquino, K. & Douglas, S., (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90(1), 195-208.
- Babcock-Roberson, M. E., & Strickland, O. J., (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of Psychology*, 144(3), 313-326.
- Baer, M. & Frese, M., (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24(1), 45-68.
- Baker, S., (1998). Salience of outcome, treatment, and structural neutrality standards. Unpublished manuscript.
- Barclay, L. J., Skarlicki, D. P., & Pugh, S. D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology*, 90(4), 629-643.
- Bargh, J. A., Chen, M., & Burrows, L., (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, 71(2), 230-244.
- Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H., (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58(1), 111-135.

- Bartel, C. A., (2001). Social comparisons in boundary-spanning work: Effects of community outreach on members' organizational identity and identification. *Administrative Science Quarterly*, 46(3), 379-413.
- Barton, M., (2017). *Thoughts, Ideas and Reflections on the Findings, Benefits and Challenges of the Collaborative Research Project*. Collaborative Research Project Conference: Well-Being, Engagement, Integrity and Service Delivery in Policing. Durham University Business School, Mill Hill Lane, Durham. 21 March 2017.
- Basford, T. E., Offermann, L. R., & Behrend, T. S., (2014). Please accept my sincerest apologies: Examining follower reactions to leader apology. *Journal of Business Ethics*, 119(1), 99-117.
- Baumeister, R. F. & Leary, M. R., (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Benzer, J., & Horner, M., (2015). A meta - analytic integration and test of psychological climate dimensionality. *Human Resource Management*, 54(3), 457-482.
- Bies, R. J., Barclay, L. J., Tripp, T. M., & Aquino, K., (2016). A systems perspective on forgiveness in organizations. *Academy of Management Annals*, 10(1), 245-318.
- Bies, R. J., & Moag, J. F., (1986). Interactional Justice: Communication Criteria of Fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.) *Research on Negotiations in Organizations*. (pp. 43-55). Greenwich, CT: JAI Press.
- Blader, S. L., & Tyler, T. R., (2003). What constitutes fairness in work settings? A four-component model of procedural justice. *Human Resource Management Review*, 13(1), 107-126.
- Blader, S. L. & Tyler, T. R., (2009). Testing and extending the group engagement model: linkages between social identity, procedural justice, economic outcomes, and extrarole behavior. *Journal of Applied Psychology*, 94(2), 445-464.
- Blau, P. M., (1964). *Exchange and Power in Social Life*. Transaction Publishers. New York: Wiley.
- Bradford, B., Quinton, P., Myhill, A., & Porter, G., (2014). Why do 'the law' comply? Procedural justice, group identification and officer motivation in police organizations. *European Journal of Criminology*, 11(1), 110-131.
- Brewer, M. B. & Gardner, W., (1996). Who is this 'We'? Levels of Collective Identity and Self-Representations. *Journal of Personality and Social Psychology*, 71(1), 83-93.

- Brockner, J., Grover, S., Reed, T. F. & Dewitt, R. L., (1992). Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. *Academy of Management Journal*, 35(2), 413-425.
- Brown, T. A., (2014). *Confirmatory factor analysis for applied research*. New York: Guilford Publications.
- Brown, S. P., & Leigh, T. W., (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368.
- Burrell, G. & Morgan, G., (1979). *Sociological Paradigms and Organisational Analysis: Elements of the sociology of corporate life*. London: Heinemann Educational Books.
- Chang, S. J., Van Witteloostuijn, A., & Eden, L., (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41(2), 178-184.
- Chavannes, A., (1883-1885). A series of papers titled 'Studies in Sociology'. *The Sociologist*.
- Chen, C., (2011). Quantitative methodology: Appropriate use in research for blind baseball ergonomics and safety design. *The Journal of Human Resource and Adult Learning*, 9(4), 1-6.
- Chen, Y., Ferris, D. L., Kwan, H. K., Yan, M., Zhou, M., & Hong, Y., (2013). Self-love's lost labor: A self-enhancement model of workplace incivility. *Academy of Management Journal*, 56(4), 1199-1219.
- Clark, M. S., & Mills, J., (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37(1), 12-24.
- Clark, M. S., & Pataki, S. P., (1995). Interpersonal processes influencing attraction and relationships. In A. Tesser (Ed.), *Advanced Social Psychology*, (pp. 283-331). Boston: McGill-Hill.
- Cobb, S., (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314.
- Cohen, S. & Wills, T. A., (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, 98(2), 310-357.
- Cohen-Charash, Y., & Spector, P. E., (2001). The Role of Justice in Organizations: A Meta-Analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278-321.
- Collins, C. J. & Smith, K. G., (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3), 544-560.

- Colquitt, J. A., (2001). On the Dimensionality of Organizational Justice: A Construct Validation of a Measure. *Journal of Applied Psychology*, 86(3), 386-400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y., (2001). Justice at the Millennium: A Meta-Analysis review of 25 Years of Organisational Justice Research. *Journal of Applied Psychology*, 86(3), 425-447.
- Colquitt, J. A., LePine, J. A., Piccolo, R. F., Zapata, C. P., & Rich, B. L., (2012). Explaining the Justice–Performance Relationship: Trust as Exchange Deepener or Trust as Uncertainty Reducer? *Journal of Applied Psychology*, 97(1), 1-15.
- Crampton, S., & Wagner, J., (1994). Percept–percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology*, 79(1), 67–76.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834-848.
- Crawshaw, J. R., Cropanzano, R., Bell, C. M., & Nadisic, T. (2013). Organizational justice: New insights from behavioural ethics. *Human Relations*, 66(7), 885-904.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58(2), 164-209.
- Cropanzano, R. & Greenberg, J., (1997). Progress in organizational justice: Tunneling through the maze. *International Review of Industrial and Organizational Psychology*, 12, 317-372.
- Cropanzano, R., & Mitchell, M. S., (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Cropanzano, R., Prehar, C. A. & Chen, P. Y., (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group and Organization Management*, 27(3), 324-351.
- Cropanzano, R., & Rupp, D. E. (2008). **Social exchange theory and organizational justice: Job performance, citizenship behaviors, multiple foci, and a historical integration of two literatures.** In S.W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Justice, morality, and social responsibility.* (pp. 63-99). Greenwich, CT: Information Age.
- Cropanzano, R., & Stein, J. H., (2009). Organizational justice and behavioral ethics: Promises and prospects. *Business Ethics Quarterly*, 19(2), 193-233.

- Crosby, F., (1976). A model of egoistical relative deprivation. *Psychological Review*, 83(2), 85- 113.
- De Cremer, D. & Tyler, T. R., (2005). *Managing Group Behaviours: The Interplay Between Procedural Fairness, Self, and Cooperation*. New York: Academic Press.
- Deng, H., (2016). *Long May Our Group Thrive: Integrating Social Identity and Procedural Justice*. Seminar Series Sponsored by the International Centre for Leadership and Followership. Durham University Business School, Mill Hill Lane, Durham. 13 April 2016.
- 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.
- Dijke, M. V., De Cremer, D., Mayer, D. M. & Quaquebeke, N. V., (2012). When Does Procedural Fairness Promote Organizational Citizenship Behavior? Integrating Empowering Leadership Types in Relational Justice Models. *Organizational Behavior and Human Decision Processes*, 117(2), 235-248.
- Doosje, B., Ellemers, N., & Spears, R., (1999). Commitment and intergroup behaviour. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social Identity*. London: Blackwell.
- Edmondson, A., (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Edmondson, A. C. & Lei, Z., (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior*. 1(1), 23-43.
- Edwards, M. R. (2009). HR, Perceived Organisational Support and Organisational Identification: An Analysis after Organisational Formation. *Human Resource Management Journal*, 19(1), 91-115.
- Edwards, M. R., & Kudret, S., (2017). Multi-foci CSR perceptions, procedural justice and in-role employee performance: the mediating role of commitment and pride. *Human Resource Management Journal*, 27(1), 169-188.
- Ehrhart, M. G., (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology*, 57(1), 61-94.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V., (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.

- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D., (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), 500-507.
- Eisenberger, R., & Stinglhamber, F., (2011). *Perceived Organizational Support: Fostering Enthusiastic and Productive Employees*. Washington, D.C.: American Psychological Association.
- Emerson, R. M., (1976). Social exchange theory. *Annual Review of Sociology*, 2(1), 335-362.
- Epitropaki, O., Kark, R., Mainemelis, C., & Lord, R. G., (2017). Leadership and Followership Identity Processes: A Multilevel Review. *The Leadership Quarterly*, 28(1), 104-129.
- Fasolo, P. M., (1995). *Procedural Justice and Perceived Organizational Support: Hypothesized Effects on Job Performance*. In R. Cropanzano & M. Kacmar (Eds.), *Organizational politics, justice and support: Managing the social climate in the work place*. (pp. 185-195). Westport, CT: Quorum Books.
- Feldman, J. M., & Lynch, J. G., (1988). Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. *Journal of Applied Psychology*, 73(3), 421-435.
- Ferris, D. L., Brown, D. J. & Heller, D., (2009). Organizational supports and organizational deviance: The mediating role of organization-based self-esteem. *Organizational Behavior and Human Decision Processes*, 108(2), 279-286.
- Ferris, D. L., Lian, H., Brown, D. J., Pang, F. X., & Keeping, L. M., (2010). Self-esteem and job performance: the moderating role of self-esteem contingencies. *Personnel Psychology*, 63(3), 561-593.
- Field, A., (2013). *Discovering Statistics Using IBM SPSS Statistics* (4<sup>th</sup> Ed.). London, UK: Sage Publication Ltd.
- Fiske, A. P., (1991). *Structures of Social Life: The Four Elementary Forms of Human Relations: Communal Sharing, Authority Ranking, Equality Matching, Market Pricing*. New York: Free Press.
- Fletcher, C., & Baldry, C., (2000). A study of individual differences and self-awareness in the context of multi-source feedback. *Journal of Occupational and Organizational Psychology*, 73(3), 303-319.
- Folger, R., (1977). Distributive and procedural justice: Combined impact of voice and improvement on experienced inequity. *Journal of Personality and Social Psychology*, 35(2), 108-119.
- Folger, R., (2001). *Fairness as Deonance*. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Theoretical and cultural perspectives on organizational justice*. (pp. 3-33). Greenwich, CT: Information Age.

- Folger, R., & Cropanzano, R., (2001). ***Fairness Theory: Justice as Accountability***. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice*, (pp. 89-118). Stanford, CA: Stanford University Press.
- Folger, R., Cropanzano, R., & Goldman, B. (2005). What is the relationship between justice and morality. *Handbook of organizational justice*, 215, 215.
- Frazier, M. L., & Bowler, W. M., (2015). Voice climate, supervisor undermining, and work outcomes: A group-level examination. ***Journal of Management***, 41(3), 841-863.
- Freeney, Y., & Fellenz, M. R., (2013). Work engagement, job design and the role of the social context at work: Exploring antecedents from a relational perspective. ***Human Relations***, 66(11), 1427-1445.
- Geiser, C., (2013). ***Data Analysis with Mplus*** (English ed.). New York: Guilford.
- Gergen, K. J., (1969). ***The Psychology of Behavior Exchange***. Reading: MA: Addison-Wesley.
- Goffman, E., (1961). ***Encounters: Two Studies in the Sociology of Interaction***. Indianapolis: Bobbs-Merrill Co.
- Gould, S. B., (1975). Organizational Identification and Commitment in two environments. Unpublished doctoral dissertation, Michigan State University.
- Gouldner, A. W., (1960). The norm of reciprocity: A preliminary statement. ***American Sociological Review***, 25(2), 161-178.
- Graham, L., Wu, C., & Zheng, Y. (Forthcoming). "Individual-Code of Ethics Values Alignment and Ethical Voice Behaviour: The Moderating Influence of Organizational Support."
- Grandey, A., Cordeiro, B., & Crouter, A., (2005). A longitudinal and multi-source test of the work-family conflict and job satisfaction relationship. ***Journal of Occupational and Organizational Psychology***, 78(3), 305-323.
- Greenberg, J., (2001). Setting the justice agenda: Seven unanswered questions about "what, why, and how". ***Journal of Vocational Behavior***, 58(2), 210-219.
- Greenberg, J., (1990). Organizational justice: Yesterday, today, and tomorrow. ***Journal of Management***, 16(2), 399-432.
- Greenberg, J., & Cropanzano, R., (1993). ***The Social Side of Fairness: Interpersonal and Informational Classes of Organizational Justice***. Justice in the workplace: Approaching fairness in human resource management. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Guba, E. G., & Lincoln, Y. S., (1994). Competing paradigms in qualitative research. In N. K. Denzin & y. s. Lincoln (Eds.), ***Handbook of Qualitative Research***, (pp. 105-117). Thousand Oaks, CA: Sage.



- Gurr, T., (1970). ***Why, Men Rebel***. Princeton, NJ: Princeton University Press.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L., (2006). ***Multivariate Data Analysis***. (6<sup>th</sup> Ed.). Upper Saddle River: NJ: Pearson.
- Hannah, S. T., & Avolio, B. J., (2010). Ready or not: How do we accelerate the developmental readiness of leaders? ***Journal of Organisational Behaviour***, 31(8), 1181-1187.
- Hayes, A. F., (2013). ***Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach***. New York: Guilford Press.
- Haynie, J. J., Mossholder, K. W., & Harris, S. G., (2016). Justice and job engagement: The role of senior management trust. ***Journal of Organizational Behavior***, 37(6), 889-910.
- Hill, C. A., (1987). Affiliation motivation: People who need people... but in different ways. ***Journal of Personality and Social Psychology***, 52(5), 1008-1018.
- Hirschman, A. O., (1970). ***Exit, Voice and Loyalty: Responses to Decline in Firms, Organisations and State***. Cambridge, MA: Harvard University Press.
- Her Majesty's Inspectorate of Constabularies (HMIC), (2011). ***Demanding Times: The Front Line and Police Visibility***. London: Her Majesty's Inspector of Constabulary. Published 30 March 2011.
- Her Majesty's Inspectorate of Constabularies (HMIC), (2014a). ***State of Policing: The Annual Assessment of Policing in England and Wales 2013/2014***. London: Her Majesty's Inspector of Constabulary. Published 31 March 2014.
- Her Majesty's Inspectorate of Constabularies (HMIC), (2014b). ***Policing in Austerity: Meeting the Challenge, National Report***. London: Her Majesty's Inspector of Constabulary. Published 22 July 2014.
- Her Majesty's Inspectorate of Constabularies (HMIC), (2017a). ***State of Policing: The Annual Assessment of Policing in England and Wales 2016***. London: Her Majesty's Inspector of Constabulary. Published 20 April 2017.
- Her Majesty's Inspectorate of Constabularies (HMIC), (2017b). ***PEEL: Police Efficiency (Including Leadership) 2017: An Inspection of Durham Constabulary***. London: Her Majesty's Inspector of Constabulary. Published 9 November 2017.
- Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS), (2017). ***HMIC to Extend Inspection Remit to Fire & Rescue Services***. London: Her Majesty's Inspector of Constabulary. Published 19 July 2017.
- Hogg, M. A., (2001). A social identity theory of leadership. ***Personality and Social Psychology Review***, 5(3), 184-200.

- Hogg, M. A., & Abrams, D., (1988). *Social Identifications*. London: Routledge.
- Homans, G. C., (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597-606.
- Home Office. (2015). *Police workforce, England and Wales: 31 March 2015*. Available from: [www.gov.uk/government/statistics/police-workforce-england-and-wales-31-march-2015](http://www.gov.uk/government/statistics/police-workforce-england-and-wales-31-march-2015). Accessed on 14 August 2017.
- 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.
- Huo, Y. J., Smith, H. J., Tyler, T. R., & Lind, E. A., (1996). Superordinate identification, subgroup identification, and justice concerns: Is separatism the problem; is assimilation the answer?. *Psychological Science*, 7(1), 40-45.
- Johnson, R. E. & Chang, C. H., (2006), "'I' is to continuance as 'We' is to affective: the relevance of the self-concept for organizational commitment", *Journal of Organizational Behavior*, 27(5), 549-70.
- Johnson, R. E. & Lord, R. G., (2010). Implicit effects of justice on self-identity. *Journal of Applied Psychology*, 95(4), 681-695.
- Johnson, R. E. & Saboe, K. N., (2010). Measuring Implicit Traits in Organisational Research: Development of an Indirect Measures of Employee Implicit Self-Concept. *Organisational Research Methods*, 14(3), 1-18.
- Johnson, R. E., Selenta, C. & Lord, R. G., (2006). When organizational justice and the self-concept meet: Consequences for the organization and its members. *Organizational Behavior and Human Decision Processes*, 99(2), 175-201.
- Kahn, W. A., (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kanfer, R., (1990). Motivation theory and industrial and organizational psychology. *Handbook of Industrial and Organizational Psychology*, 1(2), 75-130.
- Katz, D. & Kahn R. L., (1966). *The social psychology of organizations*. New York: Wiley.
- Kelloway, E. K., (2015). *Using Mplus for Structural Equation Modeling: A Researcher's Guide* (2nd Ed.). California: Sage Publications.
- Knox, J. B., (1963). The concept of exchange in sociological theory: 1884 and 1961. *Social Forces*, 41(4), 341-346.

- Konovsky, M. A., (2000). Understanding Procedural Justice and its Impact on Business Organizations. *Journal of Management*, 26(3), 489-511.
- Konovsky, M. A., & Cropanzano, R., (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. *Journal of Applied Psychology*, 76(5), 698-707.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, 37(3), 656-669.
- Kuhn, T. S., (1970). Logic of Discovery or Psychology of Research? In I. Lakatos and A. Musgrave (Eds.). *Criticism and the Growth of Knowledge* (pp. 1-20). Cambridge, England: Cambridge University Press.
- Lambert, E. G., Hogan, N. L., Jiang, S., Elechi, O. O., Benjamin, B., Morris, A., Laux, J. M., & Dupuy, P., (2010). The Relationship Among Distributive and Procedural Justice and Correctional Life Satisfaction, Burnout, and Turnover Intent: An Exploratory Study. *Journal of Criminal Justice*, 38(1), 7-16.
- Lawler, E. J., (2001). An affect theory of social exchange. *American Journal of Sociology*, 107(2), 321–352.
- Lavelle, J., Rupp, D. & Brockner, J., (2007). Taking a Multi-foci Approach to the Study of Justice, Social Exchange, and Citizenship Behavior: The Target Similarity Model? *Journal of Management*. 33(6), 841-866.
- Lavelle, J. J., Brockner, J., Konovsky, M. A., Price, K. H., Henley, A. B., & Taneja, A., (2009a). Commitment, Procedural Fairness, and Organizational Citizenship Behavior: A Multifoci Analysis. *Journal of Organizational Behavior*, 30(3), 337–357.
- Lavelle, J. J., McMahan, G. C., & Harris, C. M., (2009b). Fairness in human resource management, social exchange relationships, and citizenship behavior: Testing linkages of the target similarity model among nurses in the United States. *The International Journal of Human Resource Management*, 20(12), 2419-2434.
- Lee, D., Choi, Y., Youn, S., & Chun, J. U., (2017). Ethical leadership and employee moral voice: The mediating role of moral efficacy and the moderating role of leader–follower value congruence. *Journal of Business Ethics*, 141(1), 47-57.
- Leventhal, G. S., (1980). *What Should Be Done Equity Theory? New Approaches to the Study of Fairness in Social Relationships*. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social Exchange: Advances in Theory and Research*. (pp. 27-55). New York: Plenum.
- Levinson, H., (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, 9(4), 370–390.

- Li, X., Hou, Z. J., & Jia, Y., (2015). The influence of social comparison on career decision-making: Vocational identity as a moderator and regret as a mediator. *Journal of Vocational Behavior*, 86, 10-19.
- Liang, J., Farh, C. I., & Farh, J. L., (2012). Psychological antecedents of promotive and prohibitive voice: A two-wave examination. *Academy of Management Journal*, 55(1), 71-92.
- Lind, E. A., (2001). *Fairness Heuristic Theory: Justice Judgments as Pivotal Cognitions in Organizational Relations*. *Advances in organizational justice*. In J. Greenberg, & R. Cropanzano (Eds.), (pp. 56-88). CA: Stanford University Press.
- Lind, E. A., & Tyler, T. R., (1988). *The Social Psychology of Procedural Justice*. New York: Plenum Press.
- Lindell, M. K., & Whitney, D. J., (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121.
- Lord, R. G., Brown, D. J., & Freiberg, S. J., (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior and Human Decision Processes*, 78(3), 167-203.
- Lord, R. G. & Brown, D. J., (2004). *Leadership Processes and Follow Self-Identity*. Mahwah, N. J.: Lawrence Erlbaum Associates.
- Macey, W. H. & Schneider, B., (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30.
- Mael, F., & Ashforth, B. E., (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103-123.
- Malinowski, B., (1922). Republished in 2002. *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. London: Routledge.
- Marcus, B. & Schuler, H., (2004). Antecedents of counterproductive behavior at work: a general perspective. *Journal of Applied Psychology*, 89(4), 647-660.
- Markus, H., & Wurf, E., (1987). The dynamic self-concept: a social psychological perspective. *Annual Review of Psychology*, 38(1), 299-337.
- 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.

- Mayfield, C. O., & Taber, T. D., (2010). A prosocial self-concept approach to understanding organizational citizenship behavior. *Journal of Managerial Psychology*, 25(7), 741-763.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S., (2000). Integrating Justice and Social Exchange: The Differing Effects of Fair Procedures and Treatment on Work Relationships. *Academy of Management Journal*, 43(4), 738-748.
- Mauss, M., (1925). *The Gift: Forms and Functions of Exchange in Archaic Societies*. New York: The Norton Library.
- McFarlin, D. B., & Sweeney, P. D., (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35(3), 626-637.
- Meyer, J. P., & Allen, N. J., (1997). *Commitment in the workplace: Theory, research, and application*. London: Sage Publications.
- Meyer, J. P., & Gagne, M., (2008). Employee engagement from a self-determination theory perspective. *Industrial & Organizational Psychology*, 1(1), 60-62.
- Miller, D. T., (1999). The norm of self-interest. *American Psychologist*, 54(12), 1053-1060.
- Molm, L. D., Takahashi, N., & Peterson, G., (2000). Risk and trust in social exchange: An experimental test of a classical proposition. *American Journal of Sociology*, 105(5), 1396-1427.
- Molm, L. D., (1994). Dependence and risk: Transforming the structure of social exchange. *Social Psychology Quarterly*, 57(3), 163-176.
- Moorman, R. H., (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship?. *Journal of Applied Psychology*, 76(6), 845-855.
- Moorman, R. H., & Blakely, G. L., (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, 16(2), 127-142.
- Moorman, R. H., Blakely, G. L., & Niehoff, B. P., (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior?. *Academy of Management Journal*, 41(3), 351-357.
- Moorman, R. H., & Podsakoff, P. M., (1992). A meta-analytic review and empirical test of the potential confounding effects of social desirability response sets in organizational behaviour research. *Journal of Occupational and Organizational Psychology*, 65(2), 131-149.

- Morgan, D. L., (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1), 48-76.
- Morrison, E. W., (2011). Employee voice behavior: Integration and directions for future research. *The Academy of Management Annals*, 5(1), 373-412.
- Morrison, E. W., (2014). Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 173-197.
- Morrison, E. W., & Milliken, F. J., (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25(4), 706-725.
- Mowday, R. T., Porter, L. W., & Steers, R. M., (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Muthén, L. K., & Muthén, B. O., (2010). *MPlus User's Guide*. (6<sup>th</sup> Ed.). Los Angeles, CA: Muthén & Muthén.
- Muzumdar, P., (2012). Influence of Interactional Justice on the Turnover Behavioral Decision in an Organization. *Journal of Behavioral Studies in Business*. 5(1), 1-11.
- Myhill, A., & Bradford, B., (2013). Overcoming cop culture? Organizational justice and police officers' attitudes toward the public. *Policing: An International Journal of Police Strategies & Management*, 36(2), 338-356.
- Newman, D. A., & Harrison, D. A., (2008). Been there, bottled that: Are state and behavioral work engagement new and useful construct "wines"? *Industrial and Organizational Psychology*, 1(1), 31-35.
- Niehoff, B. P., & Moorman, R. H., (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*, 36(3), 527-556.
- Nord, W., (1973). Adam Smith and contemporary social exchange theory. *The American Journal of Economics and Sociology*, 32(4), 421-436.
- Organ, D. W., (1988). *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington, MA: Lexington Press.
- Organ, D. W., (1990). The motivational basis of organizational citizenship behavior. *Research in Organizational Behavior*, 12(1), 43-72.
- Organ, D. W., & Konovsky, M., (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, 74(1), 157-164.

- Organ, D. W., & Moorman, R. H., (1993). Fairness and organizational citizenship behavior: What are the connections?. *Social Justice Research*, 6(1), 5-18.
- Pierce, J. L. & Gardner, D. G., (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30(5), 591-622.
- Pallant, J., (2013). *SPSS Survival Manual* (5<sup>th</sup> Ed.). Berkshire, England: Open University Press, McGraw-Hill Education (UK).
- Parke, M., Weinhardt, J. M., Brodsky, A., Tangirala, S., & DeVoe, S. E., (2017). When daily planning improves employee performance: the importance of planning type, engagement, and interruptions. *Journal of Applied Psychology*, Advance Online Publication.
- Parker, S. K., Bindl, U. K., & Strauss, K., (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827-856.
- 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. & Organ, D. W., (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Podsakoff, P. M., MacKenzie, S. B. & Podsakoff, N. P., (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539-569.
- Phillips, J. S., & Lord, R. G., (1986). Notes on the practical and theoretical consequences of implicit leadership theories for the future of leadership measurement. *Journal of Management*, 12(1), 31-41.
- Preacher, K. J., & Hayes, A. F., (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40 (3), 879-891.
- Ram, P., & Prabhakar, G. V., (2011). The role of employee engagement in work-related outcomes. *Interdisciplinary Journal of Research in Business*, 1(3), 47-61.
- Rhoades, L. & Eisenberger, R., (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Rhoades, L., Eisenberger, R., & Armeli, S., (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology*, 86(5), 825-836.

- Rich, B. L., Lepine, J. A. & Crawford, E. R., (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635.
- Rousseau, D., (1995). *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*. Newbury Park, CA: Sage Publications.
- Ryan, R. M., & Deci, E. L., (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68 –78.
- Saks, A. M., (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Salanova, M., & Schaufeli, W. B., (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *The International Journal of Human Resource Management*, 19(1), 116-131.
- Saunders, M., Lewis, P., & Thornhill, A., (2012). *Research Methods for Business Students* (6<sup>th</sup> Ed.). Essex: Pearson Education Limited.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B., (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Schumacker, R. E., & Lomax, R. G., (1996). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Erlbaum.
- Selenta, C., & Lord, R. G., (2005). Development of the Levels of Self-Concept Scale: Measuring the Individual, Relational, and Collective Levels. *Unpublished Manuscript*.
- 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.
- Shore, L. M., & Shore, T. H., (1995). Perceived Organizational Support and Organizational Justice. In R. Cropanzano & M. Kacmar (Eds.), *Organizational politics, justice, and support: Managing the social climate of the workplace* (pp.149-154). Westport, CT: Quorum Books.
- Siemsen, E., Roth, A., & Oliveira, P., (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13(3), 456-476.
- Sluss, D. M., Klimchak, M., & Holmes, J. J. (2008). Perceived organizational support as a mediator between relational exchange and organizational identification. *Journal of Vocational Behaviour*, 73(3), 457-464.
- Smith, A., (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: The Modern Library.



- Snape, E. & Redman, T., (2010). HRM practices, organizational citizenship behaviour, and performance: A multi-level analysis. *Journal of Management Studies*, 47(7), 1219-1247.
- Spector, P. E., (1987). Method variance as an artifact in self-reported affect and perceptions at work: Myth or significant problem? *Journal of Applied Psychology*, 72(3), 438-443.
- Stamper, C. L., & Van Dyne, L., (2001). Work status and organizational citizenship behavior: A field study of restaurant employees. *Journal of Organizational Behavior*, 22(5), 517-536.
- Steiger, J. H., (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173-180.
- Tabachnick, B. G. & Fidell, L. S., (2007). *Using Multivariate Statistics* (5th Ed.). Boston: Pearson.
- Tajfel, H. & Turner, J.C., (1979). An integrative theory of intergroup conflict. *The Social Psychology of Intergroup Relations*, 33(47), 33-47.
- Thibault, J. W., & Kelley, H. H., (1959). *The Social of Groups*. New York: Wiley.
- Thibaut, J. W. & Walker, L., (1975). *Procedural Justice: A Psychological Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Tims, M., Bakker, A. B., & Derks, D., (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173-186.
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J., (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32(6), 951-990.
- Tsui, A. S., Egan, T. D., & O'Reilly III, C. A., (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37(4). 549-579.
- Tucker, S., Chmiel, N., Turner, N., Hershcovis, M. S., & Stride, C. B., (2008). Perceived organizational support for safety and employee safety voice: The mediating role of coworker support for safety. *Journal of Occupational Health Psychology*, 13(4), 319-330.
- Tyler, T. R. & Blader, S. L., (2000). *Cooperation in Groups: Procedural Justice, Social Identity, and Behavioral Engagement*. London: Psychology Press.
- Tyler, T. R., & Blader, S. L., (2001). Identity and cooperative behavior in groups. *Group Processes & Intergroup Relations*, 4(3), 207-226.
- Tyler, T. R. & Blader, S. L., (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(4), 349-361.

- Tyler, T. R., Boeckmann, R. J., & Smith, H. J., Smith, (1997). ***Social Justice in a Diverse Society***. Oxford, England: Westview Press.
- Tyler, T., Degoey, P. & Smith, H., (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. ***Journal of Personality and Social Psychology***, 70(5), 913-930.
- Tyler, T. R. & Lind, E. A., (1990). Intrinsic Versus Community-Based Justice Models: When Does Group Membership Matter?. ***Journal of Social Issues***, 46(1), 83-94.
- Tyler, T. R. & Lind, E. A., (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), ***Advances in Experimental Social Psychology*** (Vol. 25), (pp. 115-191). San Diego, CA: Academic Press.
- Tyler, T. R., & Smith, H. J., (1999). Justice, Social Identity, and Group Processes. In T. R. Tyler, & R. M. Kramer (Eds.), ***The psychology of the social self. Applied social research*** (pp. 223–264). Mahwah, NJ: Lawrence Erlbaum Associates.
- Van den Bos, K., & Lind, E. A., (2001). The Psychology of Own versus Others' Treatment: Self-Oriented and Other-Oriented Effects on Perceptions of Procedural Justice. ***Personality and Social Psychology Bulletin***, 27(10), 1324-1333.
- Van den Bos, K. & Lind, E.A., (2002). Uncertainty Management by Means of Fairness Judgments. In M. P. Zanna (Ed.). ***Advances in Experimental Social Psychology*** (pp. 1-60). New York: Academic.
- Van Dijke, M., De Cremer, D., Brebels, L., & Van Quaquebeke, N., (2015). Willing and able: Action-state orientation and the relation between procedural justice and employee cooperation. ***Journal of Management***, 41(7), 1982-2003.
- Van Dyne, L. & LePine, J., (1998). Helping and Voice Extra-Role Behaviours: Evidence of Constructive and Predictive Validity. ***Academy of Management***, 41(1), 108-119.
- 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. ***The Leadership Quarterly***, 23(5), 953-964.
- Wayne, S. J., Shore, L. M., & Liden, R. C., (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. ***Academy of Management Journal***, 40(1), 82-111.
- Weber, R., (2004). The Rhetoric of Positivism versus Interpretivism: A Personal View (Editor's Comment). ***MIS Quarterly***, 9(5), 235-239.

Witt, L. A., (1991a). Exchange ideology as a moderator of job attitudes-organizational citizenship behaviors relationships. *Journal of Applied Social Psychology*, 21(18), 1490-1501.

Witt, L. A., (1991b). Equal opportunity perceptions and job attitudes. *The Journal of Social Psychology*, 131(3), 431-433.

Zhong, L., Wayne, S. J., & Liden, R. C., (2016). Job engagement, perceived organizational support, high-performance human resource practices, and cultural value orientations: A cross-level investigation. *Journal of Organizational Behavior*, 37(6), 823-844.

## Appendix 1 – Durham University Ethics Forms

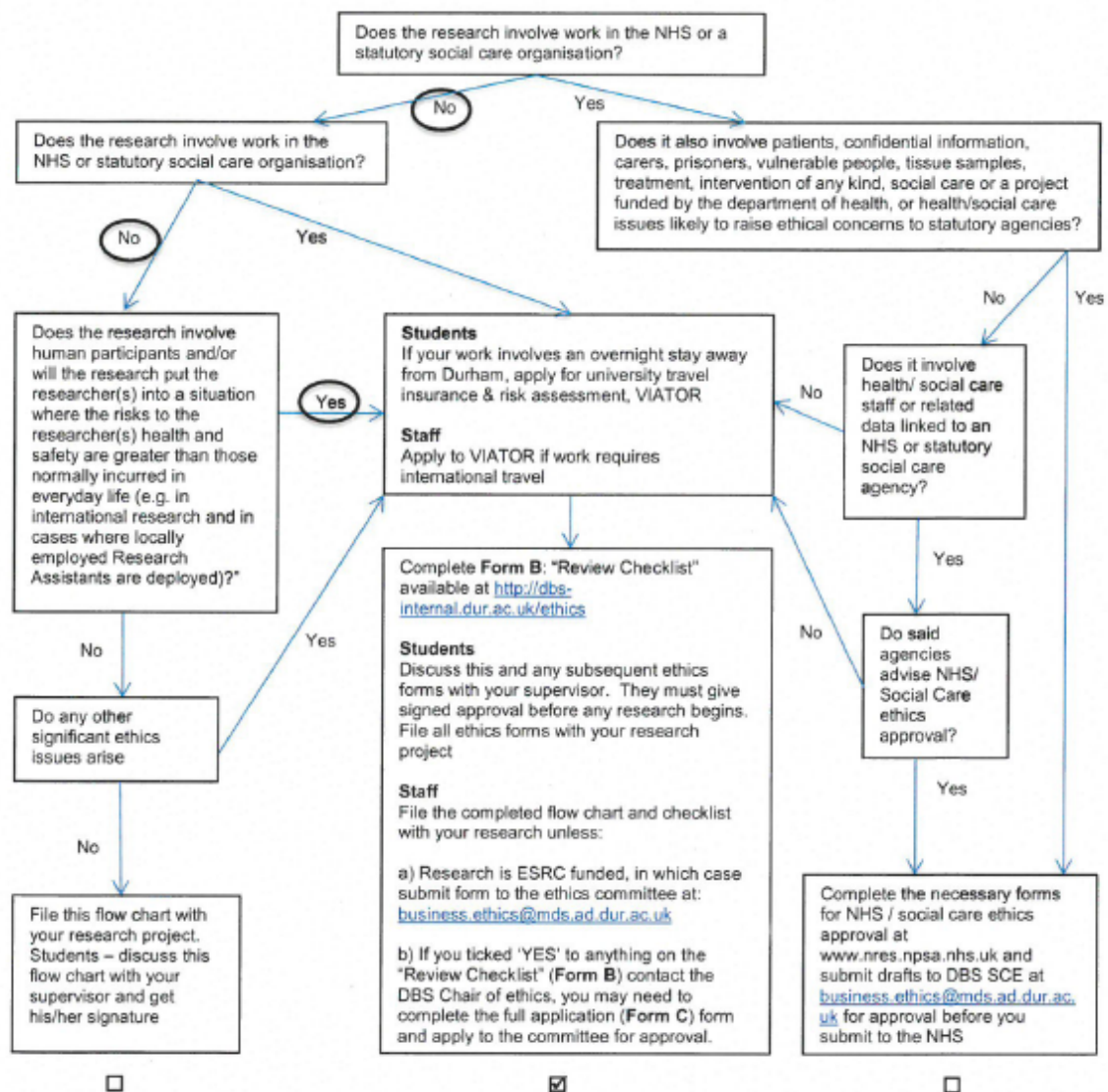


**BETTER BUSINESS THINKING**

### ETHICS FORM 'A' – Process flow chart for students & staff

Title of Project: **Fairness, Identity and Reciprocity - A Study of the Processes through which Procedural Justice Leads to Cooperative Behaviour in Emergency Services**

Name of Principal Researcher or Student: **Natalie Brown**



Tick one box only

Signature of Principal Researcher or Supervisor:

Signed: *Natalie Brown* Date: *11 May 16*

## ETHICS FORM B: REVIEW CHECKLIST

"DUBS SCE" refers to Durham University Business School's Sub-Committee for Ethics throughout.

This checklist should be completed for every research project that involves human participants. It should also be completed for all ESRC funded research, once funding has been obtained. It is used for approval or to identify whether a full application for ethics approval needs to be submitted.

**Before completing this form, please refer to the University's "Ensuring Sound Conduct in Research" available at <http://dbs-internal.dur.ac.uk/ethics/default.aspx> – all researchers should read Sections A, B and F; Principal Investigators should also read Section D. The researcher and, where the researcher is a student, the student and supervisor are responsible for exercising appropriate professional judgement in this review.**

This checklist must be completed before potential participants are approached to take part in any research.

### Section I: Project Details

1. Project title: **Fairness, Identity and Reciprocity - A Study of the Processes through which Procedural Justice Leads to Cooperative Behaviour in Emergency Services**
2. Start date: **1<sup>st</sup> January 2016** Expected End date: **31<sup>st</sup> December 2017**

### Section II: Applicant Details

3. Name of researcher (applicant)  
Or student: **Natalie Brown**
4. Status (please delete those which are not applicable)  
~~Undergraduate Student / Taught Postgraduate Student /~~ Postgraduate Research Student / Staff
5. Email address  
(staff only): .....
6. Contact address: **16 Rectory Gardens, Willington, County Durham, DL15 0BH**  
.....
7. Telephone number: **07949876607**

### Section III: For Students Only

8. Programme title: **Master of Arts (by Research)**
9. Mode (delete as appropriate)  
~~Full-Time / Part Time / Distance Learning~~
10. Supervisor's or module leader's name: **Dr Les Graham**

11. Aims and Objectives: Please state the aims/objectives of the project

The aim of this research thesis is to establish the processes through which procedural justice leads to voice behaviour in the emergency services. This objective of this research is to highlight the importance of procedural justice (fairness) in the workplace.

12. Methodology: Please describe in brief the methodology of the research project

Surveys were administered to the selected sample (Study 1 Fire Service and Study 2 Police Service). Study 1 utilised self-report surveys and Study 2 used self-report and co-worker rated surveys.  
In both studies, mediated relationships were hypothesised and tested based on academic theory.

13. Will data be collected from participants who have not consented to take part in the study e.g. images taken from the internet; participants covertly or overtly viewed in social places? If yes, please give further details. **NO**

\*Does the research take place in a public or private space (be it virtual / physical)? Please explain: -

Explain whether the research is overt or covert: -

Explain how you will verify participants' identities: -

†Explain how informed consent will be obtained: -

\*Ethical guidelines (BPS, 2005) note that, *unless consent has been sought, observation of public behaviour takes place only where people would reasonably expect to be observed by strangers.*

†It is advised that interactive spaces such as chat rooms and synchronous and asynchronous forums be treated as private spaces requiring declaration of a research interest and consent.

Additional guidance on internet research can be obtained at:

[http://www.bps.org.uk/sites/default/files/documents/conducting\\_research\\_on\\_the\\_internet-guidelines\\_for\\_ethical\\_practice\\_in\\_psychological\\_research\\_online.pdf](http://www.bps.org.uk/sites/default/files/documents/conducting_research_on_the_internet-guidelines_for_ethical_practice_in_psychological_research_online.pdf)

14. Risk assessment: If the research will put the researcher(s) into a situation where risks to the researcher(s)' health and safety are greater than those normally incurred in everyday life, please indicate what the risks are and how they will be mitigated. (Please note that this also includes risks to the researcher(s)' health and safety in cases of international research and in cases where locally employed Research Assistants are deployed).

Research which will take place outside the UK requires specific comment. (Note that research outside the UK is not automatically covered by the University's insurance. See the DUBS intranet site (<http://dbs-internal.dur.ac.uk/ethics/default.aspx>) for further details).

No risks beyond those incurred in everyday life are evident or anticipated.

For student research the supervisor should tick the following, as appropriate. The study should not begin until all appropriate boxes are ticked:

- The topic merits further research
- The participant information sheet or leaflet is appropriate (where applicable)
- The procedures for recruitment and obtaining informed consent are appropriate (where applicable)

Comments from supervisor:

#### Section IV: Research Checklist

**Research that may need to be reviewed by NHS NRES Committee or an external Ethics Committee (if yes, please give brief details as an annex)**

- |   | YES                      | NO                                  |
|---|--------------------------|-------------------------------------|
| 1 Will the study involve recruitment of patients or staff through the NHS or the use of NHS data or premises and / or equipment? <sup>1</sup>                               | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2 Does the study involve participants age 16 or over who are unable to give informed consent? (e.g. people with learning disabilities: see Mental Capacity Act (MCA) 2005). | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

#### Footnotes

<sup>1</sup> Research in the NHS may be classified as "service evaluation" and, if so, does not require NHS research ethics approval. In such cases, prior written confirmation that the research is considered to be service evaluation is required from the appropriate authority, and on receipt of this the "No" box may be ticked and this form used for ethics approval. Advice and assistance is available from [business.ethics@mds.ad.dur.ac.uk](mailto:business.ethics@mds.ad.dur.ac.uk)

**Please note:** - That with regard to 1 and 2 on the previous page, all research that falls under the auspices of MCA must be reviewed by NHS NRES.

**Research that may need a full review by Durham University Business School Sub –Committee for Ethics (DBS SCE)**

- 3 Does the study involve other vulnerable groups: children, those with cognitive impairment, or those in unequal relationship e.g. your own students? <sup>2</sup>
- 4 Will the study require the co-operation of a gatekeeper for initial access to the groups or individuals to be recruited? (e.g. students at school, members of a self-help group, residents of a Nursing home) <sup>3</sup>
- 5 Will it be necessary for participants to take part in the study without their knowledge and consent at the time? (e.g. deception, covert observation of people in non-public places)
- 6 Will the study involve discussion of sensitive topics? (e.g. sexual activity, drug use)
- 7 Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants or will the study involve invasive, intrusive or potentially harmful procedures of any kind?

**Research that may need a full review by Durham University Business School Sub – Committee for Ethics (DBS SCE) (continued)**

- 8 Will tissue samples (including blood) be obtained from participants?
- 9 Is pain or more than mild discomfort likely to result from the study?

**Footnotes**

<sup>1</sup> Research in the NHS may be classified as "service evaluation" and, if so, does not require NHS research ethics approval. In such cases, prior written confirmation that the research is considered to be service evaluation is required from the appropriate authority, and on receipt of this the "No" box may be ticked and this form used for ethics approval. Advice and assistance is available from [business.ethics@mds.ad.dur.ac.uk](mailto:business.ethics@mds.ad.dur.ac.uk)

<sup>2</sup> Vulnerable persons are defined for these purposes as those who are legally incompetent to give informed consent (i.e. those under the age of 16, although it is also good practice to obtain permission from all participants under the age of 18 together with the assent of their parents or guardians), or those with a mental illness or intellectual disability sufficient to prevent them from giving informed consent), or those who are physically incapable of giving informed consent, or in situations where participants may be under some degree of influence (e.g. your own students or those recruited via a gatekeeper - see footnote 3). Where students are perfectly able to choose to be involved and to give informed consent then, so long as there is no impact on assessment, the "No" box may be ticked.

<sup>3</sup> This applies only where the recruitment of participants is via a gatekeeper, thus giving rise to particular ethical issues in relation to willing participation and influence on informed consent decisions particularly for vulnerable individuals. It does *not* relate to situations where contact with individuals is established via a manager but participants are willing and able to give informed consent. In such cases, the answer to this question should be "No."



		YES	NO
10	Could the study induce psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Will the study involve prolonged or repetitive testing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Will the research involve administrative or secure data that requires permission from the appropriate authorities before use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Does the research involve members of the public in a research capacity (participant research)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Will the research involve respondents to the internet or other visual / vocal methods where methods are covert, intrude into privacy without consent, or require observational methods in spaces where people would not reasonably expect to be observed by strangers? <sup>4</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Will the research involve the sharing of data or confidential information beyond the initial consent given?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants? <sup>5</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Section V: What to do next

If you have answered 'No' to all of the questions:

Undergraduate and Postgraduate taught students should discuss this with their supervisor, obtain his or her signature and submit it with their business project or dissertation.

DBA / MPhil / PhD students should discuss this with their supervisor, obtain his or her signature and submit it as part of the transfer / 9 month review process and with their thesis.

*Work that is submitted without the appropriate ethics form may be returned un-assessed.*

Members of staff should retain a copy for their records, but may submit the form for approval by DUBS SCE if they require approval from funding bodies such as ESRC. *In such cases, the letter of invitation to participate, Participant Information Sheet, Consent Form and, where appropriate, the access agreement should also be submitted with this form.*

Please note that DBS SCE may request sight of any form for monitoring or audit purposes.

If you have answered 'Yes' to any of the questions in Section IV, you will need to describe more fully how you plan to deal with the ethical issues raised by your research. This does not mean that you cannot do the research, only that your proposal will need to be approved by the DUBS SCE.

Contact the Chair of the DUBS SCE in the first instance to discuss how to proceed. You may need to submit your plans for addressing the ethical issues raised by your proposal using the ethics approval application form REAF, which should be sent to the committee at

[business.ethics@mds.ad.dur.ac.uk](mailto:business.ethics@mds.ad.dur.ac.uk).

(Continued overleaf)

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#### Footnotes

<sup>4</sup> This does not include surveys using the internet providing that the respondent is identifiable only at their own discretion.

<sup>5</sup> In experiments in economics and psychology in particular it is common to pay participants. Provided such payments are within the normal parameters of the discipline, the answer to this question should be "No."

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(Form REAF can be obtained from the School Intranet site at <http://dbs-internal.dur.ac.uk/Pages/Default.aspx> or using the student / visitor access:-

<http://dbs-internal.dur.ac.uk/ethics>

**Username:** dubslethicsvisitors  
**Password:** durham

If you answered 'yes' to Questions 1 or 2 in Section IV, you will also have to submit an application to the appropriate external health authority ethics committee, but only **after** you have received approval from the DUBS SCE. In such circumstances complete the appropriate **external** paperwork and submit this for review by the DUBS SCE to [business.ethics@mds.ad.dur.ac.uk](mailto:business.ethics@mds.ad.dur.ac.uk).

Please note that whatever answers you have given above, it is your responsibility to follow the University's "Ensuring Sound Conduct in Research" and any relevant academic or professional guidelines in the conduct of your study. **This includes providing appropriate participant information sheets and consent forms, abiding by the Data Protection Act and ensuring confidentiality in the storage and use of data.**

Any significant change in research question, design or conduct over the course of the research project should result in a review of research ethics issues using the "Process Flow Chart for Students and Staff Undertaking Research" and completing a new version of this checklist if necessary.

Declaration

Signed  
(staff only, students insert anonymous code): **Z0969444**

Date: **10<sup>th</sup> May 2016**

Student / Principal Investigator

Signed:  .....

Date: **11 May 2016** .....

Supervisor or module leader (where appropriate)

## Appendix 2 – Items for Primary Measures

### **Study 1**

#### **Procedural Justice (Colquitt, 2001)**

1. I am able to express my views and feelings about the organisation's decisions
2. I am able to influence the decisions arrived at by the organisation
3. The organisation's decisions are consistent
4. The organisation's decisions are free of bias
5. The organisation's decisions are based on accurate information
6. I am able to appeal decisions arrived at by the organisation
7. The organisation's decisions uphold ethical and moral standards

#### **Perceived Organisational Support (POS) (Snape & Redman, 2010)**

1. The organisation really cares about my well-being
2. The organisation cares about my opinions
3. Help is available from the organisation when I have a problem
4. The organisation is willing to help me when I need a special favour

#### **Organisational Pride (Blader & Tyler, 2009)**

1. I am proud to tell others where I work
2. X Fire and Rescue Service is one of the best fire and rescue services in the country
3. People are impressed when I tell them where I work
4. X Fire and Rescue Service is well respected in its field
5. I think that where I work reflects well on me

#### **Engagement (Rich et al., 2010)**

##### ***Emotional Engagement***

1. I am enthusiastic in my job
2. I feel energetic at my job
3. I feel positive about my job

##### ***Cognitive Engagement***

1. At work my mind is focused on my job

2. At work I am absorbed by my job
3. At work I focus a great deal of attention on my job

### ***Physical Engagement***

1. I exert my full effort to my job
2. I devote a lot of energy to my job
3. I try my hardest to perform well on my job

### **Voice Behaviour (Van Dyne & LePine, 1998)**

1. I develop and make recommendations concerning issues that affect my team
2. I speak up and encourage others in this team to get involved in issues that affect the team
3. I communicate my opinions about work issues to others in my team even if my opinion is different and others in the team disagree with me
4. I keep well informed about issues where my opinion might be useful to my team
5. I get involved in issues that affect the quality of work life here in my team
6. I speak up in my team with ideas for new projects or changes in procedures

## **Study 2**

### **Procedural Justice (Colquitt, 2001)**

1. I am able to express my views and feelings about the organisation's decisions
2. I am able to influence the decisions arrived at by the organisation
3. The organisation's decisions are consistent
4. The organisation's decisions are free of bias
5. The organisation's decisions are based on accurate information
6. I am able to appeal decisions arrived at by the organisation
7. The organisation's decisions uphold ethical and moral standards

### **Self-Concept (Selenta & Lord, 2005)**

#### ***Individual Self-Concept***

1. I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people
2. I have a strong need to know how I stand in comparison to my co-workers

3. I often compete with my co-workers
4. I feel best about myself when I perform better than others
5. I often find myself pondering over the ways that I am better or worse off than other people around me

***Relational Self-Concept***

1. If a co-worker was having a personal problem, I would help him/her even if it meant sacrificing my time or money
2. I value co-workers who are caring, empathic individuals
3. It is important to me that I uphold my commitments to significant people in my life
4. Caring deeply about another person such as a co-worker is important to me
5. Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person

***Collective Self-Concept***

1. Making a lasting contribution to groups that I belong to, such as my work organisation, is very important to me
2. When I become involved in a group project, I do my best to ensure its success
3. I feel great pride when my team or group does well, even if I'm not the main reason for its success
4. I would be honoured if I were chosen by the organisation or team that I belong to, to represent them at a conference or meeting
5. When I'm part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them

**Ethical Voice Behaviour (Developed by Graham et al. (*forthcoming*) adapted from Tucker et al.'s (2008) Safety Voice Measure)**

1. She / he is prepared to talk to co-workers who fail to behave ethically
2. She / he would tell a co-worker who is doing something unethical to stop
3. She / he encourages her / his co-workers to act with integrity
4. She / he speaks up in her / his team to stop others from behaving with a lack of integrity