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**THE IMPACT OF ORGANISATIONAL JUSTICE ON EMPLOYEES' JOB  
PERFORMANCE AND HELPING BEHAVIOUR – A MULTILEVEL APPROACH**

**MUNIRAH SARHAN F ALQAHTANI**

**Doctor of Philosophy in Management**

**ASTON UNIVERSITY**

**November 2017**

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**ASTON UNIVERSITY**

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**Thesis Summary**

Although a growing body of work has focused on the effect of organisational justice and employee outcomes, such as job performance and OCB, little attention has been paid to the mechanisms and boundary conditions underlying this effect. Drawing on social exchange theory and social identity theory, I propose a model in which the effects of three dimensions of justice (distributive, procedural and interactional) on job performance and helping behaviour occur via social exchange and supervisor identification. Additionally, I integrate leadership and organisational justice literatures by proposing the notion of ethical leadership style as a team level moderator influencing the above proposed mediation pathway. Finally, antecedents of ethical leadership are explored, with team perceptions of overall justice being expected to predict ethical leadership. I conducted two studies. In Study1, data were collected from seven organisations, with 241 responses being from 43 teams. Study 2 was based on 349 employees within 39 teams and 27 supervisors drawn from two large organisations. Generally, the findings of both studies showed that procedural and interactional justice were significantly related to job performance and helping behaviour via social exchange and supervisor identification, but that this was not the case with distributive justice. Support was also found for the moderating effect of ethical leadership, with the pattern of results showing that the relationship between social exchange and supervisor identification was stronger when ethical leadership was low. Findings of the moderated mediation revealed that the effects of procedural and interactional justice on supervisor identification were also stronger when ethical leadership was low. Support for overall moderated mediation, linking justice dimensions to job performance and helping behaviour dependent on levels of ethical leadership, was, however, not obtained (see Study2). Finally, team perceptions of overall supervisory justice were positively related to ethical leadership at the team level (see Study2). The implications for future research and practice are discussed.

**Keywords: Justice dimensions, Ethical Leadership, Social Exchange, Supervisor Identification, Job performance and Helping Behaviour.**

## **Dedication**

This study is dedicated my father, who passed away many years ago and to my mother for her endless support and love. I dedicate this also to my husband Turki and kids Masfer, Leena, and Mohammed, for their incredible support and patience in allowing me to fulfil my life's dream. Many thanks for your love and support.

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## Chapter One – Introduction

### 1.1 Development of research problem and statement of research objectives

“Justice is the set and constant purpose, which gives every man his due”.

Marcus Tullius Cicero

The above quote highlights the importance of justice for individuals in their everyday lives. Consequently, organisational justice has witnessed a flurry of research attention in organisational behaviour, industrial-organisational psychology, and human resource management (e.g., Colquitt, Conlon, Wesson, Porter & Ng, 2001; Latham & Pinder, 2005; O'Reilly, 1991). “Research on organisational justice has been guided by the notion that employees who believe they are treated fairly will be favourably disposed toward the organisation and engage in prosocial behaviour on behalf of the organisation” (Barling & Phillips, 1993, p. 649). The term justice refers to “oughtness” or “righteousness” (Colquitt, Conlon, Wesson, Porter, & Ng, 2001: p. 425), while organisational justice refers to the fairness of social interactions, procedures and outcomes in the workplace (Greenberg, 1990b; Konovsky, 2000; Moorman, 1991).

Organisational justice is a multidimensional construct and can be assessed along three dimensions: distributive, procedural and interactional (Moorman, 1991; Niehoff and Moorman, 1993; Cohen-Charash & Spector, 2001; Wang, Liao, Xia & Chang., 2010; Colquitt et al., 2001). Distributive justice reflects the fairness of outcomes and resources among group members (Cohen-Charash & Spector, 2001). Procedural justice reflects the fairness of decision-making procedures and is judged by evaluating if the procedure is correct, unbiased, consistent and accurate (Leventhal, 1980). Interactional justice refers to the fairness of the application or implementation of those procedures (Bies & Moag, 1986). This research focuses on interactional justice rather than comparing strengths or weaknesses of either sub-dimension (i.e., interpersonal and informational justice) and examines organisational justice along three dimensions, including distributive, procedural and interactional justice. These three justice dimensions have been related to a number of attitudinal and behavioural outcomes, such as: job satisfaction (Cohen-Charash & Spector 2001; Colquitt et al., 2013); organisational commitment (Konovsky & Cropanzano, 1991); trust (Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Konovsky & Pugh, 1994); turnover intentions (Masterson et al., 2000); counterproductive work behaviours (Cohen-Charash & Spector 2001; Colquitt et al., 2013); performance (Colquitt et al., 2001; Cohen-Charash & Spector 2001; Skitka et al.,

2003; Viswesvaran & Ones, 2002; Colquitt et al., 2013); and OCB (Cropanzano & Byrne, 2000; Cropanzano & Rupp, 2008; Cropanzano, Rupp, et al., 2001).

Despite the extensive body of research on organisational justice, a number of important issues remain unaddressed. First, even though a substantial number of empirical studies have examined the effect of one or two types of justice (i.e., distributive, procedural, interactional) and two foci of justice sources (i.e. organisation & supervisor) on work outcomes (e.g., Byrne, 1999; Cohen-Charash & Spector, 2001; Cropanzano, Prehar & Chen, 2002; Malatesta & Byrne, 1997; Masterson, Lewis, Goldman, & Taylor, 2000; Rupp & Cropanzano, 2002; Liao & Rupp, 2005; Cheng, 2014), we are still not clear about how the three dimensions of organisational justice affect job performance and OCB, especially helping behaviour, a key dimension of OCB (Colquitt, 2001; Katz & Kahn, 1966; Wang et al., 2010). Helping behaviour is a robust predictor of group and organisational performance (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), as it includes actions by which employees positively affect others (Flynn, 2006; LePine & Van Dyne, 2001; Settoon & Mossholder, 2002; Mossholder, Richardson & Settoon, 2011). Thus, the current study addresses this limitation by examining the link between organisational justice dimensions and the work outcomes of job performance and helping behaviour. This examination would allow a more in-depth understanding of similarities and differences between the effects of different justice dimensions (Olkkonen & Lipponen, 2006; Colquitt et al., 2013; Rupp, Shapiro, Folger, Skarlicki & Shao, 2014). Thus, by drawing on social exchange theory (SET: Blau, 1964) and social identity theory (SIT: Tajfel, 1979), this research posits social exchange with supervisor and supervisor identification as sequential mechanisms through which procedural, distributive and interactional justice relate to job performance and helping behaviour.

Second, over the last decade there has been an exponential increase in the use of social exchange theory to account for the effects of organisational justice (Konovsky & Pugh, 1994; Colquitt, 2008; Cropanzano & Rupp, 2008; Masterson, Lewis, Goldman, & Taylor, 2000; Rupp & Cropanzano, 2002; Aryee et al., 2002; Karriker & Williams, 2009). However, little has been done in terms of examining its efficacy in explaining the effects of organisational justice relative to other mechanisms, such as identification (Tajfel, 1979). The majority of research on identity has focused on organisational identification when explaining the effects of organisational justice (Blader & Tyler, 2009; Olkkonen, Lipponen, 2006; Choi, Moon, Ko, & Kim, 2012; Chen, Wu, Chang, Lin, Kung, Weng, Lin & Lee, 2015) and rarely considers identification with supervisors (Miscenko & Day, 2016).

Third, although a paucity of prior research has examined boundary conditions of the much documented effects of organisational justice, leadership-related factors have yet to be examined as boundary conditions in this stream of research. This is surprising, given the centrality of leaders in shaping employees' experience of work. (Collins & Mossholder, 2014;

Lee & Wei, 2017). (De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber, 2005; Lee & Wei, 2017; van Knippenberg, De Cremer, & van Knippenberg, 2007). As van Knippenberg et al., (2007) observed, characteristics of the leader may have implications for the effects of organisational justice.

Ethical leadership is considered a key predictor affecting employees' moral attitude and behaviour in organisations (Mo & Shi, 2017; Mayer, Aquino, Greenbaum & Kuenzi, 2012; Brown, Treviño & Harrison, 2005). Xu, Loi and Ngo (2016) recently suggest that organisational justice perceptions and ethical leadership are underpinned by a set of ethical values that affect leaders' actions and increase or decrease organisational outcomes. In line with this notion, research has focused mainly on the role of leadership competence and improving justice perceptions (e.g., Mo & Shi, 2017; Xu, Lio Ngo, 2016; Zoghbi-Manrique-de-Lara & Suárez-Acosta, 2014).

Fourth, in addition to the scarce attention paid to the empirical examination of the role of ethical leadership as a boundary condition of the effects of justice, there is also a dearth of research examining overall justice as an antecedent of ethical leadership. More recently, there has been increasing attention paid in justice research to the role of overall justice (Ambrose & Schminke, 2009, 2007; Rupp & Aquino, 2009; Schminke & Arnaud & Taylor, 2015; Liao & Rupp, 2005) and leadership style. This is because the core function of a leader is to take responsibility for decisions that directly and indirectly affect followers (e.g., pay increases, promotion decisions, allocation of duties, etc.) (Colquitt & Greenberg, 2003; van Knippenberg et al., 2007; Strom et al., 2014; Xu, Lio & Ngo, 2016). Colquitt and Greenberg (2003, p.196) note that, "perhaps the most natural connection can be made between justice and leadership". Despite the increasing attention in this stream of research, little is known about the direct effect of overall organisational justice on ethical leadership. Such neglect is surprising, as ethics is a major value and virtue in organisations (Xu, Lio & Ngo, 2016) and employees' perceived justice toward their employing organisation is strongly related to their ethical leaders as moral agents and their view on how individuals should be treated in the workplace (Liu & Loi, 2012; Xu, Lio & Ngo, 2016).

Drawing on SIT and SET, the study proposed and tested a multilevel model of the mechanisms through which individual-level organisational justice dimensions (distributive, procedural and interactional justice) affect employees' job performance and helping behaviour, and how such effects are dependent on ethical leadership. This objective is schematically depicted in a multilevel model shown in Figure 1. Specifically, this study examines the relationship between organisational justice dimensions and job performance and helping behaviour through the mediating effects of both social exchange with supervisor and supervisor identification. Also, it examines how team level ethical leadership moderates the effects of social exchange with supervisor on supervisor identification at the individual

level. Furthermore, it examines how team level ethical leadership moderates the effects of social exchange with supervisors on job performance and helping behaviour through the mediating effect of supervisor identification. Finally, it examines the direct effect of overall supervisory justice on ethical leadership at the team level.

## 1.2 Theoretical contributions of the study

The study contributes to the justice and leadership literatures in several ways. First, this thesis contributes to the justice literature by integrating two theoretical perspectives (i.e., social exchange and social identity) to explicate the relationship between organisational justice dimensions and workplace outcomes (i.e., job performance and helping behaviour). Although the last decade of justice research has witnessed the emergence of social exchange theory as the primary explanatory framework in accounting for the effects of organisational justice (Colquitt, 2008; Cropanzano Rupp, 2008; Konovsky & Pugh, 1994; Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, 1991), scholars still do not adequately understand the mechanisms through which the organisational justice dimensions influence employees' attitudes and behaviours (Wang et al., 2010). Because research into the psychology of the supervisor-employee relationship has largely been shaped by these two theoretical perspectives (Tavares, van Knippenberg, and van Dick, 2016), it makes conceptual sense to integrate them to offer a more comprehensive understanding of the pathways through which justice influences work-related attitudes and behaviours. Consequently, this thesis goes one step further than previous research by responding to recent calls (Colquitt et al., 2013) to consider the role of supervisors by examining social exchange with supervisors and supervisor identification as potential mediating mechanisms in the relationship between organisational justice dimensions and workplace outcomes.

Second, this research contributes to organisational justice and leadership literatures by examining the moderating role played by ethical leadership in the mediating chain connecting organisational justice to job performance and helping behaviour. van Knippenberg and his colleagues urged justice scholars to integrate insights of justice with leadership (van Knippenberg & Hogg, 2003b; van Knippenberg et al., 2007). This integration is particularly important, as ethical leaders are the most important moral agents to influence subordinates' behaviours and attitudes (Brown & Treviño, 2006). Thus, this study answers this call by examining how ethical leadership style at the team level moderates the relationship between organisational justice dimensions and employees' job performance and helping behaviour. The current study addresses this issue by focusing clearly on the link between organisational justice dimensions and outcomes (i.e. job performance and helping behaviour).

Lastly, this research contributes to organisational justice and leadership literatures by examining overall justice perception as an antecedent of ethical leadership. Although scholars have examined the effect of overall justice on myriad outcomes (Ambrose & Arnaud, 2005; Ambrose & Schminke, 2009; Hauenstein et al., 2001; Lind, 2001a, 2001b; Fortin 2008; Schminke, Arnaud & Taylor, 2015), there is a dearth of research on the relationship between overall justice and ethical leadership (van Knippenberg, van Dick, & Tavares, 2007). Based on previous literature highlighting the importance of the supervisor as a source of moral guidance in the workplace and their ability to influence subordinates' outcomes (Brown & Treviño 2006; van Knippenberg, van Dick, & Tavares, 2007), this study examines the impact of overall supervisor justice on ethical leadership behaviour. Prior research, (Manrique-de-Lara & Suárez-Acosta, 2014) argued that interactional justice is the best predictor of ethical leadership. This is because it is the most reverent form of organisational justice as it reflects the degree to which employees are treated with respect and dignity by authority figures in the workplace (Bies & Moag, 1986). By focusing on the impact of overall supervisor justice rather than one form of organisational justice, this study provides an opportunity to ascertain the extent to which a supervisor's overall fairness shapes perceptions of ethical leadership. Understanding workplace antecedents of ethical leadership is important because it can potentially generate actionable knowledge that organisations may use in developing ethical leaders.

### 1.3 Thesis structure

#### Chapter 2 Literature Review

This chapter provides a comprehensive review of the organisational justice literature. Specifically, it reviews seminal and recent studies on organisational justice and the impact of organisational justice on job performance and helping behaviour (OCB). Furthermore, this chapter reviews the prior research on ethical leadership, compares ethical leadership and other leadership styles, and provides a justification for the focus on ethical leadership in this study.

#### Chapter 3 Theoretical Framework and Hypotheses Development

This chapter justifies the choice of theories that underpin the relationships illustrated in Figure 1 and examined in this study. Specifically, it discusses social exchange theory (Blau, 1964) and social identity theory (Tajfel, 1979) as well as justifies their integration to provide the theoretical grounding for the relationships depicted in Figure 1. The chapter draws on these theories together with the extant literature to explicate the hypotheses proposed and tested in this study.

## Chapter 4 Methodology

This chapter provides a general overview of the history of research philosophy and then discusses the main philosophical approaches in social science research (positivism and interpretivism). It also provides justification for the post-positivist approach that underpins this thesis and the methodological fit of the quantitative research approach adopted in this study. This is followed by a section on the research strategy and the research design of Study 1 and Study 2. Finally, it provides a short overview of the samples of the two studies included in this research project.

## Chapter 5 Study 1

This chapter describes the methodology and the results of Study 1. This study examined (i) supervisor social exchange as a mediator of the organisational justice-identification with the supervisor relationship and (ii) the cross-level moderating role of unit-level ethical leadership on the supervisor social exchange-identification with the supervisor relationship. The sample, data collection procedure, measures, and data analytic techniques are described. The primary data analytic techniques are confirmatory factor analyses and hierarchical linear regressions using MPlus (Muthén & Muthén, 2015).

## Chapter 6 Study 2

This chapter describes the methodology and results of Study 2. This study extends Study 1 by including the supervisory ratings of helping behaviour and job performance as outcome variables and testing overall justice perceptions as an antecedent of ethical leadership. The sample, data collection procedure, measures, and data analytic techniques are also discussed. The primary data analytic techniques are confirmatory factor analyses and hierarchical linear regressions using MPlus (Muthén & Muthén, 2015). This chapter concludes with a summary presentation of the results across the two studies.

## Chapter 7 General Discussion

This chapter pulls together the various components of the thesis. Specifically, it recaps the objectives of this thesis, highlights the main results across the two studies, and discusses their theoretical and practical implications. Additionally, it highlights limitations of the thesis and maps out some directions for future research.

## Chapter 2

### Literature Review

#### 2.1 Introduction

This chapter reviews the literature on organisational justice, helping behaviour dimensions of OCB, and job performance. First, it discusses the dimensions of organisational justice. Next, it discusses organisational citizenship behaviour and its dimensions. It then reviews the literature on organisational justice and organisational citizenship behaviour. Finally, it presents a review of research on ethical leadership, the comparison between ethical leadership and transformational and authentic leadership style, and provides a justification for the focus on ethical leadership in this study.

#### 2.2 Organisational justice and its dimensions

James (1993) and Campbell & Finch (2004) describe organisational justice as the individual's and group's perception of fair treatment received from their organisation and their behavioural reaction to those perceptions. A running theme in the varied definitions of organisation justice is the notion of fairness of the treatment received from an organisation and its representatives.

To decide if an event or action is fair, people refer to a number of criteria. These criteria are called justice rules (e.g., Leventhal, 1980). If the action, outcome, or event matched these rules, then the event can be judged as fair, but if the event did not match the justice rules, and specifically, if hurt has been done, the event is judged to be unfair. The judgment of fairness is often made through the use of heuristic processes, rather than effortful considerations. For example, individuals are more likely to judge an event or outcome as fair when they are in a good mood as opposed to when they are in a bad one. Similarly, individuals have a tendency to judge an event or outcome as fair depending on its benefits and their self-interest (Cropanzano, Rupp, Thornton & Shao, 2016).

The concept of justice has witnessed much research activity in the social sciences over the last three decades (Colquitt, 2001). Initially, justice research focused on the degree to which outcomes were decided according to justice rules, which was referred to as distributive justice (Adams, 1965; Leventhal, 1976). Distributive justice is promoted when outcomes are based on certain equality criteria. Later, attention turned to the degree to which decision-making processes were conducted according to just principles, termed procedural justice (Leventhal, 1980; Thibaut & Walker, 1975). Procedural justice is promoted during decision-

making processes (Thibaut & Walker, 1975) or by accordance with criteria of fair process, such as accuracy, consistency, lack of bias, ethicality, correct ability, and so on (Leventhal, 1980; Leventhal et al., 1980). An additional conceptualization focusing on interactional justice emerged (Bies & Moag, 1986). Interactional justice is focused on the interpersonal side of organisational practices, especially the interpersonal treatment and communications by top management to employees.

### 2.2.1 The Distributive justice wave

Distributive justice has its roots in the social-psychological literature (Adams, 1963) and it is defined as ‘the degree to which the appropriate allocation norm is followed in a given decision-making context’ (Colquitt, 2012. p.1). Distributive justice focuses on the appropriateness of the outcomes and resources employees receive, whether tangible (e.g., pay/salary, benefits, promotions) or intangible (e.g., satisfactory supervision, job status, praise) (Moorman, 1991). High perceptions of distributive justice occur when employees perceive outcomes and resources to be equally applied.

Homans (1961) was the first to examine distributive justice in the context of social exchange. He noted that individuals operate in an exchange relationship in which they develop normative expectations for future exchanges. For instance, when an individual helps another they expect their help to be acknowledged and reciprocated, that is, for distributive justice. In other words, individuals expect rewards that reflect the effort that they have made (Homans, 1961).

Distributive justice was based on distributive justice theory (Homans, 1961); equity theory (Adams, 1965) and relative deprivation theory (Stouffer et al., 1949). Equity theory is the most closely related to distributive justice (Byrne & Cropanzano, 2001).

For over two decades, equity theory, developed by Adams (1965), was the dominant approach to the study of workplace justice. Adams (1965) framed distributive justice in terms of equity of the perceived ratio of outcomes to inputs. According to equity theory, individuals are concerned about the ratio between how much they get (outcomes) and how much they contribute (inputs). Outcomes comprise pay, satisfactory supervision, rewards, benefits and all formal and informal approved privileges. Inputs comprise age, sex, ethnic background, experience, education and training, skills, social status and all effort expended on the job. Adams formulates this theory by using the equation below (Cropanzano et al., 2007). According to this equation, employees decide whether they are treated fairly by considering the relationship between the outcomes they gained ( $O_1$ ) and the inputs they contribute to the organisation ( $I_1$ ), and then comparing this ratio to the outcome ( $O_2$ ) and input ( $I_2$ ) ratio of the other employees who are relevant comparison targets, either inside or outside the

organisation. If the individual receives a lower salary but contributes the same as others, that individual will experience underpayment inequity, while the other person should experience overpayment inequity. Equal outcomes are said to generate equality and job satisfaction (Greenberg, 1990a).

$$\frac{O1}{I1} = \frac{O2}{I2}$$

Like Homans, Adams noted that any exchange relations could be perceived as unfair to all participants. Homans limited his discussion to satisfaction as a behavioural consequence of injustice, while Adams highlights more varied reactions to injustice such as lack of productivity, negative emotions and anger. Walster, Berscheid and Walster (1973) extended Adams' (1965) work in two fundamental ways. First, they noted that Adams' formulation in computing the equity ratio created common sense expectations when dealing with negative inputs. Second, they distinguished between two forms of restoring inequity: (a) Restoring "actual equity", which includes true modifications to one's or another outcomes and or inputs; (b) Restoring "psychological equity", which includes mentally distorting reality in a way that restores equity. This is based on the belief that people seek to maximise profits and minimise costs. Walster et al., (1973) argued that employees who are overpaid tend to restore equity psychologically by retaining rewards and employees who are underpaid tend to restore equity behaviourally by raising their rewards. Substantial research demonstrated that both behavioural changes to work performance and psychological distortions of reality appear among both overpaid and underpaid employees (Greenberg, 1990a).

Leventhal (1976) developed a justice judgment model, according to which people use three primary principles to judge distributive justice based on the situation. These three principles are equity, equality and need. The equality principle suggests that the outcome or resource should be divided equally among individuals. The need principle suggests that individuals should receive outcomes according to their needs. Leventhal (1980) suggested that these three principles can be differently adopted across situations. If decision makers intend to increase productivity and maximize employee job performance, they will choose equity as a core principle of distributive justice; if decision makers intend to enhance harmony and solidarity levels among members of a group, they will choose the equality principle; and if decision makers are more concerned about employee well-being, they will use the need principle. Cropanzano and his colleagues (2007) stated that the major difference between equity and other principles (equality and need) is that equity provides individual rewards for high performance, whereas equality builds motivation and inspiration among team members. If the objective is to inspire individual motivation, the equity principle should be applied.

However, if the objective is to build team consistency, then the equality principal would be more adequate instead.

The core contribution of equity theory stems from its accounting for the effects of perceived inequity. The theory argues that inequity creates distress and a sense of psychological tension that motivates employees to restore the balance (Adams, 1965). Equity theorists (Adams, 1965; Homans, 1961; Walster, Berscheid, & Walster, 1973) considered the effects of individual's sense of equity as a very strong norm affecting his/her behaviour and performance. This norm consists of the belief that both positive and negative work outcomes should be related to individuals' contributions and participation within the group. It is argued that individuals experience "inequity distress" when they perceived there to be an inequitable distribution of outcomes. It is theorised that inequity would motivate individuals to restore equity. Adams (1965) emphasised that even individuals benefiting from inequity experience "inequity distress" and seek to restore equity. As a result of this, individuals face dissonance both when they get over and underpaid.

Although equity theory has contributed greatly to the literature on organisational justice (e.g., Greenberg, 1988), it has also been criticised. For instance, Leventhal (1980) identified three major issues with the theory. The first is that equity theory benefits only one type of outcome (distributive outcomes) but not procedural and interpersonal treatment outcomes. The second issue is that equity theory concentrates only on the final outcome distribution and neglects the essential outcome procedures that lead to the distribution of the outcome. The third issue is that equity theory overemphasises the importance of justice and omits the power of motivation. In the same vein, Folger and Cropanzano (2001) and Rupp and her colleagues (2014) criticise equity theory for neglecting the impact of procedures designed to evaluate organisational justice as it is focused only on the fairness of outcomes. Beugre (1998) argued that equity theory has not considered individual variables in its relations to fairness perceptions. Indeed, this is an important limitation, as recent studies showed that the reaction to unfairness relies on individual differences (Begley et al., 2002; Brockner et al., 2001; Lam et al., 2002; Lee et al., 2000). Additional criticism relates to its comparative elements. Equity theory has not determined who would be selected as a comparison target, how many targets would typically be considered and what other criteria might be used to make this comparison (Colquitt et al., 2005).

Empirical research on distributive justice based on equity theory has addressed three main areas. The first has focused on the impact of inequity on employee productivity. For instance, Adams and Rosenbaum (1962) conducted a laboratory study showing that when employees feel they are over-rewarded their productivity increases, but when they feel they

are under-rewarded their productivity decreases. The second area has explored the referent individuals selected as a comparison when making judgments on (in) equality. Goodman (1974) carried out qualitative interviews with more than two hundred managers to assess with whom they would naturally compare themselves when assessing their pay satisfaction. It concluded that other system and self-referents were all linked to such perceptions. Werner and Mero (1999) stated that overpayment was associated with a positive change in employees' performance, whereas underpayment was associated with a negative change. They also said that these changes were more likely when the referent comparison individual was in the same job, rather than just being in the same organisation but in a different job. The third area has focused on workers reactions to HR practices or in the role of distributive justice as a boundary condition of these. For instance, Martin and Peterson (1987) explain how workers react to two-level payment structures. They found that those with higher levels have more positive pay-related attitudes, while the reaction of those in lower level payments have varying positive pay-related attitudes depending on the comparison referents.

Equity theory research raised important questions related to other organisational practices, particularly those related to fair processes, such as how pay strategies and plans were managed. This led to a shift in justice research towards the "perception of fairness of the policies and procedures in order to make decisions" (Greenberg, 1990b, p. 402). This new wave of organisational justice research, known as procedural justice, is reviewed next.

### 2.2.2 The Procedural justice wave

In spite of the encouraging findings of prior studies on distributive justice, the main focus among justice scholars has dramatically shifted away from distributive justice to a dual focus on individuals' distributive and procedural justice concerns. There are two primary reasons behind this shift. First, prior studies show that the perception of distributive justice is frequently biased (e.g., Messick & Sentis, 1985; Ross & Sicoly, 1979; Thompson & Loewenstein, 1992), which decreases the usefulness of distributive justice as a social concept. This is because people tend to view themselves as deserving more favourable outcomes than others would say they deserve, and are therefore, often unable to obtain what they think they deserve. Second, recent studies on procedural justice have focused on examining the impact of distributive and procedural justice judgments simultaneously and revealed a major impact of procedural justice on individual's reactions (Alexander & Ruderman, 1987; Tyler & Caine, 1981). The conclusion from these studies is that procedural justice judgment plays a greater role than distributive justice in shaping an individual's reactions to their own experience (Tyler & Blader, 2000). Reinforcing confidence in the role of procedural justice, Tyler and Blader (2003) showed that when individuals were asked about their own experiences of injustice,

they started by focusing on procedural issues and how they were mistreated when dealing with others, rather than referring to distribution of outcomes.

Thibaut and Walker (1975) were the first to introduce procedural justice, in an attempt to address a number of limitations with distributive justice; first, research demonstrates that distributive justice judgments are sometimes biased. This restricts the advantage of using distributive justice construct, as people usually see themselves as deserving more favourable outcomes than others. Accordingly, people often cannot obtain what they feel they deserve and distributive justice has not been a helpful construct to resolve team fights. Second, prior studies that examined simultaneously the effect of distributive and procedural justice judgments found that procedural justice judgments play an important role in forming people's reactions to their own experiences.

Also concerned with procedural justice, albeit coming at it from a different direction, Leventhal (1976b) claimed that individuals could be affected not only by allocation of resources or rewards, but also by the transparency of the processes that led to this allocation, paying considerable attention to the concept of "procedural justice". Similarly, Deutsch (1975) stated that fairness in the procedures used by an allocator is as an essential source of justice in social relations.

Procedural justice is defined as the fairness of the procedures and policies used to determine employee outcomes (Moorman,1991) and therefore focuses on the appropriateness of the allocation process, In other words, how outcomes are decided carries considerable significance, even when outcomes do not meet one's expectations (Cropanzano et al., 2007).

Different conceptualisations of procedural justice have been developed. Thibaut and Walker (1975) are credited with presenting procedural justice through two dimensions: (a) the legal transactions, which are concerned with the structural facets of methods that have been used in the procedure of making distributive decisions and policies. It comprises giving employees the right to speak and use their own thoughts and methods during decision-making procedures; (b) the inquisitorial system, which focuses on whether the decision-maker fairly applies policies and practices during the decision making process. Colquitt (2001) also conceptualised procedural justice as having two dimensions: first, the justice of the formal procedure itself, which focuses on an employee's perceptions of extent to which the procedures are fair. The second refers to the extent to which the employees believe these procedures were applied fairly. Colquitt's (2001) approach is nowadays dominant in justice research.

Thibaut and Walker (1975) compared, in a laboratory study, the validity of adversarial and inquisitorial procedures to generating fair decisions by reducing the effects of biases. They concluded that procedures limit third-party control, thus allocating the majority of control to disputants constitutes a just procedure. They found that decisions in which individuals were given procedural control (voice) were perceived as more fair and accepted than decisions in which the individuals were not given voice. Thibaut and Walker (1978) distinguished between two types of process control: (a) decision control (e.g., the ability to influence the outcome of the procedure); (b) process control (e.g., the ability to voice individuals' views and arguments during the procedure), which is often known as "fair process" and has generated the most replicated results in the justice literature.

Leventhal, Karuza and Fry (1980) extended the notion of procedural justice into non-legal contexts, such as organisational settings (Leventhal et al., 1980). Furthermore, Leventhal and colleagues also extended the number of determinants of procedural justice beyond procedural control. Leventhal's (1980) model of procedural justice highlighted six procedural rules that can be used by individuals to define the fairness of procedures: consistency (refers to procedures that are the same across time and for all types of people), lack of bias (refers to procedures that are unaffected by discrimination or ill-treatment), accuracy (relates to the fact that procedures must be based on accurate information), representation of all concerned (means that procedures must reflect the basic concerns, values and views of stakeholders that are part of the decision-making process), correction information (refers to the need for the existence of an appeals process or other mechanisms for fixing mistakes) and ethics (refers to procedures that follow ethical guidelines and norms of professional conduct).

Although some procedural justice scholars focused on the characteristics of decision making procedures and paid little attention to personal nature of these procedures, others were concerned about the interpersonal factors that were reflected in procedural justice items. Thibaut & Walker, (1975) and Leventhal and others (1980) discussed the importance of answering peoples' questions in a friendly and polite manner. However, it wasn't until the late 1980s and early 1990s that scholars began paying serious attention to interactional justice, which represents the third form of justice.

### 2.2.3 The interactional justice wave

Interactional justice refers to the interpersonal treatment employees receive from decision makers and the adequacy with which the formal decision-making processes are clarified (Greenberg, 1990b). Interactional justice was first introduced by Bies and Moag

(1986) when they highlighted the importance of the interpersonal treatment employees perceive at the hands of decision-makers even if there are fair outcomes and processes.

Some scholars considered interpersonal justice and informational justice as two different aspects of interactional justice, given that interpersonal relates to outcomes and informational justice relates to process (Greenberg, 1990b; Cropanzano et al., 2007; Colquitt, 2001). Others though consider interpersonal and informational justice as one single aspect of interactional justice, as they are strongly correlated (Bies & Moag, 1986; Ambrose & Schminke, 2009). Interpersonal justice refers to the degree to which people are treated with politeness, dignity and respect. In contrast, informational justice focuses on the explanations provided about why certain procedures were followed (Colquitt, 2001).

Bies and Moag (1986) proposed a set of criteria for interactional justice: truthfulness, respect, propriety and justification. "Truthfulness" requires leaders to be honest and truthful. "Respect" requires leaders to deal with everyone with dignity and respect. "Propriety" requires leaders to ask appropriate and clear questions. Finally, "Justification" asks leaders to provide adequate clarifications of the results of a decision-making process. Furthermore, Folger and Bies (1989) identified additional rules of interactional justice and included: feedback, consistency, bias suppression and consideration of employees' opinions. Greenberg (1991) established six interactional justice rules for managers to consider in order to be fair. These are similar to Bies and Moag's (1986) rules but are divided into two main components: (a) organisational considerations, which include consideration of employees' views, the appearance of neutrality and consistent implementation of rules; and (b) interpersonal considerations, which include timely feedback, adequate explanation, and treatment with respect and dignity.

Although interactional justice has become quite common in organisational justice literature as it has the most significant effects on key work outcomes (e.g., Ambrose & Schminke, 2009), scholars began building models that investigate the effects of multi dimensions altogether as integrative wave in organisational justice literature.

#### 2.2.4 The integrative wave

Unlike the first three waves, a defining feature of this wave of organisational justice research is the focus on integrative models of organisational justice, or what Greenberg and Colquitt (2014) referred to as 'overall justice'. Indeed, Colquitt, Greenberg, and Scott (2005) described overall justice as an 'integrative construct', and suggested two ways of studying overall justice. First, as a higher level construct, that is, as an indicator (e.g. justice climate) and second, as a global, self-reported measure that does not focus on specific justice dimensions.

### 2.3 Overall justice

Overall justice draws its conceptual inspiration from fairness heuristic theory (FHT) which seeks to explain when and why people form and use fairness judgements. According to FHT, people formulate judgements early on about the fairness of a work context and integrate these judgments into an overall evaluation of the fairness of their work situation. They then use this as a heuristic, or cognitive short-cut, to guide their behaviour and interpretation (Proudfoot & Lind, 2015).

Although collaborating with a supervisor can lead to effective outcomes in the long run, it also increases the possibility of exploitation. In order to solve this dilemma, individuals use a “fairness heuristic,” a psychological shortcut to determine whether it is useful to collaborate with the supervisor and the organisation. Lind (2001a) claimed that this fundamental social dilemma highlights the significance of trust, defined as accepting vulnerability to another person based on the positive expectation of that person’s intention and action (Mayer, Davis, & Schoorman, 1995). It can be difficult to judge whether a supervisor is trustworthy because trustworthiness is based on an evaluation of unobservable notions, such as capability, integrity and support. On the other hand, justice perceptions depend on observable notions, such as matching expectations (Blau, 1964), the consistency of the procedure (Leventhal, 1980), and respectful relationships (Bies & Moag, 1986). Therefore, fairness heuristic theory argues that justice is used as a substitution for trust, with fair treatment of supervisors being a key indicator (Lind, 2001a).

Overall justice reflects a complete evaluation of an individual’s perceptions of fairness, based on both personal experiences and the experiences of others (Ambrose & Schminke, 2009). In the last 20 years, justice research has showed that distributive, procedural, and interactional justice lead to an overall perception of justice. This is because justice is often defined as an individuals’ perceptions of the fairness of outcome, procedure, and interaction measured together (Ambrose & Schminke, 2009; Ambrose, Wo & Griffith, 2015; Holtz & Harold, 2009; Rupp et al., 2014).

Naumann and Bennett (2000) were the first to conceptualise justice in terms of the collective construct “justice climate”. They defined it as the “group-level cognition about how a work group as a whole is treated” (p. 882). Li and Cropanzano (2009) define justice climate as “the degree to which workplace fairness is perceived by a work unit. That is, employees form shared perceptions about the extent of fair treatment exhibited toward them in the work unit” (Priesemuth, Arnaud & Schminke, p234, 2013). Having provided a review of the major dominant framework in justice research, in the next section I provide a conceptual discussion

of the core constructs in the research model: job performance and organisational citizenship behaviour (OCB).

#### 2.4 The effects of justice: Job Performance and Organisational Citizenship Behaviour (OCB)

As the primary objective of this study is to examine the effect of organisational justice dimensions on job performance and helping behaviour, it is worth highlighting the importance of this examination. The rationale behind the choice of these two outcomes is that job performance and OCB are the main organisational outcomes resulting from justice in the workplace, which have considerable explanatory power in explaining employees' behaviour and attitudes (Colquitt et al., 2013; Greenberg & Colquitt, 2014).

##### 2.4.1 Job performance

Over the last two decades, the concept of job performance in organisational behaviour research has received considerable attention. Traditionally, job performance was concerned by evaluating the capability of employees to do the required tasks and responsibilities that were stated in their job description (Griffin, Neal & Parker, 2007). Scholars have agreed that performance should be viewed as a multi-dimensional construct containing two distinctive aspects: behaviour and outcomes (Campbell, 1990). The behavioural aspect reflects what individuals do at work. It includes specific behaviours, such as teaching students, assembling products parts or selling cars. Thus, performance is conceptualised as the description of every behaviour that is relevant to achieving the organisational goals. In contrast, the outcome aspect reflects the consequences or outcomes of individuals' performance. The specific behaviours described above may result in a number of outcomes, such as successful students, assembled products, and sold cars. Recently, research on job performance has shifted from a focus on fixed jobs to a wider understanding of the role of work in a dynamic workplace. Murphy and Jackson described job performance as 'the total set of performance responsibilities associated with one's employment' (1999: 335). From this perspective, a new set of concepts was introduced that includes an extended set of responsibilities. These concepts consist of contextual performance (Borman & Motowidlo, 1993), citizenship performance (Smith, Organ, & Near, 1983), proactivity (Crant, 2000; Frese & Fay, 2001; Parker, Williams, & Turner, 2006) and adaptive performance (Hesketh & Neal, 1999; Pulakos, Arad, Donovan, & Plamondon, 2000).

Campbell (1990) defined job performance as an individual-level variable, or action performed by single person. This distinguishes it from more encompassing concepts such as organisational performance, which is a higher-level variable. Furthermore, Campbell identified the differences between performance and outcomes as the main feature of conceptualization of job performance that help explain its meaning. Explicitly, performance is defined as a

behaviour or an action performed by an employee. This notion differentiates performance from outcomes. Outcomes are the result of an employee's performance, but also performance and outcomes are a result of other influential factors. In other words, there are many factors that lead to certain outcomes other than just an individual's behaviours and actions. In addition, Campbell clarified that performance does not have to be a directly observable behaviour of an individual. It can be also a mental process, such as answering employees' questions or participating in decision-making. Nevertheless, performance needs to be under the employee's control, despite whether the performance is mental or behavioural. Having provided a conceptual discussion of job performance, in the next section I present the literature of OCB and its dimensions with a focus on helping behaviour.

#### 2.4.2 Organisational Citizenship Behaviour

Many terms have been used to describe OCBs, including prosocial organisational behaviour (Brief & Motowidlo, 1986); contextual performance (Borman & Motowidlo, 1993), extra-role behaviours (Van Dyne & Cummings, 1990; Organ, Podsakoff & MacKenzie, 2006) and organisational spontaneity (George & Brief, 1992); OCB was conceptualised as a special type of workplace behaviour and defined by Organ (1988,p.4) as "individual behaviour that is discretionary, not directly or explicitly recognised by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation". This definition emphasises three elements of OCB: first, this behaviour is voluntary and discretionary (i.e., it is neither a given responsibility nor part of individual's formal duties); second, the benefits of this behaviour have organisational facets which can promote effective performance, and third, these behaviours are not directly rewarded (Cohen and Kol, 2004).

##### 2.4.2.1 Dimensions of organisational citizenship behaviours

Based on the preceding conceptual definitions of OCB, different dimensions of OCB have been suggested. Williams and Anderson (1991), divided OCB into two types: (1) OCBI refers to behaviours that directly benefits particular individuals in the organisation, like courtesy and altruism (2) OCBO refers to behaviours that focus on benefiting the organisation as a whole, like conscientiousness, sportsmanship and civic virtue.

Another approach was offered by Podsakoff et al., (2000: 516), who discusses seven dimensions of OCBs, including: helping behaviour, sportsmanship, organisational loyalty, organisational compliance, individual initiative, civic virtue and self-development. More recently, Khan and Rashid (2012) discuss five dimensions of OCBs, described by Organ (1990:84) as follows:

- Altruism - manifested by employees helping others with organisationally relevant tasks.

- Courtesy – evident in the extent to which employees treats others with respect.
- Sportsmanship – a characteristic wherein employees exhibit a positive attitude towards work and others, and are willing to tolerate less than ideal circumstances without complaining.
- Civic virtue – shown when employees responsibly participate in activities that exemplify concern for the welfare of the company.
- Conscientiousness – pertains to discretionary behaviour that well exceeds the minimum role required of the organisation, e.g. making phone calls to take care of business from home.

This study focuses on one specific dimension of OCBI, helping behaviour. Helping behaviours are actions directed at other employees and therefore fall under the umbrella of OCBI. This has elsewhere been referred to as altruism or cooperation, and includes assistance provided directly to other co-workers (Organ, 1988; Chou & Stauffer, 2015; Mossholder, Richardson & Settoon, 2011). The rationale for choosing this dimension in the current study rather than OCB is consistent with previous literature on this topic which, as we saw, helping behaviour includes actions by which employees positively affect others, many organisational studies have sought to examine its antecedents and consequences. (Flynn, 2006; LePine & Van Dyne, 2001; Settoon & Mossholder, 2002; Mossholder et al., 2011). Often organisations rely on helping behaviours to deal with different aspects of work. Helping behaviour is a powerful predictor of group and organisational performance (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), organisational justice (e.g., Aquino, 1995; Colquitt, et al, 2001) and has become more crucial for employees' engagement (e.g., Boxall & Macky, 2009), effective work outcomes (e.g., Frenkel & Sanders, 2007), and human resource practices (Mossholder et al., 2011).

#### 2.4.2.2 Helping behaviour (extra role behaviour)

As mentioned previously, this study focuses on examining helping behaviour. Ng and Van Dyne (2005:515p) define helping behaviour as “voluntarily assisting other group members in work-related areas”. Helping is a core construct in OCB, and is a dimension of altruism (as described above) that provides aid to specific individuals, including co-workers. Helping behaviours are viewed as promotive, affiliative behaviours that are essentially cooperative in nature (Mossholder et al., 2011). Although helping behaviour is considered as extra-role behaviour (not part of employees' job requirements) (Colquitt et al., 2001), Van Dyne and LePine (1998) noted that helping is not always an extra role behaviour, as some jobs require helping (i.e., nursing requires caregiving). That is not, however, the case in this study, wherein 'helping others' is not part of the job description and is therefore entirely discretionary. Helping behaviour is a critical workplace phenomenon, as it facilitates smooth functioning of

the organisation and contributes significantly to organisational outcomes, such as quality of work, customer satisfaction, productivity, and efficiency (Anderson and Williams, 1996; Organ 1998; Podsokoff et al., 2000).

In the next section, the discussion will focus on reviewing the leadership literature. Specifically, I review the concept of ethical leadership style and the main characteristics of ethical leadership. I also, justify the choice of ethical leadership and clarify the similarity and differences between the ethical leadership construct and transformational and authentic leadership.

## 2.5 Leadership literature

### 2.5.1 Leadership construct

Leadership is the process of influencing the perceptions, effects and behaviours of subordinates towards specific goals (Lussier & Achua, 2013). House, Javidan, Hanges, & Dorfman (2002) describe leadership as the ability to inspire, motivate and empower individuals to achieve the goals of the organisations of which they are employees. However, after many years of studying the leadership concept, there is still little convention regarding its definition.

Forsyth (2010: p253) defined the task-relationship model as "a descriptive model of leadership which maintains that most leadership behaviours can be classified as performance maintenance or relationship maintenances". Task-oriented leadership is a behavioural scheme in which the leaders focus on essential tasks that need to be completed in order to achieve organisational objectives or to meet particular performance standards. Whereas, relationship-oriented leadership is a behavioural scheme in which the leaders focus on enhancing employees' satisfaction, motivation and their general well-being (Forsyth, 2010).

This study focuses on the role of ethical leadership as a boundary condition of the relationship between justice dimensions and the outcomes and also as an antecedent of justice perceptions. Thus, the next section presents an overview of the concept of ethical leadership and its main characteristic, and seeks to justify the choice of ethical Leadership. Finally, it compares ethical leadership with other leadership theories (namely, authentic leadership and transformational leadership).

### 2.5.2 The concept of ethical leadership

Ethical leadership is defined by Brown et al., (2005:120) as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making". This definition highlights two dimensions of ethical leadership (Brown

& Mitchell, 2010; Brown & Treviño, 2006; Brown, Treviño & Harrison, 2005): (a) The moral personal dimension, which reflects the abilities of the ethical leader as a person, such as trustworthiness, fairness, honesty, self-control, approachability and their care for other people's interests. Employees know their voice will be heard if they come to these individuals with concerns and problems. A moral person has a reputation for being fair and ethical. Finally, a moral person is seen as consistently moral in both their personal and professional life. (b) The moral manager dimension reflects how leaders use the tools and techniques of the leadership position to stimulate ethical conduct at the workplace, such as listening to subordinates, using rewards and punishments and considering collective ethics. Strong moral managers consider themselves to be role models at work. They create noticeable morals by promoting ethical conduct in their workers. In sum, moral managers engage in two-way communication with employees, both "walk the talk" and "talk the walk", modelling their behaviour and organisational practices on the fulfilment of ethical standards (Brown & Mitchell, 2010).

Treviño, Hartman and Brown (2000) argue that individuals in powerful positions need to have both a strong moral personality and moral management skills in order to be viewed as an ethical leader by their employees. A strong moral manager but a weak moral person is likely to be perceived as a hypocrite, failing to practice what they promised to do. A hypocritical leader talks about the necessity of being ethical, but their activities show them to be dishonest. In opposition, strong moral persons who are weak moral managers take the risk of being perceived as an ethnically "neutral" leader. This kind of leader is seen as being voiceless on ethical matters, telling employees that leaders do not truly care about ethics.

The conceptualization of ethical leadership draws on social learning theory (Bandura, 1977, 1986) to explain the antecedents and consequences of ethical leadership. This theory proposes that employees learn appropriate conduct through two ways; through their experience and by observing how role models, such as parents, teachers, and leaders, behave (Bandura 1986, Treviño et al., 2000; Brown & Treviño, 2006; Brown & Mitchell, 2010). In view of that, ethical leaders "teach" ethical conduct to subordinates through their own behaviour (Brown & Treviño, 2006; Brown & Mitchell, 2010). Ethical leaders are appropriate role models if they occupy very powerful and influential positions in the organisational hierarchy that helps them to capture the attention of subordinates (Brown & Mitchell, 2010). However, effective ethical role models require more than power and influence (Bandura, 1986). From the social learning perspective, role models must be trustworthy and treat everyone fairly. Otherwise, subordinates may ignore the leader whose behaviour conflicts with their proclaimed ethical intentions (Brown & Mitchell, 2010).

### 2.5.3 The main characteristics of ethical leadership

The five characteristics of ethical leadership provide a foundation for the development of the ethical leadership concept: respect, service, justice, honesty, and community (Bedi, Alpaslan & Green, 2016). (1) Ethical leaders respect others, ethical leaders show respect to others by listening to them closely, appreciating their contributions and being kind. Burns (1978) advocated that leaders should value, respect and appreciate their followers and should be aware of their followers' needs and goals. (2) Ethical leaders help others. Some ethical theories highlight the importance of helping others (what is referred to as ethical altruism). The 'helping trait is obviously an example of altruism. Leaders who help are altruistic, as the well-being of their employees is a high priority. (3) Ethical leaders are just, ethical leaders are always fair and just by treating everyone equally. They are not biased on the basis of gender, ethnicity, race, or any other factor. Justice is similar to the ethic of reciprocity, as both are necessary for all people who are collaborating together to fulfil their common interests (Brown & Treviño, 2006). (4) Ethical leaders are honest. When the leader is dishonest, his followers lose trust in what he says and stands for, and their respect for him may decline. (5) Ethical leaders build two ways communications. Leadership is a process whereby an individual affects group members to achieve a common goal (Brown et al., 2005). Thus, it is clear that this definition has an ethical dimension as it focuses on achieving a collective goal. Consequently, the leader needs to consider the purposes of their followers, while working toward goals that are beneficial for everyone involved.

Brown et al., (2005) highlighted the significant effect of three features of ethical leadership: an ethical model, treating individuals justly, and effectively managing morality. These unique characteristics of ethical leadership can make employees more motivated and can increase their work performance. Likewise, Xu, Loi and Ngo (2016) argue that the unique characteristics of ethical leadership make employees more enthusiastic and treat their leaders' decisions and actions as originating from the organisation itself.

### 2.5.4 Justification of the choice of ethical leadership

As mentioned previously, ethics is closely related to justice, as justice is a part of morality and ethical standards (Greenberg & Colquitt, 2014). Research on ethics and justice share similar concerns; first, both literatures are concerned with how individual perceptions and beliefs influence organisational outcomes. Treviño and Weaver (2001) propose that there is a significant relationship between perceived overall fair treatment and ethical outcomes. Their study demonstrates that unethical reactions can appear in the workplace if employees believe that their organisation, in general, treats them unfairly. Second, justice plays a noticeable role in the philosophical treatment of ethics (Brown & Treviño, 2006). Leventhal

(1980) argued that ethicality is one of the most significant factors in procedural justice rules. Surprisingly, the concept of ethics remained separated from the justice literature for several decades, because justice has its roots in social psychology rather than philosophy (Colquitt & Zippay, 2015). However, that detachment has started to change with the establishment of fairness theory (Folger & Cropanzano, 2001).

### 2.5.5 Comparison with other leadership theories (authentic leadership and transformational)

Aside from ethical leadership, there is also authentic and transformational leadership, which will be briefly discussed. First, authentic leaders are consistent in their words, actions, and values; they have self-awareness as a leader and develop trust between themselves and their followers (Schwartz, 2015). Second, transformational leaders enhance moral leadership because they motivate their followers to look beyond self-interest and work together for a collective purpose (Burns, 1978). These leadership styles are consistent with ethical leadership; the distinction lies in the various aspects of leadership emphasised (See table 2.1).

Despite the obvious similarities among these styles of leadership, ethical leadership is the one that is most closely related to justice because it is founded on notions of right and wrong, good and bad. The same may be said of transformational leadership, which focuses on integrity, caring for others and ethical decision-making processes (Ricketts & Ricketts, 2010). This study focuses on ethical leadership style, as there are few studies have linked organisational justice and ethical leadership (e.g., Xu et al., 2016; Mo & Shi, 2017; Meyer et al., 2012).

Table 2.1: Similarities with and differences between ethical, authentic and transformational theories of leadership

Leadership style	Key similarities	Key differences
Authentic leadership	<ul style="list-style-type: none"> <li>- Concern for others (Altruism)</li> <li>- Ethical decision-making</li> <li>- Integrity</li> <li>- Role modelling</li> </ul>	<ul style="list-style-type: none"> <li>- Ethical leaders emphasize moral management (more transactional) and awareness of the “other”.</li> <li>- Authentic leaders emphasize authenticity and self-awareness</li> </ul>
Transformational leadership	<ul style="list-style-type: none"> <li>-Concern for others (Altruism)</li> <li>-Ethical decision-making</li> <li>-Integrity</li> </ul>	<ul style="list-style-type: none"> <li>- Ethical leaders emphasize ethical standards, and moral management (more transactional)</li> <li>-Transformational leaders emphasize vision, values, and intellectual stimulation.</li> </ul>

Source adapted from Brown et al., 2006.

This research focuses on ethical leadership style rather than other types of leadership as ethical leadership has been found to be the most powerful style that affects some important employees' outcomes such as identification, job performance and their wellbeing (Xu et al., 2016). Furthermore, the focus of this research on social exchange with the supervisor because

LMX is based on the concept that leaders develop unique types of relationships with subordinates. These relationships have two ranges low-quality, in which the relationship is based rigorously on the transactional part of the employment contract, to high-quality relationships based on trust, mutual relationships, respect, and impact. Social exchange with supervisor has no restrictions on leader–member relations as subordinates do not have to prove their competence or trust before involving in exchanges. Social exchange with supervisor simply implies as individuals act in ways that benefit other individuals and create the obligation for future reciprocation. Specific commodities such as competence and trustworthiness are an essential part of the exchange relationships. Blau's (1964) theory of social exchange also includes a second important difference from LMX, that is, unspecified returns. Social exchanges are based on '... a general expectation of some future return, its exact nature is definitely not stipulated in advance' (Blau, 1964, p. 93). Therefore, there is an anticipation of future action, but precisely what or when this action will happen is not clear. Social exchange is the more behaviourally-oriented concept and thus it is more visible and concrete than general feelings. This is an important difference from LMX scale that measures specific aspects of relationships (i.e., affect, loyalty and respect) (Bernerth et al., 2007). Ethical leadership is important in this study rather than LMX because ethical leadership has the more effective impact on employees' outcomes than LMX. The ethical leader is considered as an honest and trustworthy person and his decision can affect the followers, organisation and society (Brown & Treviño, 2006). The ethical leader can shape high-quality social exchanges with the supervisor that are based on two-way communication, trust, knowledge sharing. When employees perceive their direct supervisor is caring, encouraging and supporting them in the best interesting, their relationship will increase. Thus, ethical leadership appears as a moderator between the social exchange with supervisor and supervisor identification.

## 2.6 Conclusion

This chapter reviewed the literature on organisational justice, job performance and helping behaviour dimension of OCB. Furthermore, it reviewed the literature on ethical leadership and provided a justification for the choice of this leadership style relative to authentic and transformational leadership styles. In the following chapter, I discuss the theoretical foundation of this thesis (Social exchange and Social Identity Theories; Blau, 1964; Tajfel, 1979). Furthermore, it explains the research model and the hypotheses, including cross-level relationships.

## Chapter 3

### Theoretical Framework, Conceptual Model and Development of Hypotheses

#### 3.1 Introduction

In the preceding chapter, the literature on organisational justice, organisational citizenship behaviour and ethical leadership were reviewed. This chapter provides an overview of social exchange and social identity theories as theoretical underpinnings of the relationships examined in this study and depicted in Figure 1. Furthermore, the chapter discusses the multilevel conceptual model proposed in this study and explains how these theories informed the choice of variables and their interrelationships.

#### 3.2 The theoretical framework

##### 3.2.1 Social exchange theory (SET)

Social exchange theory (SET) is one of the dominant theories for understanding workplace behaviour. SET has its roots in anthropology (e.g. Sahlins, 1972; Firth, 1967), psychology (e.g. Gouldner, 1960; Thibault & Kelly, 1959) and sociology (Blau, 1964). In spite of different views of social exchange, theorists have recognised that social exchange includes a chain of interactions that create obligations (Emerson, 1976). Within SET, these interactions are often viewed as interdependent and conditional, based on the actions of another individual (Blau, 1964). Furthermore, Blau (1964) concluded that exchange relationships are viewed as causally related. For instance, he argues that “the character of the relationship between exchange partners” may “affect the process of social exchange” (p. 97), which means that the social relationship affects the type of exchange. In addition, he indicated that successful exchange might cause an individual to be committed to another, meaning that exchanges might sometimes influence the relationship. SET asserts that under certain circumstances, these interdependent transactions have the possibility to develop and maintain high quality interpersonal relationships over time.

Blau (1964, p.93) was the first to differentiate between social exchange and economic exchange. He defined social exchange as “favours that create diffuse future obligations, not precisely specified, and the nature of the return cannot be bargained..... but must be left to the discretion of the one who makes it”. In contrast, economic exchange is based on a contractual relationship that entails a specific performance of a contractual obligation without exceeding references provided in the contract (Blau, 1964). The main difference between economic and social exchange, thus, is the nature of the exchange between parties. Social exchange requires unspecified, flexible, and open-ended obligations and mutual trust (Blau,

1964). According to Blau (1964; p. 93) “the basic and most crucial distinction is that social exchange entails unspecified obligations” He also argued that social exchange “involves favours that create diffuse future obligations . . . and the nature of the return cannot be bargained” (p. 93) and “only social exchange tends to engender feelings of personal obligations, gratitude, and trust; purely economic exchange as such does not” (p. 94). He also maintained that “the benefits involved in social exchange do not have an exact price in terms of a single quantitative medium of exchange”. Within contemporary management literature, SET has attracted much research and has been employed to explain the nature of the employee-organisation relationship Workplace social exchange relationships evolve when employers “take care of employees,” which, in turn, obligates employees to reciprocate with positive work outcomes).

Blau (1964) discussed a number of benefits from social exchange relationship, these benefits are considered as voluntary actions, beneficial acts by a person exchange partner that is expected to bring about a desire to return in the other person. These actions imply assistance, compliance, advice, estimates, and basic services. Sometimes, these benefits are symbolical and specific, which means the identity of the provider influences the value and the level of the benefit (Foa & Foa, 1980).

The main elements of social exchange include rewards and costs, which both influence relationship decisions. Homans (1961) defined costs as something valuable that is given up. Money is considered to be the most visible “cost” that can be exchanged for products or services. Others include time, skills and effort. Rewards can be considered as a “social reward”, which can only be obtained through an interactional relationship with another person. Social rewards have a positive influence because people feel recognised socially, loved, respected, and valued by others. Social interaction increases satisfaction, pleasure, and helps needs to be met (Thibaut & Kelley, 1959). Social exchange theory argues that people are trying to maximize their rewards and minimize their costs in order to increase profit. Thus, profits can influence relationship decisions as people seek interactions that increase rewards "profits" rather than those that increase costs.

Another basic tenet of SET is that relationships develop through time into trusting, faithful, and mutual obligations (Cropanzano & Mitchell, 2005). To do so, two partners should be involved in the “rules” of exchange. Rules of exchange form a “normative definition of the situation that forms among or is adopted by the participants in an exchange relation” (Emerson, 1976: 351). From this perspective, norms of exchange are the guidelines that underpin social exchange processes. Therefore, the use of SET in organisational behaviour research is framed on the principle of the exchange rule.

Reciprocal interdependence focuses on contingent interpersonal transactions, whereby an action by one person leads to a response by another. If an individual provides a benefit, the receiving person should respond in a kind way (Gergen, 1969). Accordingly a “reciprocal exchange” is understood as one that does not contain obvious bargaining. Rather, one person's action depends on the other's behaviour. Thus, reciprocal interdependence decreases risk and increases collaboration between individuals.

Cropanzano and Mitchell (2005) discuss two types of reciprocating responses to clarify how social exchange constructs have been accounted for in workplace behaviour: behavioural response (i.e. the initiating action), where an individual behaves in a certain way towards a target (e.g., their supervisor); and relational response (i.e. the reciprocating response), where the target reacts in two possible ways. They might (a) perceive that they have good or bad personal relationship with the actor and/or (b) behave in a supportive or harmful way that affects the actor. These behaviours include OCB (Organ, 1988; 1990, Organ et al., 2006), prosocial organisational behaviour (Brief & Motowidlo, 1986), constructive deviance (Galperin, 2003; Warren, 2003; Vadera & Pratt, (2013), and counterproductive behaviour (Spector & Fox, 2005).

SET has been employed as the dominant framework for understanding employees' attitudes and behaviours in relation to organisational justice (Blau, 1964; Masterson et al., 2000; Organ, 1990). In a recent meta-analysis, Colquitt et al., (2013) points out that in the past decade, SET was the dominant approach to examining the effects of organisational justice. The results of their meta-analysis indicate a strong and significant relationship between justice dimensions and social exchange indicators.

Cropanzano and his colleagues (2015) illustrate the multifocal nature of workplace social exchange relationships, as social exchange theory can capture how employees conceptualise their work experiences through different sources of initiating actions (e.g. organisation, supervisor, and co-worker). Scholars are able to predict employee behaviour by differentiating between sources of social exchange relationships. In this regard, the target similarity model (Lavelle et al., 2007; 2015) has been used to understand the connection between employees' behaviours, perceptions and relationships with others. For example, Lavelle and colleagues (2007) used the target similarity model to argue that there are many different sources of injustice in the workplace. In this manner, the target similarity model combined a multi-foci concept on the source of justice and suggested that employees are able to build distinct social exchange relationships with each source. The target similarity model also suggested that high quality social exchange relationships can be developed between an initiating actor and a target when the actor exhibits just treatment (See Lavelle et al., 2015). In

addition, employees feel a sense of reciprocity when they have high quality social exchange relations with their supervisor or any initiating actor. So, in turn, they are motivated to involve in sort of behaviours such as, citizenship behaviours targeted to the initiating actor (Lavelle, McMahan, & Harris, 2009).

As shown in Figure 1, I posit that organisational justice signals a supervisor's attempts to initiate a social exchange relationship with a subordinate and therefore leads the subordinate to perceive a social exchange relationship with the supervisor. Based on the norm of reciprocity I also propose that social exchange with supervisors will mediate the effects of organisational justice and supervisor identification. In line with previous studies. I also propose that social exchange with supervisors will mediate the effects of organisational justice and job performance and helping behaviour.

### 3.2.2 Social identity theory (SIT)

Social identity is defined as a person's sense of who they are, based upon three socio cognitive processes used to evaluate others as "us" or "them" (i.e. 'in-group' and 'out-group'). According to SIT, individuals tend to classify themselves and others into several social categories, such as gender, age, religions, organisational membership and affiliation (Tajfel & Turner, 1985). People may be classified into more than one category and different individuals may benefit from different categorisation, given that social classification serves two functions. First, it cognitively divides the social environment and provides individuals with an organised means of defining others, because individuals are assigned the prototypical characteristics of the category to which they are classified. Second, social classification enables individuals to define themselves in relation to their social environment. SIT suggests that individuals strive for a positive self-concept which comprises a personal identity, including idiosyncratic features (e.g., physical characteristics, psychological traits, capabilities, and so on) and a social identity, including prominent group classification (See Hogg & Terry, 2000; Ashforth & Mael, 1989; Turner, 1982). Social identification, therefore, is "the perception of oneness with or belongingness to some human aggregate" Ashforth & Mael, 1989: p21). For example, a woman might define herself in terms of the group with which she categorises herself (I am an American; I am a woman).

Self categorization helps to clarify the differences between social identity and other aspects of the self and to explain how self classification is organised and what makes any one part of this classification psychologically active in a specific context. Furthermore, self-categorization offers an explanation for the differences between the three levels of

identification (described below). Turner (1982) argued that the self is often defined in terms of social relationships (i.e. in comparison to others) but that this can take place at different levels of description. So, one can define oneself as unique and different from others ('I' vs. 'you') in line with personal identity. One can define oneself as a member of a group that is different from other groups ('we' vs. 'they'). One could also define oneself at higher levels, such as 'human' rather than non-human, or even as 'active' versus 'inactive' (Ashforth & Mael, 1989).

Self-categorisation requires a process of depersonalisation. When acting in terms of social identity, an individual view himself in terms of his group memberships. As a result, an individual would tend to see his group members as similar to each other and different from another group's members. Furthermore, an individual would tend to adopt the characteristics of the group to which he belongs. This is the rule of stereotyping. When it is difficult to claim that we stereotype people in terms of the groups to which they belong, it is easier to claim that we would also stereotype ourselves. Therefore, when we self-categorize as members of a specific group, we answer the question 'who am I?' in relation to the characteristics of the others members of the groups to which we belong.

Social-identity is based on three levels of identity (e.g., individual or personal, relational, and organisational or collective/group) (Brewer & Gardner, 1996; Sluss & Ashforth, 2007). These levels explain how individuals identify themselves as individuals, as part of an individual-supervisor relationship, or as group-organisational members (Brewer & Mael, 2001; Sedikides & Brewer, 2001b). At the individual level, individuals see themselves as independent, unique and having autonomy. It focuses on self-esteem and self-expression, and individual success derives from interpersonal comparisons of goals, characteristics, and performance. At the relational level, social identification reflects the extent to which individuals are closely related to others, remaining sensitive to their interdependence, intimacy, and reciprocated obligations with significant others. It focuses on an individual's related role (i.e., role-relationship), for instance, co-workers, supervisors and subordinates (Sluss & Ashforth, 2007). At the organisational level, individuals view themselves as members of a group, rather than as unique individuals or partners of interpersonal relationships (Zhang & Chen, 2013). An example can help to illustrate this; if an individual had an individual identification, he will view himself as unique and different from others. He would focus on independent activities that are diverse and not mainstream. Or, if an individual had a relational identification, he would focus on the relationships that he has developed with his family, colleagues, and subordinates. He may become involved in mainstream activities in order to establish relationships and get to know people. Finally, if an individual had an organisational identification, he will view himself as a member of the group to which he belongs. He will be focused on ensuring his belonging and visible association with this group.

However, there are two major differences between organisational identification and relational identification (i.e., supervisor identification, in this study) as they are conceptually different and based on distinct self-identity levels. First, organisational identification is a form of self-identity at the collective/group level that focuses on a specific collective or group, is depersonalised and has group tendencies. Ashforth and Mael, (1989, p.34), defined *organisational* identification as “the perception of oneness with or belongingness to the organisation” or as the process of incorporating the perception of oneself as a member of a particular organisation into ones general self-definition. In contrast, relational identification is a type of self-identity at the interpersonal level that focuses on the role-relationship with a specific person (e.g., a supervisor), is personalised, and has interpersonal tendencies (Sluss & Ashforth, 2007). Second, organisational identification and supervisor identification have different psychological outputs. Relational identification (i.e., supervisor identification) essentially has a positive impact on interpersonal outcomes, whereas organisational identification has a positive impact on organisation-oriented outcomes (for reviews, see Ashforth et al., 2008; Brown, 2000).

Cooper and Thatcher (2010) identified two main motives behind relational identification. First, reducing uncertainty. This is because individuals with relational identification tend to see themselves in terms of their relationships with others and have a strong desire to maintain their relationships. Individuals with a high relational identification likely prefer a settled environment so that their relationships can be maintained. Therefore, the uncertainty reduction motive is likely to be strongly associated with a relational identification. Second, personalised belongingness. Investigators link the relational identification to a strong motivation to form interpersonal attachments because it is argued that those with high relational identification are motivated to make and maintain the relationship for the sake of the relationship itself. Because relationships represent the key focus of the relational self-concept, Cross and Morris (2003) found that individuals with high relational identification have a tendency to take the perspectives of others and share information compared to individuals with low relational identification. Thus, relational identification likely involves a strong relationship with self-expansion due to the desire to see things from the perspectives of others.

Consistent with the previous discussion, I employed SIT as an explanatory mechanism linking justice and the work outcomes of performance and helping behaviour. Specifically, in this study, I conceptualize identification with supervisor as a form of relational or interpersonal identification.

### 3.2.3 Integrating SET and SIT in organisational justice research

When trying to explain and understand the psychological relationship between employees and their supervisor, two explanatory frameworks have been extensively used (van Knippenberg, 2012): SET (e.g., Cropanzano & Mitchell, 2005; Shore, Coyle-Shapiro, Chen, & Tetrick, 2009) and SIT (e.g., Ashforth & Mael, 1989; Ashforth, Harrison, & Corley, 2008; Hogg & Terry, 2000; Tavares et al., 2016). Although both theories have developed in isolation from one another, in recent years, scholars have started to integrate these two theoretical perspectives to explain employee behaviours, as these two theoretical perspectives largely shape the psychology of the employees' relationships in the workplace (Flynn, 2005; Hekman, Bigley, Steensma, & Hereford, 2009; Umphress, Bingham, & Mitchell, 2010; van Knippenberg, van Dick, & Tavares, 2007, Tavares et al., 2016). For instance, Tavares, van Knippenberg, and van Dick (2016) argue that identification and social exchange can be integrated to explain and understand employees' behaviours in their employing organisation.

The main outcome of the integration of SET and SIT is the idea that processes of social exchange with supervisors affect the extent to which an employee identifies with the supervisor. In other words, employees' identification with the supervisor depends on the treatment they received from that supervisor. From this perspective it is argued that the employee-supervisor relationship rests upon employees' unspecified obligations to reciprocate the benefits of the supervisor because of the fair and beneficial treatment they receive (Cropanzano & Mitchell, 2005).

Meanwhile, reciprocity between the employee and the supervisor and self-identification depends on the core of the social exchange approach, in which the psychological relationship between the employee and the supervisor is captured by the concept of supervisor identification. According to Sluss and Ashforth (2007), relational identification (i.e. with the supervisor) relates to self-definition, particularly in terms of the specific relationships with other individuals in the workplace, and is "a specific form of social identification" Ashforth and Mael (1989; p22). Hence, supervisor identification has been referred to as the perception of oneness with the supervisor with which the individual works (Sluss & Ashforth, 2007). The more employees identify with their supervisor, the more significant their relationship when it comes to understanding 'who they are' (Cooper & Thatcher, 2010). This sense of "we" including the supervisor is important because it leads the employee to experience the supervisor's interests and understand them in relation to their own self-interest as well as the collective interest (i.e., our interest). When employees define themselves in terms of role relationships with supervisors, they perceive an overlap between their values and attributes and the supervisor's values, strategies and ways of doing things (Ashforth & Mael, 1989). Therefore, in this study, I integrate the two theories (SET and SIT) to help understand the

relationship between justice dimensions and work outcomes (i.e., job performance and helping behaviour). I situate reciprocity between the employee and supervisor as the core of the social exchange perspective and self-definition as the core of the social identity perspective.

In sum, social exchange and social identity have the potential to impact on employees' work life and the ability to influence their perceptions of the quality and value of workplace relationships (Sluss et al., 2008). Therefore, I integrate social exchange and identification with supervisor to account for the relationship between the organisational justice dimensions and the employee work outcomes of job performance and helping behaviour.

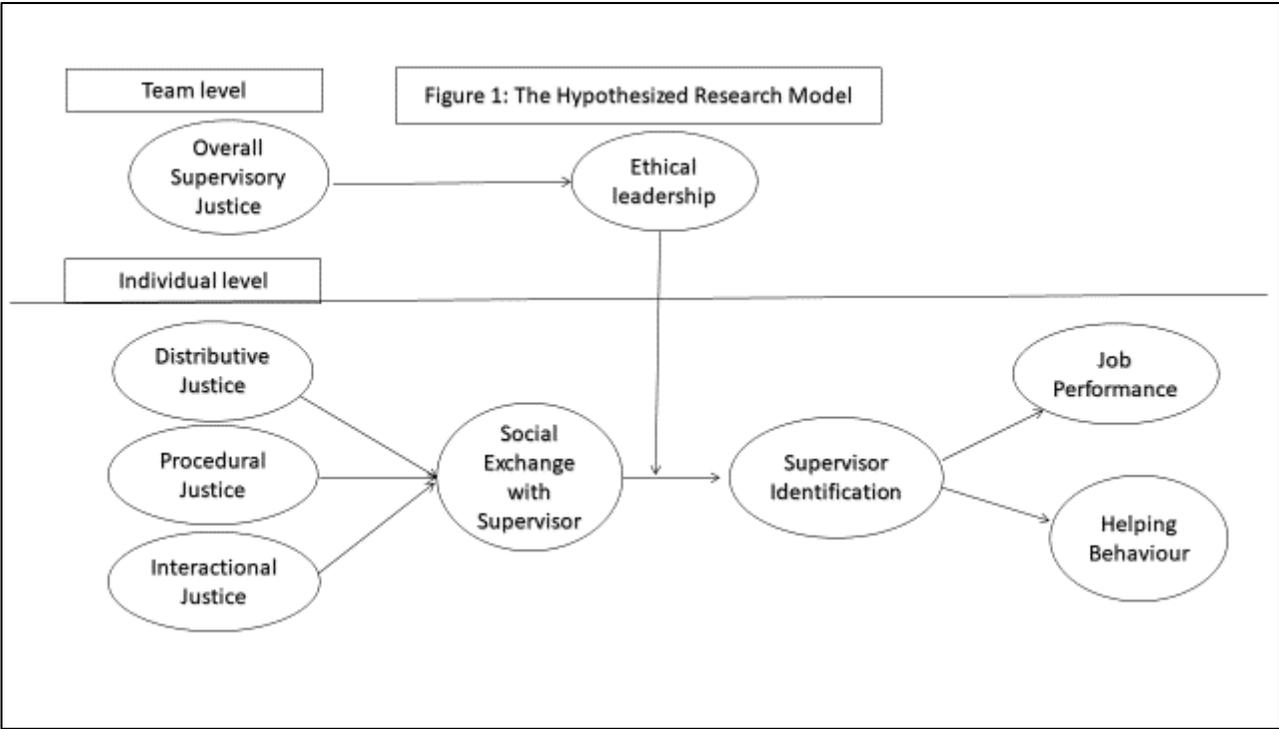
### 3.3 Conceptual model

Figure 1 shows the mechanisms through which social exchange and social identification with a supervisor link organisational justice to work-related outcomes. Specifically, it proposes that the overall justice of a supervisor is related directly to ethical leadership at the team level. In line with previous studies, both social exchange (e.g., Aryee et al., 2002; Colquitt, 2008; Cropanzano Rupp, 2008; Cropanzano et al., 2002; Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, 1991) and supervisor identification (e.g., Knippenberg et al., 2007; Tavares et al., 2016; He & Brown, 2013; Lee et al., 2015; Wang & Jiang, 2015; Zhang & Chen, 2013) have been examined as robust mediators of the relationship between organisational justice and employees behaviours. Supervisor's fair treatment and the resulting quality of supervisor-subordinate relationship lead employees to develop a strong identification with their supervisor which, in turn, motivates job performance and helping behaviour (Chang & Johnson, 2010; He & Brown, 2013; Lee et al., 2015; Wang & Jiang, 2015; Zhang & Chen, 2013).

Therefore, as shown in Figure 1 employee perceptions of organisational justice at the individual level indirectly relate to individual job performance and helping behaviour through the serial mediating effects of social exchange and identification with the supervisor. Furthermore, Figure 1 posits ethical leadership at the team level to have a cross-level moderating effect on the relationship between social exchange and identification with the supervisor. In the research model, we integrated the overall justice of supervisor and ethical leadership in order to provide strong evidence that overall justice would trigger ethical behaviour in the leader. Justice is the core antecedent of ethical leadership. Ethical leaders are concerned about issues of fairness and justice (Brown & Treviño, 2006a; Mayer et al., 2012). If the leader is fair and just then they are able to treat all of their subordinates in a fair and equal way.

For the theoretical reason, interpersonal and informational justice are treated as similar constructs because they are considered to be social aspects of justice. Interpersonal and

informational justice came from the same source (supervisor), which means there would be a rationale to combine them. Moreover, interpersonal and informational justice tend to be correlated (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Cropanzano et al., 2001) and several scholars have found that interpersonal and informational justice leads to the same effect (e.g., evaluation of authority, individual citizenship behaviour and withdrawal) (Cohen-Charash & Spector, 2001; Cropanzano et al., 2001). For the statistical reason, these two constructs were strongly correlated, (53.) for Study 1 and (56.) for Study 2.



### 3.4 Development of hypotheses

#### 3.4 .1 Individual- level relationships

##### 3.4 .1 .1 Main effects:

###### 3.4.1.1.1 Organisational justice dimensions and social exchange

The first attempt to integrate social exchange and organisational justice emerged in Organ and Konovsky's (1989) study of the antecedents of organisational citizenship behaviour, which focused on the effect of justice in fostering a sense of trust amongst employees. Organ (1988), drawing on the work of Blau (1964), argued that justice is an essential part of the organisation and can be used to explain situations of an employee being a "good soldier". From this view, justice serves as a benefit that is positively related to the social exchange relationship, with that relationship positively influencing the reciprocal behaviour of citizenship.

As discussed earlier, a social exchange relationship refers to the degree to which the exchange relationship between two parties is characterised by respect, trust and mutual obligations (Blau, 1964). Employees build trust in their supervisors if they perceive they have been treated fairly in the allocation of payment and rewards (distributive justice), given a voice in the decision making process (procedural justice), and treated with politeness, respect and dignity and provided information about why procedures were used and why outcomes were distributed in a certain way (interactional justice), leading to the development of social exchange relationships with the supervisors.

Indeed, there is much empirical evidence supporting the effect of organisational justice perceptions on social exchange (e.g. Aryee et al., 2002; Colquitt, 2008; Cropanzano Rupp, 2008; Cropanzano et al., 2002; Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, 1991). For example, Bajaj and Krishnan (2016) found a positive impact of employees' interactional justice on social exchange with supervisors in numerous organisations in the U.S. Likewise, Rupp and Cropanzano (2002) tested the relationship between social exchange theory and the multifoci organisational justice (i.e., supervisor focus and organisational focus). They predict that supervisory interactional and procedural justice are related positively to supervisory social exchange and organisational interactional and procedural justice are related positively to organisational social exchange. The findings supported their prediction for both the supervisory focus and organisational focus, but interactional justice was more significantly related to the supervisory focus, whereas procedural justice was more significantly related to organisational social exchange. In a similar vein, Masterson and her colleagues (2000)

reported that employee's interactional justice perceptions led to positive relationships between employees and their supervisors (i.e., LMX). Colquitt and his colleagues (2013) found a positive relationship between all justice dimensions and social exchange. Taken together, I anticipate a positive relationship between all dimensions of justice and social exchange with the supervisor.

H1: Distributive justice is positively related to social exchange with the supervisor.

H2: Procedural justice is positively related to social exchange with the supervisor.

H3: Interactional justice is positively related to social exchange with the supervisor.

#### 3.4.1.1.2 Social exchange and supervisor identification

The social exchange perspective argues that the supervisor- subordinate relationship is based on obligations to reciprocate the benefit of fair treatment that the subordinates receive from their supervisor (Cropanzano & Mitchell, 2005). The fundamental rationale for the link between social exchange and supervisor identification is that subordinates tend to have an obligation to reciprocate socio-emotional attachment with their supervisor as their supervisor helps them to meet their socio-emotional needs (He & Brown, 2013). Thus, employees incorporate their social exchange relationship with the supervisor into their self-concept, leading to increased identification with the supervisor (Chang & Johnson, 2010).

Subordinates' identification with the supervisor is a process of self-definition, which Sluss and Ashforth (2007) describe as relational/personal identification. It is a self-extension process, in which the individual views the supervisory relationship as a prominent role relationship in the individual's definition of self (Huang, Wang & Xie, 2014). It is well known that cues conveyed by an important other play a significant role in shaping individuals' self-identification (Anderson & Chen, 2002; Sluss & Ashforth 2007; Huang et al., 2014). Thus, supervisor behaviours that are viewed as more trustworthy should enhance and raise an individual's identification with the supervisor because a high quality interpersonal relationship with the supervisor conveys to employees that they are esteemed and appreciated (Walumbwa et al., 2009; Chang & Johnson ,2010). Empirical evidence to supports this connection in several studies. For example, Karanges et al., (2014) found that interpersonal communications between employees and their supervisor promote identification with the supervisor. Likewise, Huang et al., (2014) found that social exchange with the supervisor was positively related to follower's identification with the supervisor. Based on the above discussion, I hypothesise the following:

H4: Social exchange with the supervisor is positively positively related to supervisor identification.

#### 3.4.1.1.3 Supervisor identification, job performance and helping behaviour

According to SIT, self-identity extends to supervisor identification and one of the most powerful connections in the organisation is the degree of subordinates' personal attachment to their supervisor as leader's behaviour shapes employees' self-identities (Zhang & Chen, 2013). Scholars suggest that individuals with high supervisor identification have a tendency to contribute positively to their workplace or firm (van Knippenberg et al., 2007). This is because it leads employees to identify themselves in terms of the characteristics they share with their supervisor (van Knippenberg, 2000), allowing them to maintain a positive relationship with them (Cropanzano & Mitchell, 2005). Thus, employees tend to expend more effort on behalf of their supervisor (Anderson & Chen, 2002; Sluss & Ashforth 2007; Huang et al., 2014), and by so doing, they are more motivated to achieve goals on their behalf (van Knippenberg, 2000). This high effort and motivation is likely to increase employees' performance. Previous meta-analyses showed that there is a positive relationship between organisational identification and job performance (Mael & Ashforth, 1992; van Knippenberg, 2000; van Knippenberg & van Schie, 2000; Ashforth et al., 2008; Riketta, 2005; Lee et al., 2015; Chang and Johnson, 2010).

Another outcome of supervisor identification is helping behaviour. Individuals with strong identification consider helping others to achieve their goals because they see them as their own goals (Sluss & Ashforth, 2008). Additionally, for individuals with strong identification, the supervisor influences their perceptions of what the supervisor is and provides substantial meaning for their self-definition. Thus, individuals with strong identification are more likely to help supervisors and other members of their group (e.g., by adhering to informal supervisory rules, assisting others facing work problems, helping newcomers and providing direction and guidance). Thus, identification positively influences employees' helping behaviour because employees with higher identification are more "willing" to exert more effort to help others in their organisation. Prior research supports these arguments and shows that identification promotes beneficial work attitudes and behaviours, for example, Zhang and Chen (2013) examine how supervisor identification can lead to positive organisational outcomes. They found that supervisor identification positively influenced subordinate's OCB. Likewise, Wang and Jiang, (2015) argue that subordinates who strongly identify with their supervisor are willing to maintain their relationship with their supervisor and enhance their performance outside their job descriptions. They found that supervisor identification positively influenced altruism. Chang and Johnson (2010) suggest that future research should examine the role played by leader relational identity when examining how leaders rate follower's performance. Therefore, this research examines the relationship between followers' identification with their supervisor and

followers' performance and helping behaviour rated by the supervisor. I hypothesise the following:

H4a: Supervisor identification is positively related to job performance.

H4b: Supervisor identification is positively related to helping behaviour.

#### 3.4.1.2 The moderating role of ethical leadership

Examining the individual-level model only may provide an incomplete picture as it does not capture sufficient richness (Hitt, Beamish, Jackson, & Mathieu, 2007). For instance, a large number of organisations have recently begun to use a team-focused work structure (i.e. employees nested within teams or units). Thus, we can argue that considering individual-level relationships and neglecting the influence of team-level variables on individual-level variables leads to lack of understanding.

As a growing number of organisations have adopted team-based work structures (Parker, 1994), leaders have become important in the organisations at both individual and team levels. Judge and Colquitt (2004; p 402) note that 'even the best procedure cannot overcome supervisors who forbid their employees from using it'. Unfortunately, there is scarcity of research that examines the effect of team-level leadership on individual level processes that engender work outcomes. Thus, I examine cross-level ethical leadership as a boundary condition of the indirect effect of organisational justice dimensions on individual level outcomes, helping behaviour and job performance (See Figure 1).

An ethical leader is a moral person who is fair, honest, trustworthy, building respect and two ways communications (Bedi, Alpaslan & Green, 2016; Brown & Treviño, 2006a; Brown et al., 2005). A leader high in ethical leadership is also viewed as a principled decision-maker who cares more about the best interests of employees and the organisation (Brown & Treviño, 2006a; Brown et al., 2005). All of these ethical characteristics can promote positive relationships between leader and subordinates (Walumbwa et al., 2011) and employees can strengthen their relationship with ethical leaders into their self-definition. Therefore, employees reciprocate with strong feelings of identification and loyalty to their leader (Wayne, Shore, Bommer & Tetrick, 2002). According to social identity theory, individual generally desire to be associated with positive and prestigious identities (Ashforth & Mael, 1989), such as an ethical person who cares about their needs. In line with this reasoning, employees feel indebted to highly ethical leaders as they are fair, trustworthy and care about their needs.

In contrast, low ethical leadership suggests an absence of fair treatment, trust and honesty, which negatively impacts on the willingness of employees to incorporate their

relationship with the leader into their self-concept. Employees do not align in any way with the leader's values or strategies, or view their concept of self as being defined by their leader as a result of the unethical conduct seen in the organisational setting. Brown and Mitchell delineate unethical leadership "as behaviours conducted and decisions made by organisational leaders that are illegal and/or violate moral standards, and those that impose processes and structures that promote unethical conduct by followers" (Brown, Mitchell, 2010:588). Detert, Treviño, Burris and Andiappan (2007) stated that unethical leadership influences employee behaviour and their relationship with their leader. Thus, low levels of ethical leadership is not only damaging to leader-subordinate relationships and their identification with that leader, but it can damage the whole organisation (Brown and Mitchell, 2010). Applying this rationale to the role of social exchange with the supervisor in enhancing the supervisor identification, I make the following predictions:

H5: The positive effect of social exchange with supervisor and supervisor identification is stronger when ethical leadership is higher.

#### 3.4.1.3 Mediating role of social exchange between organisational justice and supervisor identification

SET (Blau, 1964) provides insight into what variables might mediate the different effects of employees' perception of justice on employee's reaction to the organisation or the supervisor (Colquitt et al., 2013; Aryee et al., 2002; Aryee & Chay, 2001; Karriker & Williams, 2009; Konovsky & Pugh, 1994; Lavelle et al., 2009; Masterson et al., 2000; Moorman et al., 1998; Rupp & Cropanzano, 2002; Wayne et al., 2002; Wang, Liao, Xia & Chang, 2010; Asamani & Mensah, 2013; Chen & Jin, 2014).

Organisational justice dimensions should positively influence supervisor identification via social exchange with the supervisor. Based on social identity theory (Tajfel, & Turner, 1979), employees are more likely to have stronger identification with their supervisor, when they perceive higher justice in the organisation and treated with dignity and respect by the supervisor. Scholars have demonstrated that organisational justice can enhance social identity. Blader and Tyler (2009) proposed that in interactional justice "salient interpersonal ties . . . may be more closely linked to their relational identities than to their social identities" (p. 459). Additionally, Ajogwu and Edwinah (2017) found that distributive justice has a positive and significant effect on supervisor identification. Thus, organisational justice can be seen as a cue to affect self-identity (Johnson & Lord, 2010; Johnson, Selenta, & Lord, 2006; Blader and Tyler, 2009; Wang & Jiang, 2015).

Several studies have examined the mediating role of social exchange on the relationship between organisational justice and organisational outcomes (e.g., Aryee et al., 2002; Aryee & Chay, 2001; Karriker & Williams, 2009; Konovsky & Pugh, 1994; Lavelle et al., 2009; Masterson et al., 2000; Moorman et al., 1998; Rupp & Cropanzano, 2002; Wayne et al., 2002; Wang, Liao, Xia & Chang, 2010; Asamani & Mensah, 2013; Chen & Jin, 2014) in order to capture the notion of obligation in the social relationship with the supervisor. As Cropanzano and Byrne (2000) stated, any intervening variable needed to be able to capture the notion of obligation in exchange relationships, whether adaptable to supervisors or organisations.

Therefore, I hypothesise the following:

H6a: Distributive justice is positively related to supervisor identification via social exchange with supervisors.

H6b: Procedural justice is positively related to supervisor identification via social exchange with supervisors.

H6c: Interactional justice is positively related to supervisor identification via social exchange with supervisors.

#### 3.4.1.4 Moderated mediation effects of ethical leadership on justice perception

Based on the above proposed mediations and moderations effects, I also posit a moderated mediation model, whereby ethical leadership moderates the indirect effect of employee's justice perception on supervisor identification through social exchange. Ethical leaders are viewed as fair, trustworthy and moral. These core characteristics reflect various elements of justice, such as high levels of perceived fair treatment, equal income and reductions in ambiguity (which correspond to elements of distributive, procedural and interactional justice). Thus, an ethical leader acts as a moral agent in the organisation to promote justice in the workplace; it is expected that ethical leaders' behaviour plays an important role in influencing employees' perceptions of organisational justice (Brown & Treviño, 2006a; Brown et al., 2005; Brown & Mitchell, 2010; Walumbwa et al., 2011; Fien, 2013; Greenberg & Colquitt, 2013). Many scholars have argued that leaders have the most powerful impact on employees' perceptions of organisational justice (Brown et al., 2005; Fien, 2013; Greenberg & Colquitt 2013; Treviño & Weaver, 2001; Colquitt, 2015; Folger & Cropanzano, 2001). For example, Fein, Tziner, Lusky and Palachy (2013) note that ethical leaders adopt norms and patterns of justice in the organisation. Thus, high levels of ethical leadership is seen as an important factor in the promotion of organisational justice. Otherwise, low levels of ethical conduct would trigger injustice, loss of confidence and a decrease in the trust in the leader. Poor ethical practice

would lead to undesirable outcomes, such as negative deviant behaviours, which violate organisational policies and rules (Brown & Mitchell, 2010). Applying this rationale to the role of organisational justice in enhancing the supervisor identification, I make the following predictions:

H7: The positive effect of distributive justice on supervisor identification via social exchange with the supervisor is stronger when ethical leadership is high as compared to low.

H8: The positive effect of procedural justice on supervisor identification via social exchange with the supervisor is stronger when ethical leadership is high as compared to low.

H9: The positive effect of interactional justice on supervisor identification via social exchange with the supervisor is stronger when ethical leadership is high as compared to low.

#### 3.4.1.5 Moderated mediation effects of ethical leadership on the relationship between social exchange and outcomes (job performance and helping behaviour)

Based on the above proposed moderated mediation effects, I posit also a moderated mediation model whereby ethical leadership moderates the relationship between social exchange and outcomes (i.e., job performance and helping behaviour) via supervisor identification. The relationship between social exchange and both job performance and OCB (i.e., helping behaviour) is well-known in the literature (Colquitt et al., 2013; Aryee et al., 2002; Aryee & Chay, 2001; Karriker & Williams, 2009; Konovsky & Pugh, 1994; Lavelle et al., 2009; Masterson et al., 2000; Moorman et al., 1998; Rupp & Cropanzano, 2002; Wayne et al., 2002; Wang, Liao, Xia & Chang, 2010; Asamani & Mensah, 2013; Chen & Jin, 2014). Social exchange includes the exchange of benefits, such as acceptance, support, trust, and assistance (Liao et al., 2010). As employees start to develop better relationships with their supervisor, they will perform well and be motivated to undertake additional responsibilities in order to continue the positive relationships they have with the supervisor.

Drawing on the social identity perspective, I suggest that supervisor identification, which is generated by the social exchange with supervisors, as previously explained, can cognitively influence employees' job performance and helping behaviour. In other words, supervisor identification can be the underlying mechanism, illustrating the relationship between social exchange and employees outcomes. The fairness in the decision-making process and the caring for subordinates exemplified by highly ethical leaders can make their followers feel indebted to their supervisor and reciprocate by fulfilling their job requirements and engaging in extra-role behaviours by helping others. Ruiz-Palomino et al., (2011) state that highly ethical

leaders consider the moral behaviours of helping others and serve because of the role models of such behaviours for their followers to emulate. Therefore, employees under a high level of ethical leadership will learn to engage in OCB. In contrast, low ethical leaders are harmful to the well-being of employees, their followers will be demotivated to help other co-workers or even performing well in a stressful atmosphere (Brown & Mitchell, 2010; Walumbwa et al., 2011).

Applying this rationale to the role of social exchange in enhancing job performance and helping behaviour, I make the following predictions:

H10a: The positive effect of social exchange on job performance via supervisor identification is stronger when ethical leadership is high as compared to low.

H10b: The positive effect of social exchange on helping behaviour via supervisor identification is stronger when ethical leadership is high as compared to low.

#### 3.4.1.6 Serial mediated effects of organisational justice dimensions, social exchange, supervisor identification, job performance and helping behaviour

Following from the previous hypotheses, I hypothesise that the effect of social exchange on job performance and helping behaviour is mediated by supervisor identification. Also, I hypothesise that organisational justice dimensions have positive effects on job performance and helping behaviour via social exchange and supervisor identification.

Several studies have reported that a social exchange relationship with the supervisor influences both job performance and organisational citizenship behaviour (OCB) (e.g., Early and Lind, 1987; Konovsky and Cropanzano, 1991; Lind et al., 1990; Masterson et al., 2000; Rupp and Cropanzano 2002; Burton et al., 2008; Masterson et al., 2000). Rupp and Cropanzano (2002) found that social exchange with supervisors is strongly related to job performance and OCB. The relationship between justice and performance has been examined in a number of studies (e, g., Early and Lind, 1987; Konovsky and Cropanzano, 1991; Lind et al., 1990; Masterson et al., 2000), with findings revealing that justice and performance are related. Some scholars have founded a significant relationship between interactional justice and performance via LMX (Cropanzano et al., 2002; Masterson et al., 2000). Interactional justice is driven by the interpersonal relationship and communication between the employee and one's supervisor or other organisational member. Thus, if supervisors treat employees fairly, these employees will reciprocate through better performance.

A meta-analysis by Cohen-Charash and Spector (2001), which referred to studies on the relation between organisational justice and performance, revealed that work performance is mostly correlated with procedural justice ( $r = 0.45$ ), in field studies ( $r = 0.11$ ) and in laboratory studies. However, the relationship is weaker with distributive justice ( $r = 0.13$ ) and interactional justice ( $r = 0.16$ ) in field studies, and there is a weak relationship between distributive justice and work performance ( $r = 0.05$ ) in laboratory studies. Furthermore, Cohen-Charash and Spector clarified that when employees face distributive injustice, they would review the organisational procedures that led to that outcome. Thus, employees correct their performance to restore fairness, especially when they perceive the procedure to be unfair. The meta-analysis also found procedural justice to be the best predictor out of the three types of organisational justice.

The significant relationship between employees' perceptions of justice and helping behaviour has been examined in a number of studies (e.g., Ehrhart 2004; Karriker and Williams 2009; Lavelle et al., 2009; Moorman 1991). Employees who feel they are treated fairly will show helping behaviour and go beyond their job requirements. In addition to individual-level effects, group or cross-level effects of the justice climate and shared perceptions of fairness among members on their helping behaviour have been recently identified (e.g., Liao and Rupp 2005; Walumbwa et al., 2010; Shin et al., 2015). Ehrhart (2004) found that servant leadership led to the development of a climate for justice, which in turn enhanced team helping behaviour. Furthermore, Shin and his colleagues (2015) examined the effects of individual procedural justice perceptions and the team level procedural justice climate on helping behaviour. Their results revealed that the procedural justice climate enhanced helping behaviour via two dominant processes, the trust climate at the team level and organisational commitment at the individual-level.

Prior studies showed that interactional justice is the strongest predictor of helping behaviour among two other dimensions of justice (i.e., distributive and procedural justice) (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). In addition, Aquino (1995) and Colquitt (2001) provided empirical evidence for such a prediction, linking interpersonal justice to helping behaviour among both managerial and non-managerial employees across several organisations. Likewise, Colquitt (2001) found that interpersonal justice related positively to helping behaviour ( $r = .23$ ) but the relationship was stronger with procedural justice ( $r = .26$ ). In contrast, Nadiri and Tanova (2010) state that distributive justice emerged as more accurate and stronger predictor of organisational citizenship behaviour compared to procedural justice, because the helping of the fellow co-worker is dependent on the fairness of the reward allocated to the employees. Dijke, De Cremer, Brebels and Quaquebeke (2013) found that fair procedure motivates employees to display helping behaviour to improve organisational outcomes and customer service.

In Cohen-Charash & Spector's (2001) study, altruism/helping behaviour was predicted by three justice dimensions (i.e., distributive, procedural and interactional) (the weighted mean  $r$  ranged from .11 to .18). Prior research shows that the effect of justice dimensions on employees' helping behaviour is mediated by social exchange and social identity (Blader & Tyler, 2009; Cropanzano, Byrne, Bobcel & Rupp, 2001). Both SIT and SET theories have been used to examine the indirect relationship between justice and helping behaviour in the workplace. Wang and Jiang (2015) found that the interactional justice predicts that OCBs are mediated by supervisor identification. While, Ishak and Alam's (2009) results indicate that interactional justice leads to helping behaviour through leader-member exchange.

Although scholars of OCB have noted the importance of various types of justice, most frequently procedural justice, in examining helping behaviour, there is still ambiguity on several issues related to the relationship between justice dimensions and helping behaviour. Scholars have highlighted the need to pay more attention to the relationship between helping behaviour and organisational justice (Becton et al., 2008; Markoczy et al., 2009; Kabasakal et al., 2011; Bolino et al., 2013; Shin et al., 2015). Shin and his colleagues (2015) indicate the need for further research to determine how organisational justice, or any of its components, impact not the only OCB in general but specifically helping behaviour.

As discussed previously, supervisor identification influences job performance and helping behaviour because of a sense of collective self-interest (i.e., our interest), employees with strong identification are more likely to contribute to organisational goals by engaging in activities that benefit the whole organisation (Lee et al., 2015; Wang & Jiang, 2015). Ashforth and Mael (1989) suggest that employees who have a good relationship with their supervisor often have a strong identification and display a helping attitude that helps in achieving the overall goals and objectives of their organisation. Thus, identification with the supervisor is motivated by mutual reciprocation and social expectations; employees are more likely to perform on the behalf of their supervisor leading to enhanced levels of job performance and helping behaviour. In support of the preceding arguments, Cialdini, Brown, Lewis, Luce, and Neuberg (1997) found that relational identification mediated the link between relationship closeness and helping behaviour. Empirical evidence to support this notion can be found in several studies. Wang and Jiang (2015) investigate different mediating effects of supervisor identification to explain why interactional justice influences supervisor-focused outcomes. They found that supervisor identification mediates the relationship between interactional justice and organisational citizenship behaviours directed at the supervisor outcomes and supervisor evaluation.

Combining these arguments, I hypothesise the following:

H11a: Social exchange with the supervisor is positively related to job performance via supervisor identification

H11b: Social exchange is positively related to helping behaviour via supervisor identification

H12a: Distributive justice has a positive effect on job performance, mediated by social exchange with the supervisor and supervisor identification.

H12b: Distributive justice has a positive effect on helping behaviour, mediated by social exchange with the supervisor and supervisor identification.

H13a: Procedural justice has a positive effect on job performance, mediated by social exchange with the supervisor and supervisor identification.

H13b: Procedural justice has a positive effect on helping behaviour, mediated by social exchange with the supervisor and supervisor identification.

H14a: Interactional justice has a positive effect on job performance, mediated by social exchange with the supervisor and supervisor identification.

H14b: Interactional justice has a positive effect on helping behaviour, mediated by social exchange with the supervisor and supervisor identification.

#### 3.4.1.7 Serial moderated Mediations effects of ethical leadership

Based on the above proposed mediation and moderation effects, I also posit a serial moderated mediation of ethical leadership on the relationship between employee's justice perception and the outcomes (job performance and helping behaviour) through social exchange and supervisor identification. As explained previously, social exchange (Blau, 1964) and social identity (Tajfel & Turner, 1979) theories have been used as explanatory frameworks to account for the effect of organisational justice dimensions on work outcomes, such as job performance and OCB. (e.g., Aryee et al., 2002; Aryee & Chay, 2001; Karriker & Williams, 2009; Konovsky & Pugh, 1994; Lavelle et al., 2009; Masterson et al., 2000; Moorman et al., 1998; Rupp & Cropanzano, 2002; Wayne et al., 2002; Wang, Liao, Xia & Chang, 2010; Asamani & Mensah, 2013; Chen & Jin, 2014).

According to SET (Blau, 1964) and SIT (Tajfel & Turner, 1979), when employees receive supervisor's fair treatment they reciprocate by incorporating their relationship with the supervisor into their self-identification, leading to identification with the supervisor. Thus, the level of employees' identification rises in accordance with the detection of fair treatment. This strong identification is likely to increase an individual's willingness to perform well and help others in the organisation. As previously discussed, highly ethical leaders convey their ethical expectations to subordinates through open two-way communications, listening to their

employees (Brown et al., 2005). Furthermore, highly ethical leaders set ethical examples of how to do things using the right method in terms of fair outcome distribution, reward ethical behaviours and discipline unethical behaviours in the workplace (Xu et al., 2016) Ethical leadership emphasises enhancing organizational justice. As Loi et al., (2012) found, subordinates under highly ethical leaders perceive higher procedural justice. When employees develop trust in their leader based on ethical leadership behaviour, their perception of organisational justice will enhance and they will display positive attitudes towards their supervisor. Applying this rationale to the moderating effect of ethical leadership on the relationship between organisational justice and employees' outcomes (i.e., job performance and helping behaviour) via social exchange with the supervisor and supervisor identification, I make the following predictions:

H15a: The positive effect of distributive justice on employee job performance via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

H15b: The positive effect of distributive justice on helping behaviour via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

H16a: The positive effect of procedural justice on employee job performance via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

H16b: The positive effect of procedural justice on helping behaviour via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

H17a: The positive effect of interactional justice on employee job performance via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

H17b: The positive effect of interactional justice on helping behaviour via social exchange with the supervisor and supervisor identification is stronger when ethical leadership is high as compared to low.

### 3.4.1.2 Team- level relationships

#### 3.4.1.2 Overall supervisory justice and ethical leadership

Justice is one of the most important antecedents of ethical leadership (Brown & Treviño, 2006a; Mayer et al., 2012). Justice shares some conceptual and operational overlap with ethical leadership constructs, such as treating employees fairly, listening to them, being fair and balanced, and having the best interests of employees in mind (Brown & Treviño, 2006a). When employees receive fair outcomes, clear procedures and are treated with dignity and respect, they are more likely to perceive their supervisors as ethical leaders. Moreover, the supervisor has the opportunity to create a just climate by making decisions that are perceived by employees to be fair (Brown et al., 2005). As a result, creating a fair climate in the workplace means developing ethical behaviours in leaders. Treviño et al. (2000) found that leader behaviours reflect the fair treatment of employees and contribute to the perception of ethical leadership. Taking overall justice and ethical leadership together, it can be argued that the overall justice of supervisor enhances ethical leadership. The strong evidence to support this claim exists in the literature. For example, Fein, Tziner, Lusky and Palachy (2013) found a strong relationship between the three dimensions of justice perceptions and ethical climate and that ethical climate can be enhanced only if the perceptions of organisational justice is high. Likewise, the empirical results of Elçi and his colleagues (2015) indicate that employees' organisational justice perceptions have a positive effect on the ethical climate. Therefore, I hypothesise the following:

H18: Overall supervisory justice is positively related to ethical leadership at the team level.

### 3.5 Conclusion

This chapter reviewed social exchange theory (Blau, 1964) and social identity theory (Tajfel, 1979) and justified the choice of these theories that underpin the relationships illustrated in Figure 1 and examined in this study. Specifically, it discusses SET and SIT as well as provided a review of the organisational justice literature and justifies its integration with social exchange theory and social identity theory. It also explained the relationships depicted in Figure 1. Drawing on these theories and the pertinent literature, I proposed a number of hypotheses.

The next chapter presents a discussion of the research philosophy and methodology deployed in this thesis.

## **Chapter Four**

### **Research Methodology**

#### 4.1 Introduction

In this chapter, I will provide a general overview of the history of research philosophy and then discuss the main philosophical approaches in social science research (positivism and interpretivism). Next, I will argue for the post-positivist approach that underpins this thesis and justify the methodological fit of the quantitative research approach adopted in this study. This is followed by a section on the research strategy and the research design of Study 1 and Study 2. Finally, I will conclude with a short overview of the samples of the two studies included in this research project.

#### 4.2 Research philosophy

The research process allows scientists to address particular questions (such as why and how the perception of organisational justice influences employee behaviours and work outcomes), which leads to the development of knowledge about a particular phenomenon (Lee & Lings, 2008). According to Popper (1959), science is best described as obtaining knowledge by the use of the scientific method (Popper, 1959). However, the selection of this method depends on the researcher's philosophical perspective. Philosophy of science describes the conceptual reasons that embed the search for knowledge (Ponterotto, 2005) and includes theories about ontology, epistemology, axiology, and methodology. Two main philosophical perspectives or research paradigms can be classified within the philosophy of science: positivism and interpretivism, and these will be described in the next section.

##### 4.2.1 Historical overview of philosophy

In general, philosophy is associated with wisdom, culture and searching for knowledge. Philosophy is concerned with major problems affecting subjects, such as reality, knowledge, values, reason, mind, and language (Garfield & Edelglass, 2011). Traditionally, philosophy came from the Western world and dates to Pre-Socratic philosophers who were alive in Ancient Greece in the 6th century BC. Milesians were the first true philosophers in the 6<sup>th</sup> century BC, who lived in Miletus – a city on the coast of Turkey. In contrast with previous thinkers, philosophers did not rely on religion to explain anything they did not understand. Generally, Socrates (470-399 BC) is considered to be the “father” of Western philosophy. His greatest contribution was to move philosophy away from questions of reality to questions of

morality. After that, Aristotle (384-322) is thought to have developed the deductive and inductive approach (which will be discussed when referring to the research approach embedded this project) (Lee & Lings, 2008).

While Western thought was dominated by the church during a period which was often called “The Dark Ages”, the philosophical ideas thrived in the Islamic world under the Abbasid Caliphs. The Abbasids played an important role in transferring the thought of the classical philosophers to the Christian West and contributed significantly to the Enlightenment era (Lee & Lings, 2008). The enlightenment brought a new era of beliefs in science across Europe, which was named “modern philosophy”. Modern philosophy was focused on generating a logical foundation for knowledge from people’s experience and moving from traditional structures of such as church and literary thinking. The main modern philosophers were Spinoza (1632-1677), Leibniz (1646-1716), Locke (1632-1704), Hume (1711-1776) and Kant (1724-1804). Locke was one of the founders of empiricism. Empiricism states that knowledge is based on experience and emphasises the role of empirical evidence in the formulation of ideas. Karl Popper (1902-1994) argued one should never rely on empirical observation to prove theories. Popper suggested that Scientists should indicate conditions under which the theories were not supported. Thus, theories cannot be proved but only accepted until contradictory observations falsify them. This idea is central to modern scientific methods (Lee & Lings, 2008).

Nineteenth century philosophy is influenced by the dramatic changes during the Enlightenment period. Georg Hegel (1770-1831), a key contributor to the philosophy of science, proposed that better presentations of reality could be obtained through a logical process, “thesis and antithesis”, in order to generate true knowledge. Based on these ideas, scientists of the Vienna Circle, such as Moritz Schlick (1882-1936), were the generators of a philosophy of science termed “logical positivism”. Logical positivism believes that it is impossible to observe knowledge, but that it only can be empirically tested.

In the first half of the 20<sup>th</sup> century, interpretivism emerged as an alternative to the traditional scientific method (Lee & Lings, 2008). Both the positivist and the interpretativism paradigms are discussed in more depth in the following section.

#### 4.2.2 Research paradigms

Paradigms represent beliefs, values, techniques and rules accepted by a scientific field (Kuhn, 1962). A research paradigm is defined as “the basic belief system or worldview that guide the investigators “(Guba & Lincoln, 1994, p. 105). The majority of the literature in social psychology is based on two paradigms, one is positivism, which is typically associated with quantitative research by using survey and structured interviews. The other research

paradigm is interpretivism, which is more closely associated with qualitative research by using unstructured interviews or observation (Lee & Lings, 2008). These two paradigms are based on different views of the world, which follow through to the different methodologies each uses to generate knowledge.

The interpretivist believes that knowledge can be generated by an individuals' personal experience of the world around them. Ontologically, reality is understood through multiple forms and intangible mental constructions based on social and experiential facets (Guba & Lincoln, 1994). Epistemologically, interpretivism describes the individual's world view as reality in order to generate knowledge (Bryman, 2012). Interpretivists believe that individuals are complex and have different experiences and reasons for acting in the social world, hence the scientific method is not suitable (Bryman, 2012). Positivism assumes that an external reality and "social fact" is directly observable and measurable (Guba, 1990). Positivists believe that reality is solid and can be observed and described from an objective viewpoint without interfering with the researched phenomena (Levin & Gaeth, 1988). They contend that phenomena should be separated and that observations should be repeatable.

In a reaction to some aspects of positivism, other scholars have put forward an alternative view, post-positivism. One of the most popular forms of post-positivism is a philosophy named critical realism. In general, positivism and critical realism believe that there is an objective reality that science can measure (Lincoln & Guba, 2000). The difference between positivism and post positivism/critical realism is that the post-positivist or critical realist recognises that all measurement is fallible and subject to error and therefore the theory is revisable (Bryman, 2012). Furthermore, post-positivists or critical realists emphasise the importance of using multiple measures and observations in order to get a better understanding of reality (Lee & Lings, 2008). It is also based on causality and generalisations and reducing the phenomena to simple elements, whereas post positivism focuses on explaining the phenomena within a context and assumes that scientists are biased by their own world views, cultural experiences and personality (Lee & Lings, 2008). Thus, the best approach to achieve objectivity and understand what is happening in reality is to triangulate across multiple fallible perspectives as the objectivity is essentially a social phenomenon and is not affected by individual's characteristics (Bryman, 2012).

#### 4.3 Research philosophy and research approach of this study

This current research adopted a post-positivist, 'critical realism' view, which extends the epistemological debates of positivism as discussed above. According to post-positivism/critical realism, the objective reality in this research is independent of its perception (e.g., justice dimensions and ethical leadership). This study focuses on providing credible data and empirical evidence (epistemology). More importantly, it is assumed that there are not

directly observable phenomena, but that these can be operationalised (i.e. through validated scales). As is characteristic of the post-positivist approach, the researcher controls the theoretical framework, the sampling frame and the structure of the research. This type of research seeks to identify causal relationships and draws on the testing of hypotheses and establishing relationships between constructs.

The post positivistic approach is based on the scientific research method, which is described as “a set of techniques about collecting and interpreting evidence which are generally considered likely to illuminate differences in the plausibility of these declarative statements, which recommends activities which help to drive us either believe or disbelieve a given statement. In other words, the scientific method is how we find evidence to either accept or reject our knowledge claims”. Lee & Lings (2008; p. 40).

The scientific research method is also viewed as the hypothetic-deductive method (Lee & Lings, 2008). The hypothetic-deductive method focuses on generating theories based on the primary observation and exploring the theoretical claims in empirical research in order to validate theories, and finally generalising the findings to other research settings, which can lead to further development of the theories (Lee & Lings, 2008). The deductive process concentrates on testing the hypotheses with statistical techniques. Therefore, the model behind this research process is quantitative in nature, for several reasons. First, based on my own perspective of the world and knowledge; there is an objective reality, which is possible to study, however, I recognise that this is always conducted with a certain amount of error and observation is fallible and all theory is revisable. That said, I still, as post-positivists do, subscribe to the notion of the scientific method and its deductive approach as the key for understanding reality, although aware of its caveats.

Second, the nature of the research field and the research question also make this the most appropriate approach. I have a specific question which I want to test, and this question refers to a mature research context in which there is already a reasonable amount of knowledge, therefore enabling me to derive hypotheses based on extant knowledge. I also have available tools that enable me to quantitatively capture the constructs I wish to measure. Edmondson and Mcmanus (2007) stated the importance of understanding the nature of the research field in order to determine the right method for answering the research question. They argue that methodological fit helps in developing rigorous and compelling field research. Given the circumstances described above, the best fitted approach would be to develop the logical hypotheses and create a precise research model that builds on prior research (Edmondson & McManus, 2007), which is the approach pursued in this study.

#### 4.4 Research paradigm in the organisational justice literature

According to Cronbach (1957), there are two paradigms in behavioural science: the experimental and the correlational paradigm. The experimental paradigm examines how individuals react to a specific situation by isolating independent variables and testing how these affect dependent variables. The correlational paradigm relies on the examination of individuals' ideas by administering questionnaires or conducting a psychological tests, and then correlate these predictors with various outcomes. Cronbach's (1957) two paradigms model provides a useful heuristic lens through which organisational justice can be examined.

Cropanzano and colleagues (2001) analysed research in organisational justice using Cronbach's paradigms framework. They termed the experimental/situational research as an "event paradigm", concerned with the environmental events that impact justice judgments. Research protocol in this paradigm often manipulates elements of the specific situation or event. The kinds of events studied by justice researchers include factors such as income reduction (Greenberg, 1990), redundancies (Brockner & Wiesenfeld, 1996) and the application of organisational policies (Konovsky & Cropanzano, 1991).

The second paradigm is termed "social entity". The social entity emphasises general or overall evaluations of organisational justice through the real world settings and across specific situations and events. Indeed, this stands opposite to the event paradigm, in which the research participants evaluate specific factors of the workplace environment, and do not only evaluate justice based on one single event. For example, one factor is evaluated when I say "my supervisor treated me fairly during my last feedback session or a specific event," rather than saying "generally, my supervisor is a fair person". The latter is evaluating fairness globally. This second paradigm focuses on how people lead interpersonal relationships with fair and unfair social entities. In several situations, people make a judgment about someone's intention. This means that the social entity intended to commit a moral violation. Unfair events happen because of weak policies, innocent mistakes, or other incidents, whereas unfair people are those who either prefer to behave unethically or do not to care about the needs of others. Therefore, when it is said that a person, group, or organisation is unfair, this judgment has broad implications for how people manage their behaviour to that person or group (Cropanzano et al., 2001).

The social entity paradigm has been used by Moorman and his colleagues (e.g., Moorman, 1991; Moorman, Blakely & Niehoff, 1998). These studies use overall evaluation survey items to measure justice, such as "all job decisions are applied consistently across all affected employees" (Niehoff & Moorman, 1993, p.541). It is noticed that the research participant is clearly asked to evaluate all situations ("all job decisions") and individuals ("all affected employees"). As a result, Niehoff and Moorman were measuring an overall evaluation

of fairness in the organisation, or at least of the organisation's main supervisors or decision-makers.

This study draws more closely on the social entity paradigm, as the general evaluation of employees' perceptions of organisational justice across situations and events is examined. Indeed, employees were asked to assess the distributive, procedural and interactional justice of their supervisors. This approach was deemed more appropriate for the context of this research, as the focus was on understanding how perceptions of justice as enacted by supervisors would influence on employees' attitudes and behaviours in a specific organisational context in which manipulation of such features was not feasible.

#### 4.5 Research design overview

Research design as defined by Bryman (2012, p. 45) is "...a framework for the collection and analysis of data". The research purpose and research questions are the suggested starting points to develop a research design, because they provide important clues about the substance that a researcher is aiming to assess (Saunders, Lewis & Thornhill, 2012). Research design is an essential stage of the research process as it links the theoretical hypotheses to the real world in order to test the theory (Lee & Lings, 2008).

This research comprises two studies, both following a cross-sectional design. A cross-sectional design is also known as a cross-sectional analysis, transversal design, and prevalence design (Bryman, 2012). Cross sectional studies are commonly used in social science and psychology. The major advantage of using a cross sectional design is allowing large number of data to be collected at little or no cost with high level of external validity (Lee & Lings, 2008). It allows capturing all required measures in the same research setting at a single point in time, enabling the researcher more time to examine the research phenomena in greater depth (Bryman, 2012; Lee & Lings, 2008). However, there are also a number of limitations that should be noted. Most critically, as data on each participant are collected only at a single point in time, it is difficult to assess the temporal effect and the behavioural changes over time (Lee & Lings, 2008). A cross-sectional study may be subject to biased results and outcomes as participants who agree to take part in the study might differ from those who do not, which can lead to a sample that is not representative of the population.

#### 4.6 Sampling strategy and sample overview

In quantitative sampling, there are two types of sampling, namely, probability sample and non-probability sampling. Probability sampling (also known as random sample) provides the most valid results because it reflects the characteristics of the population from which the sample is selected from a list of all members of the population (Lee & Lings, 2008). On the

other hand, non-probability sampling method (also known as availability or convenience sample) depends on collecting data from participants who are conveniently available to participate in the study. Although the strengths of a probabilistic sampling are acknowledged, the non-probability sampling approach was adopted in both studies included this research given its simplicity and effectiveness, which are key strengths of this sampling strategy (Lee & Lings, 2008). More details regarding data access negotiation and data collection for each study are provided in the next chapters.

Sample size plays a significant role in the ability to test a hypothesised model as it affects the statistical power to identify significant results, reducing Type 2 errors (Bryman, 2012). Tabachnick and Fidell (1996) recommend having between 10-20 participants per construct, which in Study 1, involving 11 variables, would imply a final sample of 80 to 160 participants, and in Study 2 would imply around 200 participants. Thus, as the sample size met the stated standards (Tabachnick & Fidell, 1996), this sample was considered to be a suitable sample for testing the hypothetically-derived multilevel-level model and to be representative of the whole population. Study 1 sample included 241 full-time employees within 43 teams from two different sectors (banking and telecommunication) in Saudi Arabia, distributed across 7 organisations. Study 2 sample model involved 349 full time employees distributed across 39 teams, from two different companies in Saudi Arabia. The participants from both samples were full time employees working in teams. Katzenbach and Smith (1993, p.146.) defined team as “a small group of people with complementary skills who are committed to a common purpose, performance goals and approach for which they are mutually accountable”. There are several features based on this definition (1) interdependent workflow or task, (2) share common goals (3) exchange influences with other teams, and (4) social interactions (Kozlowski & Bell, 2001), which were met by the different teams. Following Witte, Davis (2014), I used two as the minimum number of members for a team to be included in the study.

An important issue to consider is the number of teams and team members per team required to conduct multilevel analysis. Although there is not yet a clear consensus, some scholars suggest 30 teams as the minimum sample size for MLM (Hox, 2010; Maas & Hox, 2005). Regarding the second point, there is again little consensus, with some researchers pointing to seven as the minimum requirement (Scharf, 1989), while in other empirical studies teams of only two were included (Witte, Davis, 2014). Given the lack of a clear agreement and in order to try to maximize the team size, complete data (individual level) for at least two members per team was considered as the minimum requirement for inclusion in the analysis.

#### 4.7 Data collection procedure

As earlier indicated, cross-sectional surveys were used in both studies. In Study 1, measures were collected only from team members, while in Study 2 team managers were also included. In Study 1, participants completed paper-based questionnaires providing ratings on both individual level variables (organisational justice dimensions, social exchange and supervisor identification) and team level variables (ethical leadership). In Study 2, participants completed the same measures with the addition of overall supervisory justice, and supervisors provided ratings for job performance and helping behaviour.

To prevent common source bias (Podsakoff et al., 2003), helping behaviour and job performance were rated by supervisors in Study 2. More details regarding the research procedures for each study are provided in the following chapters.

The original survey was produced in English and was translated into Arabic, given that Arabic is the official and most widely used language in Saudi Arabia. The original survey was translated from English to Arabic by the researcher. The Arabic version was back translated to English by another academic member of the work and organisational psychology group at Aston University. The two versions were then compared and minor discrepancies were corrected, as recommended by Brislin (1980).

#### 4.8 Data analytical technique

##### 4.8.1 Structural equation modelling (SEM)

In order to analyse the data, a combination of statistical packages and techniques were used. SPSS (Statistical Package for the Social Sciences) version 21 was firstly used for data management (calculating mean scales and aggregating constructs), to examine the variables descriptive statistics, and to examine the pattern of correlations between the study variables. Given the multilevel structure of the data (with individuals nested in teams) and the nature of the research model, involving both serial mediations and moderations, and including multiple predictors and outcomes, MPlus Version 7.3 (Muthén & Muthén, 2015b) was afterwards adopted in order to test the hypotheses.

Mplus is a structural equation modelling programme, and thus offers the advantages associated with this analytical approach. According to Chang et al., (2010a, 2010b), SEM explains the extent of relationships between variables in addition to the path of causes and effects. Klein & Kozlowski (2000) describes path analysis, a type of SEM, as an extension of multiple regression. Path analysis is a technique that “allows a researcher to test a theory of causal order among a set of variables.  $X$  causes  $Y$ , and  $Y$  causes  $Z$ ” (Klem, 1995, p. 65). MPlus can not only conduct such analysis, which is required in order to test the proposed

model, but allows doing so while taking into account the multilevel structure of the data, thus being also capable of conducting multi-level structural equation modelling (MSEM), which carries critical advantages that are relevant for this project.

Indeed, Mplus has several advantages compared to the conventional methods. First, it allows for testing all pathways in the research model simultaneously rather than going through several multiple regression analyses. Additionally, it allows for testing the direct and indirect effects on the model from predictor variables to outcome variables. Second, it helps to overcome potential problems related to estimating the standard error of the output of regression coefficients. Thus in light of the above, this programme and the MSEM technique available in it were selected to conduct the testing of the hypotheses suggested in this study.

#### 4.8.2 Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) is a special form of factor analysis, most commonly used in social research (Kline, 2010). CFA is a statistical technique that measures the extent to which there is covariance between observed variables that create a factor or theoretical constructs (Schumacker & Lomax, 2004). It is used to test whether measures of a theoretical constructs are in line with a researcher's understanding of the nature of that construct (or factor). In other words, the objective of CFA is to test whether the data 'fits' a hypothesized research model. This hypothesized model is based on theories or/and previous research (Blau, 1964; Tajfel, 1979; Colquitt et al., 2013; He & Brown, 2013; Wang et al., 2010). Thus this approach was used in order to test the distinctiveness of the scales included in both studies, as described in more detail in the next chapters.

There are several measures of fit that can be used to determine how well the hypothesized model fits the observed data. These measures are categorized as absolute or relative fit indices.

The Absolute fit indices determine how well the a priori model fits, or reproduces the data. Absolute fit indices include, the Chi-Squared test, RMSEA, GFI, AGFI, RMR, and SRMR. Relative fit indices are known as "incremental fit indices" and "comparative fit indices". They compare the chi-square between the hypothesized research models to one from a "null", model. In the null model all variables are assumed to be unrelated, and this constitutes the worse possible fit.

The most commonly used among these fit indices is chi-square goodness-of-fit statistic, which is used to test how well the hypothesized research model captured the covariance between all the variables in the model. A non-significant chi-square statistic (i.e., close to zero) indicates a better fit and strong relationships between the variables.

These fit measures are categorised into two different types of absolute fit: (i) The goodness of fit index (GFI), which compares the hypothesized model and the observed covariance between the variables; (ii) The adjusted goodness of fit index (AGFI), an improvement of GFI, which is affected by the number of indicators of each latent variable. Values over .9 of GFI and AGFI indicate acceptable model fit.

Other measures of fit are: Standardized Root Mean Square Residual (SRMR), with values 0.08 or less indicating an acceptable fit with the data; Root Mean Square Error of Approximation (RMSEA), with a value of .06 or less indicating acceptable model fit; Comparative Fit Index (CFI), with a value between 0.90 and 0.95 indicating a good fit, while a value of 0.95 and more is considered a perfect model fit (Hu & Bentler, 1999). Following Kline's (2010) recommendation, in this study the Chi-squared test, the RMSEA, the SRMR and the CFI are reported to represent how well the model fits the data.

#### 4.8.3 Construct aggregation

In alignment with previous research, this study assumes that certain variables collected at the individual level are meaningful at the team level (Chan, 1998). When using a consensus based model to aggregate a variable at the unit level (Chan, 1998) it is necessary to ensure there is sufficient theoretical and statistical support for such a decision (Kozlowski & Klein, 2000). While there are already theoretical precedents supporting the conceptualisation of these variables, overall supervisory justice and ethical leadership, as group level constructs, it is still necessary to show that teams share sufficient common variances with and that these variances can be used to differ between teams. For that effect, both measures of within group agreement and reliability were calculated. The within-group agreement (rwg (j); James, Demaree, & Wolf, 1984, 1993), assesses the interchangeability of team members' ratings. Bliese (2000) recommended using the means of either intraclass correlation coefficient 1 (ICC 1) or intraclass correlation coefficient 2 (ICC 2), or both, to assess team level reliability. ICC (1) calculates the amount of variance explained by team levels, while ICC (2) calculates the reliability of the team-level mean differences (Bliese, 1998). These indicators are calculated and presented in the following analyses chapters.

#### 4.9 Addressing potential problems

Common method variance (CMV) is "variance that is attributable to the measurement method rather than to the construct of interest. The term method refers to the form of measurement at different levels of abstraction, such as the content of specific items, scale type, response format, and the general context (Fiske, 1982, pp. 81–84). Common method variance can threaten the validity of the research conclusions, which are drawn based on

statistical results (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The common method variance could happen from several elements, such as consistency of research topic and social desirability, complexity and ambiguity of the items and research context (e.g. participant's mood, time and location of research) (Podsakoff et al., 2003). There are many ways to identify the sources of the common method variance and control for them in order to achieve fair results. In this research, this problem has been minimised by having two sources of information in Study 2: employees and their direct supervisors. Bias is also more likely if employees are uncomfortable about the confidentiality of their answers. Thus, this issue was as much as possible avoided by providing respondents with a sealable envelope and reassuring them that no one beyond the researcher would have access to these. As much as the research methods are important, the statistical approaches also play another vital role to control the common method bias effect. A recommended procedure to test common method variance consists of running an Exploratory Factor Analysis (EFA), including all variables and examining whether one factor explains more than 50% of the variance (Harman's single factor test, Podsakoff et al., 2003). This test was performed in both studies and in neither case did one factor account for more than 50% of the variance; 49.64 of the total variance was explained in Study 1 and 42.69 of the total variance was explained in Study 2, thus suggesting that the data from study 1 was not considered satisfactory, whereas the data in study 2 were free from major common method variance effects. Thus, I theoretically argue this is a more appropriate model than one in which the variables are reversed. In terms of statistical issues, the model with the opposite effects would show a worse fit. The model fit for Study 1 is -1022.345 and the model fit for Study 2 is -1034.277. The model fit for Study 1 is -1022.345.

#### 4.10 Ethical considerations and data protection

The data collection processes for both studies presented in this thesis followed the APA's ethical guidelines for psychologists and code of conduct (American Psychological Association, 2010). Additionally, both studies presented in this thesis were approved by the Research Ethics Committee at Aston Business School (reference number 13:06/15 for study one and 09:17/16 for study two) (See Appendix A). All participants were informed that their participation was voluntary and that they were free to withdraw at any time and without any harmful effect on their employment. In both studies, all participants were asked to sign a consent form in which the overall objectives of the study were explained and their right to withdraw at any time was stated. In addition, all respondents also received an information sheet about the content and purpose of the study. Participants were assured that all answers were kept confidentially and would be stored in a way that protected their anonymity. Data

were stored electronically in the researcher's computer, which is only accessible via a personal password. Afterwards they were kept in a large box in a locker in the researcher's home. All the questionnaires will be stored for 5 years, according to APA requirements.

#### 4.11 Conclusion

This chapter has introduced the underpinning research philosophy and research approach and has provided a general overview of the research methodology. The next chapters will present the research methodology of both studies in more detail, followed by the analytical approach and results.

## **Chapter Five: Study 1**

### **Methodology, Data Analysis and Results**

#### 5.1 Introduction

In this chapter the methodology and results of Study 1 are presented. The objectives of this study (study 1) are: first, to examine mediating effects of social exchange on the relationship between distributive, procedural and interactional justice and supervisor identification. Second, to examine the moderating effects of ethical leadership on the relationship between social exchange and supervisor identification. Third, to examine the moderated mediation (conditional effects) of ethical leadership on the indirect relationship between distributive, procedural and interactional justice and supervisor identification via social exchange. To achieve these objectives, data were collected from employees from seven organisations in Saudi Arabia. Mplus version 7.3 (Muthén & Muthén, 1998 - 2015) was used to analyse the data by adopting Multilevel Structural Equation Modeling (MSEM). This chapter explains the methodology used in Study 1. Specifically, it represents the research context, sample and data collection procedure, measures of the study variables and data analysis. Finally, it presents the study's results and concludes with a discussion of the same.

#### 5.2 Research context

##### 5.2.1 Saudi culture and organisational context

The Kingdom of Saudi Arabia (KSA) is one of the largest countries in the Arab world. Saudi Arabia is located in the south-western part of Asia. It is bordered to the west by the Red Sea, to the east by the Arabian Gulf, to the north by Jordan, Iraq and Kuwait, and to the south by Yemen and Oman. The country encompasses 2.25 million square kilometres with a population over 32 million, with 10.4 million expatriates in 2017. Saudi has an oil-based economy with GDP (gross domestic product) of 1.6 in 2017. The Kingdom of Saudi Arabia was officially named and has been governed by King Abdulaziz Al-Saud since 23 September 1932. The Law in Saudi Arabia is Islamic law (Shari'ah) and Arabic is the official local language. Islam is not only the official religion, but also the most dominant constituent of the cultural, social, and political life of the country. Saudi is considered to be the homeland of Islam; two holy pilgrimage cities, Makkah and Medina, are located here.

## 5.2.2 Influence of culture and religion on justice in Saudi organisations

A comprehensive understanding of organisational justice cannot be obtained without considering the social context and the cultural factors affecting this construct (Greenberg, 1987; Aryee et al., 2002; Liu & Ding, 2012; Gupta & Singh, 2013), thus, in the next section I provide a brief overview of the effects of cultural factors on employees' organisational behaviour in the Arab world, including Saudi in order to have better understanding of the Saudi context. As Saudi society is influenced by Islamic norms and principles, it is important to discuss justice from the Islamic perspective (Elamin & Tlaiss, 2015). Adl (عدل) is an Arabic word meaning justice in Urdu. Justice is the core concept of Islam as it is the main characteristic of Allah. The Quran considered justice to be a moral virtue. Islam is against unjust practices when treating others, whether they are family, friends, relatives, strangers and enemies. Allah declares in the Quran: "God commands justice and fair dealing..." (Quran 16:90). He also says: "...Be just, for it is closest to God-consciousness..." (Quran 5:8). The Prophet of Islam (Muhammed) stated: "There are seven categories of people whom God will shelter under His shade on the Day when there will be no shade except His. [One is] the just leader" (Saheeh Muslim).

Saudi culture is combined of Arab and Islam, and the society itself is extremely traditional, religious, conservative, and family oriented (Elmain & Tlaiss, 2015). Many attitudes and traditions are centuries-old and derived from Arab civilisation. According to Hofstede's, (2001) classification of cultural principles, Arab societies, including Saudi Arabia, are described as being patriarchal and paternalistic, have high power distance, are collectivistic, and have masculine values. These cultural norms and values are deeply embedded in the workplace and behaviour of Arab employees and managers. Based on their collective nature, Arabs prefer to build personal relationships based on trust, harmony, and respect among family members, friends and tribe (Elamin, 2012). In collectivistic cultures, the work relationships build trust among employees, the employer and organisation, whereas in individualistic cultures the working relationship are more contractual in nature (Gupta and Singh, 2013). Moreover, individuals in high power distance cultures, as is the case in Saudi Arabia, emphasise values such as respect for authorities and followers reciprocating their supervisor's instructions with loyalty and respect (Aryee et al., 2002). As these cultural and social values often reflect organisational systems, they are often viewed as highly bureaucratic because of the lack of transparency in the work procedures and processes, and widespread favouritism (Tlaiss & Elamin, 2015). Although Arab people are subject to unfair treatment in the workplace, similar to other cultures with high uncertainty avoidance, they are less likely to criticize unfair treatments in the organisational workplace that is established by authorities as they see this practice as part of the "role-defined privileges" of individuals with a higher social

status (Elamin, 2012). Therefore, the current study is attempting to expand organisational justice research to a new context and to provide explanations of the findings that are informed by Arab cultural and Islamic norms and values. Saudi culture is a very interesting context for many reasons, not only for the lack of justice research in the Arab region (Elamin, Tlaiss, 2015), but because of the entrenchment of Islamic principles and Arab socio-cultural values and traditional norms even when comparing to other Arab countries like the United Arab Emirates (UAE) or Jordan.

### 5.2.3 Private sector

This research was conducted in the private sector, more specifically in the banking and telecom industries. The private sector in Saudi Arabia is dominated by foreign business investments, especially in the oil and service sector. Since 2003, many essential services joined the private sector (e.g., water supply, electricity, telecommunication, education and health care). Currently, there are about 6.4 million Saudi working in private companies, compared to 4.2 million in the public sector (SAMA Annual report, 2016).

#### 5.2.3.1 Bank sector overview

The Saudi banking sector has 24 banks, which are currently managed by the Saudi Arabian Monetary Agency (SAMA). These banks include 13 local banks, 12 branches of foreign banks and the Industrial and Commercial Bank of China (ICBC), which has been licensed but has not yet begun operations. In 2015, there were 44,688 employees in the Saudi banking sector (SAMA Annual report, 2016).

#### 5.2.3.2 Telecom sector overview

The Saudi telecom sector is the largest in the Middle East, with over 54.0 mn mobile subscribers and over SAR66.0 bn in revenues. At the end of 2011, total mobile penetration reached 188.0%, which is higher than the Gulf Cooperative Countries (Kuwait, Bahrain, Qatar, United Arab Emirates and Oman) average. The telecom sector in Saudi Arabia includes companies that make global communications possible, either by phone or Internet. These companies built an effective infrastructure that enables data to be sent everywhere in the world. The largest companies in this sector are Saudi Telecom Company (STC) and Mobily. These companies provide services such as wireless technology, satellite, cellular phones, radio, television broadcasting and Internet services (Aljaziracapital, 2017).

### 5.3 Method

#### 5.3.1 Sample and data collection procedure

##### 5.3.1.1 Data collection method

Data were collected by using a self-administrated questionnaire, which was completed by employees in seven organisations in Saudi Arabia at one time point. These participating organisations were located in Riyadh and operated in two different sectors: telecommunication and banking.

Concerning data access, in relation to the banking sector, the researcher visited the branch managers of the five banks (The Saudi British Bank (SABB), the Saudi American Bank (SAMBA), Arab national Bank, Alinma, and Alahili) in order to invite them to participate in this study. Access to the Telecom companies was facilitated by a personal contact (a regional manager in STC and Mobily) who introduced the researcher to the Directors of Human Resources of Telecom Companies. In the ensuing meetings in both sectors, the researcher explained the objectives of the study and described the contribution expected from each organisation if they wished to partake. A senior human resource manager in both telecom companies (13 in STC and 15 in Mobily) was nominated to randomly select the participating team members.

Once the logistics of the study execution were agreed, the questionnaires were distributed amongst participants by hand by the researcher. Attached to each questionnaire was an information sheet explaining the objectives of the study, assuring participants of the confidentiality of their answers, asking them for their participation consent, and clarifying that their participation was entirely voluntary and that they could withdraw of the study at any time. Participants were asked to seal their questionnaires in self-addressed envelopes provided by the researcher and to drop them in secured locked boxes only accessible by the researcher available in each location. Contact details of the researcher were also provided to all participants should they want to clarify any questions or withdraw participation.

##### 5.3.1.2 Sample

In total, 500 questionnaires were distributed to all full time employees working as part of a team, 260 (52%) questionnaires were received but 19 (7%) blank questionnaires were excluded. This study involved 241 participants distributed across 43 teams and one team was excluded because of having just one participant. The number of team members per team varied between 2 and 8. 170 participants belonged to the banking sector (68.2%) and 72 respondents (28.2%) were from telecommunication sector. The number of participants and teams per bank was as follows: The Saudi British Bank (SABB), 32 participants (13% of the total sample); The Saudi American Bank (SAMBA), 27 participants (11% of the total sample);

Arab national Bank, 70 participants (28 % of the total sample); Alinma, 27 participants (11% of the total sample); Alahili, 14 participants (5 % of the total sample). Participants worked in administrative positions (e.g., coordinator, security, administrative assistant, etc.). The majority of the participants were male (59.9%), their average age was 30-39 years and their average job tenure was 3 years and less.

### 5.3.2 Measures

The questionnaires were administrated in Arabic. To ensure that the scales captured the same meaning as in English, Brislin's (1980) recommended translation and back translation procedures were followed. The questionnaires were translated by the researcher into Arabic, and afterwards an Arabic native speaker back translated the Arabic version into English. Finally, the original English version and back translated English version of the questionnaires were compared by an academic with a background in Human Resource management and organisational behaviour. Because of slight differences between both versions, the Arabic questionnaires were amended to completely capture the content of the original scales. The complete scales are included in the appendix (See Appendix B).

#### 5.3.2.1 Individual level variables

##### 5.3.2.1.1 Distributive justice

Colquitt's (2001) scale was used to capture all justice measures. The distributive justice scale consisted of 4 items, with response options using a seven -point Likert scale (1 = strongly disagree to 7 = strongly agree). Sample items are: "Do those outcomes reflect the effort you have put into your work?", "Do those outcomes reflect what you have contributed to your work?", and "Are those outcomes appropriate for the work you have completed?" The Cronbach's alpha for this study was .96.

##### 5.3.2.1.2 Procedural justice

The procedural justice scale (Colquitt et al., 2001) consisted of 7 items, with response options using a seven -point Likert scale (1 = strongly disagree to 7 = strongly agree). Sample items are: "Are you able to express your views during those procedures?", "Are you able to appeal the decisions arrived at by those procedures?" The Cronbach's alpha in this study was .91.

##### 5.3.2.1.3 Interactional justice

Interactional justice was formed by averaging the four items capturing interpersonal justice and the five items measuring informational justice (Colquitt et al., 2001). The merging

of interactional justice scales was suggested by Cohen-Charash and Spector (2001), who argued that these scales were best used combined because interactional justice is considered to be related to interpersonal communication and behavioural reactions (i.e., cognitive and affective) between the direct supervisor or source of justice and the employees or the recipient of justice. As in this study the objective was not to conduct a fine grained analysis of both interpersonal and informational justice types but instead to examine the effects of a more general construct, tapping into both aspects of workplace interaction, this approach was also adopted here. Response options ranged on a seven -point Likert scale (1 = strongly disagree to 7= strongly agree). Sample items “Has (he/she) treated you in a polite manner?”, and “Has (he/she) been candid in (his/her) communication with you? The Cronbach’s alpha for this study was 0.92.

#### 5.3.2.1.4 Social exchange with the supervisor

Bernerth’s Armenakis, Feild, Giles & Walker (2007) scale was used to measure social exchange relationships with the supervisor. The scale consists of 8 items, with response options using a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Respondents were asked to indicate the extent to which the items characterised the quality of their exchange relationships with their supervisors. Sample items are: “My supervisor has made a significant investment in me,” “The things I do on the job today will benefit my standing with my supervisor in the long run”. The Cronbach’s alpha for this study was .93.

#### 5.3.2.1.5 Supervisor identification

Kark, Shamir and Chen’s (2003) scale was used to measure supervisor identification. The scale consists of 5 items, with response options using a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Sample items are “My supervisor is a role model”, “I highly identify with the supervisor of my group”. The Cronbach’s alpha for this study was .94.

#### 5.3.2.2 Team level variables

##### 5.3.2.2.1 Ethical leadership

Brown et al.’s (2005) scale was used to measure ethical leadership. The scale consists of 10 items, with response options using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Sample items are ‘He/she discusses business ethics or values with employees’, ‘He/she can be trusted’ and ‘He/she makes fair and balanced decisions’. The Cronbach’s alpha for this study was .96.

As leadership can be conceptualised as a team-level variable with team members sharing the same perceptions of their leader's behaviour (Morgeson, DeRue, Karam, 2010), a direct consensus model was used to aggregate team members' individual responses at the team level (Chan, 1998).

To assess the moderation effect of ethical leadership between individual level variables (i.e., social exchange and supervisor identification), individual-rated ethical leadership was aggregated to the team level, as the researcher was interested in the moderating effect of team members perception as a group of leaders showing more or less ethical leadership (and not in team members' individual perceptions). Interrater agreement averaged among all teams was adequate, the median within-group interrater agreement  $rwg_j = .96$  and the intraclass correlations were: ICC (1) = .28; ICC (2) = .96. These indices were at the conventionally acceptable values of above .05 (ICC 1: Bliese, 2000) and .70 (ICC 2: Klein & Kozlowski, 2000). Therefore, these values justified the aggregation of ethical leadership to the team-level.

#### 5.3.2.3 Control variables

Individuals with previous work experience may have preconceived ideas about the types of organisations for which they enjoy working. Therefore, I controlled for years of full-time work experience and organisations. Besides, I also controlled for gender, age and education, as the perception of justice may differ among men and women or the old and young, or those who are educated. Prior studies (Bott et al., 2003; Chen and Francesco, 2003; Jones and Schaubroeck, 2004; Hochwarter et al., 2004; Williams et al., 2002) indicated that personal attributes affect employee job performance and the perception of justice in the workplace. These were used to assess the effect of control variables on organisational justice employees' perceptions, as they might influence the perception of organisational justice through egotistic bias or self-interest (Cohen-Charash and Spector, 2001). Gender was coded as 1 for male and 0 for female. Age was coded as Under 30, 30-39, 40-49 and 50 – Above. Education was coded as 1 for High School- below, 2 for Diploma, 3 for undergraduate, 4 for Postgraduate). Tenure was coded as 1 for 3 years or less, 2 for 4-5 years, 3 for 6-10 years, 4 for 11-15 years, and 5 for More than 15 years. Organisations were coded 1 for SABB, 2 for SAMBA, 3 for Arab national Bank, 4 for Alinma, 5 for Alahili, 6 for STC and 7 for Mobily.

#### 5.3.3 Data analysis

First, the description of means, standard deviations, correlations and internal consistencies (Cronbach's alpha) between all variables was examined using IBM SPSS version 21.

Next, the distinctiveness of the variables was tested in MPLUS using a series of CFAs. Hypotheses were then tested using MSEM (multilevel structural equation modelling) in MPlus Version 7.3 (Muthén & Muthén, 2015). MPlus is a statistical modeling software that enables us to simultaneously conduct structural equation modelling and multilevel analysis (MPLUS team reference). A benefit of MPlus is testing mediation and moderation simultaneously and being able to include multiple moderators and mediators, which is highly relevant in this study. I adapted Stride, Gardner, Catley and Thomas's (2015) syntax codes to test these models, as these authors developed a number of syntax codes which are relevant to the models tested in this study. All individual variables were included at the within level, while the team level variables (i.e., ethical leadership) was included at the between level of analysis. The indirect effects (i.e., mediations and serial mediations) were calculated by multiplying the sequential effects under model constraints (See Appendix E). In terms of the conditional indirect effects (moderation, moderated mediation and serial moderated mediations), were calculated by adding the interaction term to the serial mediation at the mean, -1 and +1 SD. This method of assessing mediation has been proposed by Preacher, Zhang and Zyphur (2011). The interactional effect was plotted by using an Excel spreadsheet (Dawson, 2015).

## 5.4 Results

### 5.4.1 Descriptive statistics and correlations

Means, standard deviations, correlations and internal consistencies (Cronbach's alpha) between the measures from Study 1 are reported in (Table 5.1) below.

Table 5.1: Descriptive statistics, reliability estimates, and intercorrelations between measures of the variables in Study1

No	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1	Gender	.61	.48											
2	Age	1.93	.88	.16*										
3	Education	2.51	.93	-.03	.12*									
4	Tenure	2.69	1.50	.19**	.72**	.07								
5	Organisation	3.83	1.89	-.07	.07	.09	.11							
6	Distributive justice	4.06	1.78	.01	-.03	-.03	-.01	-.05	(.91)					
7	Procedural justice	4.27	1.35	.03	-.05	-.00	-.03	-.06	.61**	(.91)				
8	Interactional justice	4.87	1.45	-.09	.00	.02	-.04	-.06	.57**	.68**	(.92)			
9	Social Exchange	5.08	1.44	-.11	.02	-.09	.03	-.01	.42**	.52**	.57**	(.93)		
10	Supervisor Identification	5.46	1.62	-.10	.05	-.12	.08	-.07	.44**	.49**	.60**	.74**	(.94)	
11	Ethical leadership	5.41	1.37	-.10	.04	-.02	.06	.18**	.30**	.39**	.35**	.41**	.53**	(.96)

Note.  $n = 241$ . \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed). Cronbach's alpha coefficients are in parentheses.

Organisations: 1, 2, 3, 4, 5=organisations from bank sector, 6, 7= organisations from telecommunication sector.

Table 5.1 presents the descriptive statistics and intercorrelations between the variables included in this study. All measures of internal consistency reliabilities were in the acceptable range of .70 and above, suggested by Nunnally and Bernstein (1994). The pattern of correlations is generally supportive of hypothesised model. Using Cohen's (1988) criteria in the interpretation of small ( $r = .10$  to  $.29$ ), medium ( $r = .30$  to  $.49$ ), and large ( $r = .50$  to  $1.0$ ) values to determine the magnitude of the strength of the intercorrelations among the subscales, strong and positive correlations were found between distributive justice and social exchange ( $r = .42, p < .01$ ), procedural justice and social exchange ( $r = .50, p < .01$ ), interactional justice and social exchange ( $r = .57, p < .01$ ).

Strong and positive correlations were found between social exchange and supervisor identification ( $r = .74, p < .01$ ). Also, positive correlations were found between ethical leadership and distributive justice ( $r = .30, p < .01$ ), procedural justice ( $r = .39, p < .01$ ), interactional justice ( $r = .35, p < .01$ ), social exchange ( $r = .41, p < .01$ ) and supervisor identification ( $r = .53, p < .01$ ).

#### 5.4.2 Confirmatory factor analyses

All individual level variables were tested in MPLUS using a series of confirmatory factor analyses (CFAs). To do so, various alternative models were compared with the hypothesized five-factor model (distributive justice, procedural justice, interactional justice, social exchange, supervisor identification). Several structural models showing the hypothesized structural relationships variables were assessed.

As shown in Table 5.2, the CFAs of the five-factor model (i.e., all factors loading separately), which included distributive justice, procedural justice, interactional justice, social exchange, supervisor identification demonstrated the following fit statistics ( $\chi^2 = 707.473, DF = 265, P < .001; SRMR = .047; RMSEA = .083; CFI = .91; TLI = .90$ ). These results suggest that the five-factor model presented an acceptable fit (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996; Browne & Mels, 1990; Bentler, 1990). Also, this model presented a better fit than alternative models: (i) three-factors model (all justice dimensions collapsed into one factor and social exchange and supervisory identification), which demonstrated the following fit statistics ( $\chi^2 = 2094.287, df = 461, p < .001; SRMR = .75; RMSEA = .123; CFI = .74; TLI = .73$ ); (ii) two-factors model, which included all justice dimensions collapsed into one factor, and social exchange and supervisory identification collapsed into a second factor, which demonstrated the following fit statistics ( $\chi^2 = 2246.184, DF = 463, P < .001; SRMR = .077; RMSEA = .128; CFI = .71; TLI = .69$ ); and (iii) One -factor model, in which all items are loaded together, which demonstrated the following fit statistics ( $\chi^2 = 3166.856, DF = 464, P < .001; SRMR = .107; RMSEA = .158; CFI = .57; TLI = .54$ ).

Table 5.2: Results of confirmatory factor analyses Study 1

Model	$\chi^2$	df	p	SRMR	RMSEA	CFI	TLI
Five-Factor Model (Distributive Justice, Procedural Justice, interactional Justice, Social exchange, supervisor identification)	707.473	265	.0000	.047	.083	.91	.90
Three-factor model: justice dimensions collapsed into one factor	2255.300	461	.0000	.074	.127	.75	.73
Two-factor model: justice dimensions collapsed into factor one and social exchange and supervisor identification collapsed into factor two	2638.610	463	.0000	.077	.140	.69	.67
One-factor model	3660.064	464	.0000	.111	.169	.55	.52

Note:  $N = 241$ .  $\chi^2$  = chi-square; df: degrees of freedom; Standardized Root Mean Square Residual (SRMR); Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI).

#### 5.4.3 Testing of hypotheses

The second step in the analysis was to run structural models depicting the relationships between the variables. In all analyses, the outcome variable was regressed on the control variables (gender, age, education, tenure and organisation). Given the complexity of the model, variable means rather than the latent constructs were used in the analyses in order to facilitate model convergence. All analyses were run jointly for all three-justice dimensions, social exchange and supervisor identification, as a model including all variables simultaneously would, because of the complexity of the relationships, not converge. Therefore, five models were run jointly to test the hypotheses H1, H2, H3, H4, H5, H6a, H6b, H6c, H7, H8 and H9.

As mentioned previously, data were collected from the research participants nested in teams. Thus, the non-independence of the participants might be an issue which can be accounted for by using a multilevel approach. In order to justify the need to use this multilevel approach, the ICC's for team level variables (i.e., ethical leadership) were tested (as discussed in 5.3.4 measures). For social exchange, interrater agreement averaged among all teams was adequate, the median within-group interrater agreement  $\text{rwg}_j = .93$  and the intraclass correlations were:  $\text{ICC}(1) = .10$ ;  $\text{ICC}(2) = .89$ . For supervisor identification, interrater agreement averaged among all teams was adequate, the median within-group interrater agreement  $\text{rwg}_j = .94$  and the intraclass correlations were:  $\text{ICC}(1) = .13$ ;  $\text{ICC}(2) = .86$ . These indices were at the conventionally acceptable values of above .05 (ICC 1: Bliese, 2000) and

.70 (ICC 2: Klein & Kozlowski, 2000). Because there is a significant group level variance, the data should be analysed using multi-level approaches.

#### 5.4.3.1 Individual level analysis

All individual level hypotheses were tested using the following steps: First, the main effects (i.e., direct effects), which represent the relationships between the organisational justice dimensions and social exchange (i.e., H1, H2, and H3) and the relationship between social exchange and supervisory identification (i.e., H4) were examined. Second, the moderating effect of ethical leadership on the relationship between social exchange and supervisor identification was examined (H5). Third, the mediating effect which represent the relationships between the organisational justice dimensions and supervisor identification mediated by social exchange (i.e., H6a, H6b, and H6c) were analysed. Finally, the moderated mediations hypotheses, representing the relationships between the organisational justice dimensions and the outcomes moderated by ethical leadership (i.e., H7, H8, and H9) were tested.

##### 5.4.3.1.1 Results of the main effects of organisational justice perception on social exchange (H1- H4)

Table 5.3 presents the results of direct effects of the study hypothesized relationships. Hypothesis H1 predicts that distributive justice would be positively related to social exchange. As seen in (Table 5.4), distributive justice was positively related to social exchange, but this result was not significant ( $B=.082, SE=.064, p > .05$ ), thus failing to support H1. Hypothesis H2 predicts that procedural justice is positively related to social exchange and hypothesis H3 predicts that interactional justice would be related to social exchange. The results provide support for both H2 ( $B = .243, SE = .095, p < .01$ ) and H3 ( $B = .349, SE = .085, p < .001$ ). Hypothesis 4, predicting that social exchange would be related to supervisor identification, was also supported ( $B = .629, SE = .074, p < .001$ ).

Table 5.3: Results of the direct effects of organisational justice dimensions, social exchange and supervisory identification (Hypotheses 1- 4)

No	Hypothesized model	Betas	SE	t	P value
(H1)	Distributive justice → social exchange	.082	.064	1.290	.197
(H2)	Procedural justice → social exchange	.243	.095	2.566	.010
(H3)	Interactional justice → social exchange	.349	.085	4.097	.001
(H4)	Social exchange → supervisor identification	.629	.074	8.491	.001
	Distributive justice → supervisor identification	.072	.036	1.237	.216
	Procedural justice → supervisor identification	.000	.058	-.001	.999
	Interactional justice → supervisor identification	.266	.081	3.286	.001
	Gender	-.356	.134	-2.659	.008
	Age	-.010	.117	.084	.933
	Education	-.175	.081	-2.166	.030
	Tuner	.077	.066	1.171	.242
	Organisation 2	-.013	.355	-.038	.970
	Organisation 3	.043	.216	.202	.840
	Organisation 4	-.508	.216	-2.353	.019
	Organisation 5	.264	.224	1.180	.238
	Organisation 6	.136	.196	.692	.489
	Organisation 7	.011	.190	.056	.955

#### 5.4.3.1.2 Cross-Level analyses moderation effects (H5)

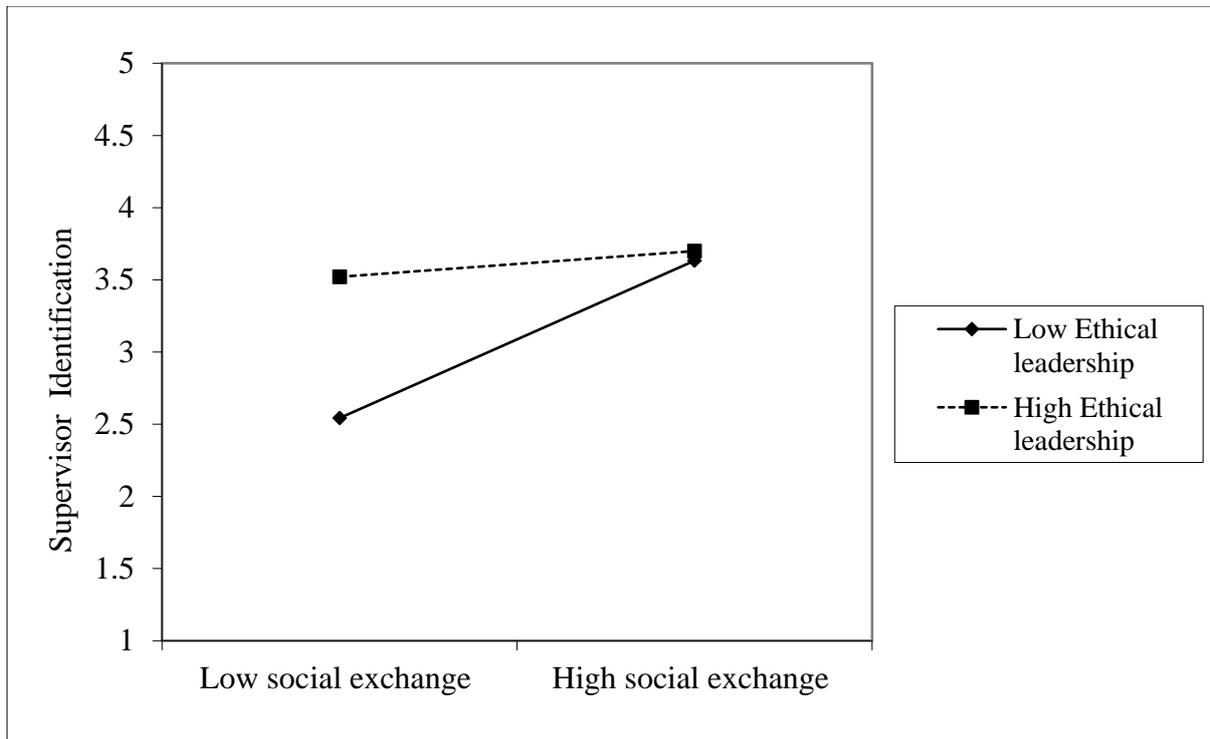
In order to test cross-level interaction effect of ethical leadership on the relationship between social exchange and supervisor identification (Hypothesis 5), a random slope between social exchange and supervisor identification was specified in the within part of the model and in the between part of the model this random slope was regressed on ethical

leadership. As shown in Table 5.4, this interaction was significant ( $B = -.229$ ,  $SE = .071$ ,  $p < .001$ ,  $[-.369, -.089]$ ), supporting hypothesis 6. Simple slope tests revealed that this effect was significant (positive) when ethical leadership was one SD below the mean ( $B = .789$ ,  $SE = .083$ ,  $p < .001$ ,  $[.627, .952]$ ) and also significant but weaker when ethical leadership was one SD above the mean ( $B = .542$ ,  $SE = .071$ ,  $p < .001$ ,  $[.403, .681]$ ). An analysis of Figure 2 shows that the relationship between social exchange and supervisor identification does not become stronger as ethical leadership increases, as was expected, but instead, it is in situations when social exchange is low that having an ethical leader becomes critical in terms of leading to leader identification. When social exchange is high, whether the leader is perceived as being very ethical or not, does not affect the level of identification. Thus, hypothesis 5 received only partial support, as the obtained moderation effect did not reflect the predicted pattern (enhancing effect of ethical leadership and social exchange).

Table 5.4: Results of cross- level the moderating interaction effect of ethical leadership on the relationship between social exchange and supervisor identification (Hypothesis 5)

Hypothesized model	Betas	SE	t	P value	95% CI	
					Lower	Upper
(H5) Ethical leadership X social exchange supervisor identification (interaction) →	-.229	.071	-3.215	.001	-.369	-.089
Ethical leadership X social exchange supervisor identification – 1 SD (4.888 ) →	.789	.083	9.537	.000	.627	.952
Ethical leadership X social exchange supervisor identification Mean(5.427) →	.666	.067	9.965	.000	.535	.797
Ethical leadership X social exchange supervisor identification + 1 SD (5.966 ) →	.542	.071	7.646	.000	.403	.681

Figure2: Interaction between social exchange and ethical leadership on supervisor identification Study1.



5.4.3.1.3 Results of mediation of social exchange between the relationships of organisational justice dimensions and supervisor identification (H6a – H6c)

Next, I tested the mediating effects of social exchange between the relationships of all organisational justice dimensions and supervisor identification simultaneously (Hypotheses 6a-6c). Hypothesis 6 suggested that social exchange would mediate the relationship between distributive justice (H6a), procedural justice (H6b), interactional justice (H6c) and supervisor identification. The results in Table 5.5 indicate that social exchange did not mediate the relationship between distributive justice and supervisor identification ( $B = .052, SE = .040, p > .05$ ), thus failing to support H6a. The results did provide support for both H5b ( $B = .153, SE = .059, p < .01$ ) and H5c ( $B = .220, SE = .066, p < .01$ ), indicating that social exchange did mediate the effects of procedural justice and interactional justice on supervisor identification.

Table 5.5: Results of the mediating effects of social exchange between the relationships organisational justice and supervisor identification (Hypotheses 6a-6c)

	Hypothesized model	Betas	SE	t	P value
(H6a)	Effect from Distributive justice → social exchange → supervisor identification	.052	.040	1.282	.200
(H6b)	Effect from Proceural justice → social exchange → supervisor identification	.153	.059	2.589	.010
(H6c)	Effect from Interactional justice → social exchange → supervisor identification	.220	.066	3.329	.001

#### 5.4.3.1.4 Moderated mediation effects (H7, H8 and H9)

Next, the moderated mediation hypotheses were tested all together (H7, H8, H9). The overall moderated mediation hypotheses suggested that the effects of the three justice dimensions on supervisor identification via social exchange are stronger when ethical leadership is high. In order to test these hypotheses a model combining both the mediation and the cross-level moderation was specified in Mplus (See Appendix E). The conditional indirect effects were specified under model constraints and calculated for low (1SD below average), average, and high (1SD above average) values of ethical leadership. It is worth noting that when tested in conjunction with the mediation, the interaction effect remained significant ( $B = -.201, SE = .074, p < .001, [-.413, -.112]$ ).

As shown in Table 5.6, the indirect effect of distributive justice and supervisor identification via social exchange was not significant for either low or high levels of ethical leadership ( $-SD: = .057, SE = .044, p = .197, [-.057, .130]$ ;  $+SD: B = .039, SE = .030, p = .188, [-.038, .089]$ ). Thus, hypothesis 7 did not receive support.

In relation to the effect of procedural justice on supervisor identification via social exchange, this effect was significant at both levels, for low level of ethical leadership ( $B = .169, SE = .067, p < .01, [CI .037, .301]$ ), and at high level ( $B = .117, SE = .047, p < .01, [.024, .209]$ ), moderated mediation, however, the indirect effect was stronger when ethical leadership was low, thus supporting the existence of a moderated mediation. Similar findings were obtained for the indirect effect of interactional justice on supervisor identification via social exchange. This effect was significant at both levels low levels of ethical leadership ( $B = .243, SE = .075, p < .001, [.096, .390]$ ), and high level of ethical leadership ( $B = .167, SE = .056, p < .001, [.058, .277]$ ). Again, although both effects were significant, the indirect effect was stronger when ethical leadership was low, thus supporting the existence of moderated mediation. These results revealed support for H8 and H9.

Table 5.6: Results of the moderated mediation effects of organisational justice dimensions on ethical leadership (H7, H8, H9)

No	Variable	Beta	SE	T value	P value	95% CI	
						Lower	Upper
	Ethical leadership X social exchange	-.201	.074	-2.722	.006	-.413	-.112
H7	Ethical leadership X distributive justice Social exchange → supervisor identification - 1 SD (4.888)	.057	.044	1.290	.197	-.057	.130
	Ethical leadership X distributive justice Social exchange → supervisor identification M SD (5.427)	.048	.037	1.305	.192	-.047	.109
	Ethical leadership X distributive justice Social exchange → supervisor identification +1 SD (5.966)	.039	.030	1.316	.188	-.038	.089
H8	Ethical leadership X procedural justice Social exchange → supervisor identification - 1 SD (4.888)	.169	.067	2.512	.012	.037	.301
	Ethical leadership X procedural justice Social exchange → supervisor identification M SD (5.427)	.143	.057	2.526	.012	.032	.254
	Ethical leadership X procedural justice Social exchange → supervisor identification +1 SD (5.966)	.117	.047	2.459	.014	.024	.209
H9	Ethical leadership X interactional justice → Social exchange supervisor identification - 1 SD (4.888)	.243	.075	3.235	.001	.096	.390
	Ethical leadership X interactional Social exchange → supervisor identification M SD (5.427)	.205	.064	3.203	.001	.080	.330
	Ethical leadership X interactional Social exchange → supervisor identification + 1 SD (5.966)	.167	.056	2.999	.003	.058	.277

## 5.5 Discussion

The purpose of this study was first to examine the mediating effects of social exchange on the relationship between distributive, procedural and interactional justice and supervisor identification. The second objective was to examine the moderating effects of ethical leadership on the relationship between social exchange and supervisor identification. Finally, it also aimed to examine the moderated mediation (conditional indirect effects) of ethical leadership on the relationship between distributive, procedural and interactional justice and supervisor identification via social exchange.

Firstly, the findings of the direct effects revealed that procedural justice and interactional justice were significantly related to social exchange, but this was not the case with distributive justice. These findings suggest that the perception of justice in pay and reward systems will not affect social quality exchange, trust and reciprocation with the supervisor and instead supervisory social exchange is only affected by procedural and interactional justice (i.e., by whether employees perceive that their supervisors listen to them and treat them with respect and integrity). Prior studies have already reported related results, for example, Mansour (2014) found that procedural and interactional justice were strongly related to perceptions of supervisory focused justice, while distributive justice was positively related to perceptions of organisational focused justice, suggesting that distributive justice is not positively related to trust in supervisors but trust in the organisation and procedural and interactional justice are positively related to trust in supervisors but not trust in the organisation.

Likewise, Aryee and his colleagues (2002) found that distributive justice was positively related to trust in the organisation, whereas interactional justice was positively related to trust in supervisors. So, it seems that in the same way that distributive justice fails to exert an effect on supervisory trust, it is also ineffective in leading to social exchange with the supervisor. This is likely because participants assume that decisions regarding the distribution of resources, although being enacted by the supervisor, are largely determined by the organisation directives and rules, and beyond the discretion of the supervisor, and are therefore not used to influence the level of social exchange developed with the supervisor. This assumption is even more likely to be the case in the Saudi context, characterised by high power distance, which leaves little autonomy and discretion for direct manager, who also have to respond to several higher layers in the organisation and follow allocation rules. In such a context, justice elements such as interactional and procedural justice, which are more strongly dependent on the personality, will and discretion of direct supervisors, are therefore more likely to play a central role in determining the extent to which employees feel encouraged to

develop a rich social exchange with the supervisor. This is an insightful finding of study 1 which will be again tested in Study 2.

As expected, the direct effect of social exchange on supervisory identification was supported. This is in line with previous results (e.g., Loi et al., 2014; Rupp et al., 2014; Huang, Wang & Xie, 2014) and supports the idea that when employees have reciprocal relationships with their supervisor, they are more likely to feel a stronger sense of supervisor identification.

Secondly, the test of the moderating effect of ethical leadership on the relationship between social exchange and supervisor identification revealed that this relationship becomes stronger when ethical leadership is low rather than high, which although showing that there is an interaction effect, as expected, this effect follows a different pattern from what was originally hypothesized. This finding suggests then that instead of an incremental effect, ethical leadership has a compensatory effect on the relationship between social exchange and supervisor identification, meaning if social exchange is low, a leader can compensate for this by still enabling employees to identify with him/her by displaying ethical leadership. However, if social exchange is high, employees disregard whether the leader is ethical or not and identify with him regardless of these perceptions. This is an interesting finding, suggesting that once the social exchange relationship is forged, other assessments of the leaders' ethical style cease to be influential in determining the extent to which the employee identifies with the leader. This is perhaps also a product of the Saudi culture, in which personal relationships can take a primary role (Elamin & Tlaiss, 2015). Prior studies support this finding, for instance Huang and colleagues (2014) found a significant relationship between social exchange and supervisor identification. This pattern can of course also be interpreted from a different perspective, suggesting that it is in situations of low ethical leadership that social exchange becomes more critical in terms of leading to supervisory identification. So, if employees perceive their supervisor to display a lower level of ethical leadership but have a good social exchange relationship with them, they will still identify with this less ethical supervisor. On the other hand, when ethical leadership is high, the intensity of the social exchange is not a determinant of the extent to which one will identify with their supervisor. Although the first explanation seems to be more in line with the Saudi context's characteristics, as described above, this line of thinking is also feasible. Regardless of the perspective adopted, the findings suggest that social exchange and supervisory identification play compensatory roles in leading to employee supervision; one is more important in the absence of the other.

Thirdly, the findings further offered support for the mediating effect of social exchange on the relationship between procedural justice and interactional justice and supervisor identification, but not for the effect of distributive justice. Previous studies have shown that

social exchange mediated the relationship between justice dimensions and different outcomes (e.g., Masterson et al., 2000; Rup & Cropanzano, 2002; Cropanzano, Prehar and Chen, 2002; Colquitt et al., 2001; Cohen-Charash & Spector, 2001; Aryee et al., 2002). For example, El Akremi, Vandenberghe and Camerman (2010) examined the role of justice and social exchange in the workplace. They found that perceived organizational support (POS) fully mediated the relationship between procedural justice and organization-focused deviance but not distributive justice and organization-directed deviance. Furthermore, LMX fully mediated the relationships of interactional justice on both supervisor-focused deviance and organization-focused deviance but not distributive justice. Moreover, prior research (e.g., Colquitt et al., 2001; Sweeney & McFarlin, 1993) confirmed that distributive justice is the best predictor of specific attitudes (e.g., pay satisfaction), whereas procedural justice is the best predictor for organisational commitment. Consistent with the result of Masterson et al., (2000) and Cropanzano et al., (2002) and Wang et al., (2010), this research determined that different types of justice are linked to social exchange differently, as social exchange with supervisors mediated the relationship between procedural and interactional justice and supervisor identification and the relationship between distributive justice and supervisor identification.

Finally, the test of the boundary role played by ethical leadership on the indirect effect of justice dimensions on supervisor identification via social exchange (moderated mediation) revealed that the effects of interactional and procedural justice on supervisor identification were always significant at both levels when ethical leadership was high and low, but they were stronger when ethical leadership was low. This is an important finding as it clarifies a different pathway via which justice can lead to supervisor identification and it also identifies the role of ethical leadership as a compensatory boundary condition.

With regards to demographic variables, the findings revealed that demographic variables (age gender education and tenure and organisations) had no significant effect on employees' justice perceptions. Although perhaps surprising in this context, this is in line with previous studies (e.g., Alsalem & Alhaini, 2007; Al-Zu'bi, 2010; Cohen-Charash & Spector, 2001). For example, Al-Zu'bi, (2010) conducted a study in Jordan and found a positive relationship between participants' age and their perception of organisational justice, but no differences regarding gender and educational level and perceptions of organisational justice.

In summary, Study 1 has contributed to the understanding of the relationship between different justice dimensions and supervisor identification, building on social exchange and identification theories. Integrating ethical leadership theory enabled identifying ethical leadership as a boundary role of the aforementioned indirect effect, thus contributing to the literature on justice by clarifying the complex pattern of relationships that relate justice to

different exchange processes and job attitudes (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Colquitt et al., 2013). Additionally, several insightful findings emerged from this study, namely that in contrast with procedural and interactive justice, distributive justice is not associated with social exchange, and that ethical leadership plays a compensatory (rather than incremental) interactive role in the relationship between social exchange and supervisor identification.

Nevertheless, this study has also a number of limitations and offers opportunities for extensions that are worthy of examination in a further study. Firstly, it is important to show the replicability of results, thus the first objective of the second study was to verify whether the reported relationships would be replicated in a different sample. This is the case both in relation to the findings supporting the hypotheses, but also in relation to those that although insightful were not originally hypothesized (e.g., the pattern of the interaction reported above).

Also to note is that in study 1 data were derived solely from employees' self-reports (i.e., single source). Although using self-reported data is necessary for studies such as the one reported here, in which employees are the ones best positioned to report on all variables of interest, it is possible that this could have increased the possibility of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Thus it is even more important to test this relationship in a second study. Furthermore, given the complexity of the research model, the sample size in Study 1 was relatively small. Therefore, it would be desirable to replicate these results in a larger sample.

A second objective was to extend the theoretical model by including job-related outcomes (performance and OCB) and the role of overall perceptions of organisational Justice as an antecedent of perceptions of ethical leadership. This first theoretical extension was also associated with a methodological improvement, the inclusion of a secondary source of data in the form of supervisory ratings of employee performance and OCB. In the next chapter Study 2, designed to address this objective, is described in detail in terms of its methodology and results.

## **Chapter Six- Study 2**

### **Methodology, Data Analysis and Results**

#### 6.1 Introduction

In this chapter the methodology and results of Study 2 are presented. The objectives of this study are: first, to replicate the findings obtained in Study 1 by examining the mediating effects of social exchange on the relationship between distributive, procedural and interactional justice and supervisor identification, the moderating effects of ethical leadership on the relationship between social exchange and supervisor identification, and the moderated mediation of ethical leadership on the indirect relationship between distributive, procedural and interactional justice and supervisor identification via social exchange; second, to extend the hypothesised model by examining the effect of organisational justice on employees' outcomes, namely job performance and helping behaviour; third, to further extend the proposed model by examining the direct effect of overall supervisory justice on ethical leadership at the team level. To achieve these objectives, data were collected from a total of 355 employees and 27 supervisors distributed across 39 teams in two organisations in Saudi Arabia. Mplus version 7.3 (Muthén & Muthén, 1998 - 2015) was also used to analyse the data by adopting Multilevel Structural Equation Modeling (MSEM) as a statistical technique. This chapter explains the methodology used in Study 2. Specifically, it discusses the sample and data collection procedure, measures of the study's variables and data analysis. Finally, it presents the study's results and concludes with a discussion of the same.

#### 6.2 Method

##### 6.2.1 Sample and data collection procedures

###### 6.2.1.1 Data collection method

The second study took place in the summer of 2016 and involved two large telecommunication organisations located in Riyadh. Access to the organisations was facilitated by personal contacts, one HR manager from each organisation introduced the researcher to the Technology Directors with whom access was afterwards discussed. The objectives of the study as well as the requirements for participation were presented to both HR and Technology directors and participation and design were subsequently discussed and negotiated, with the researcher agreeing to keep both individual and institutional participants anonymous.

Senior human resource officers in both technology organisations were nominated to randomly select supervisors who could afterwards identify the participant team members. Each supervisor identified between seven and fourteen subordinates. The average team size was 3 and the number of members per team varied between 5 and 14.

In total, 500 questionnaires were distributed (i.e., 250 questionnaires sent out in each organisation), 355 (71%) were received but 6 (1%) were excluded as these were blank. Thus this study involved three hundred and forty nine participants distributed across 39 teams and 27 supervisors as some teams had the same supervisor. Attached to both team members' and supervisors' questionnaires was an information sheet explaining the objectives of the study, offering reassurance regarding the confidentiality of the answers, and informing respondents of the voluntary character of their participation and that they could withdraw from that study at any time. In order to match supervisor ratings to subordinate responses, the indication of their names (i.e., supervisors and their subordinates) was used. All completed questionnaires were returned in envelopes provided by the researcher to a locked box, only accessible to the researcher, located in the Human Resources Department in each company. Participants were asked to seal their questionnaires in envelopes provided by the researcher and to drop them in secured locked boxes only accessible by the researcher available in each location. Contact details of the research were also provided to all participants should they want to clarify any questions or withdraw participation. (See Appendix C for employees' survey and Appendix D for supervisor's survey).

#### 6.2.1.2 Sample

The number of participants from each company was 105 (30% of the total sample) from STC company and 244 (69% of the total sample) from Mobily company. The employees were 74.9 percent male and 25.8 percent female, their average age was 30-39 years, their average tenure in their job was 3 years and less, and their average tenure with their current supervisor was 7 years and less. Seventy 73.5 percent of the supervisors were male, their average age was 30-39 years, and their average tenure in their job was 4- 5 years.

#### 6.2.2 Measures

##### 6.2.2.1 Individual level variables

In this study I adopted the same scales as in Study 1 to measure distributive justice, procedural justice, interactional justice social exchange, supervisory identification and ethical leadership. These scales are also briefly described below:

##### 6.2.2.1.1 Distributive justice

Colquitt's (2001) scale was used to measure distributive justice. The scale consisted of 4 items with response options using a five-point Likert scale (1 = strongly disagree to 5 =

strongly agree). Respondents were asked to indicate the extent to which the items characterized the interactional justice of their relationships with their supervisors. Sample items are: “Do those outcomes reflect the effort you have put into your work?” and “Do those outcomes reflect what you have contributed to your work?” The Cronbach’s alpha for this study was .95.

#### 6.2.2.1.2 Procedural justice

Colquitt’s (2001) scale was used to measure the procedural justice. The scale consisted of 7 items, with response options using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Sample items are, “Are you able to express your views during those procedures?”, “Are you able to appeal the decisions arrived at by those procedures?” The Cronbach’s alphas for this study was .89.

#### 6.2.2.1.3 Interactional justice

Colquitt’s (2001) scale was used to measure the interactional justice (interpersonal justice and informational justice). The scale consisted of 4 items of interpersonal justice 5 items of informational justice with response options using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Respondents were asked to indicate the extent to which the items characterized the interactional justice of their relationships with their supervisors. Sample items are for interpersonal justice ‘Has (he/she) treated you in a polite manner?’, and for informational justice ‘Has (he/she) been candid in (his/her) communication with you?’ The Cronbach’s alpha for the scale capturing the two dimensions of this study was .92.

#### 6.2.2.1.4 Social exchange with supervisor

As in Study 1, social exchange with the supervisor was assessed using Bernerth’s et al., (2007) scale, which includes the scale of Shore Tetrick, Lynch & Barksdale (2006). The scale consisted of 12 items with response options using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Respondents were asked to indicate the extent to which the items characterised the quality of their exchange relationships with their supervisors. Sample items are, ‘My supervisor and I have a two-way exchange relationship’, ‘I do not have to specify the exact conditions to know my supervisor will return a favour’. The Cronbach’s alpha for this study was .95.

#### 6.2.2.1.5 Supervisor identification

Kark’s, Shamir and Chen’s (2003) scale was used to measure supervisor identification. The scale consisted of 5 items with response options using a five-point Likert scale (1 =

strongly disagree to 5 = strongly agree). Sample items are 'My supervisor is a role model', 'I highly identify with my supervisor of my group'. The Cronbach's alpha for this scale was .95.

#### 6.2.2.1.6 Individual job performance

Supervisors were asked to rate the performance of their employees. Williams and Anderson's (1991) in-role behaviour scale (IRB) was used to capture individual job performance. The scale consisted of 7 items rated options ranged as the following: 1 (never), 2 (seldom), 3 (occasionally), 4 (often), or 5 (always/frequently). Sample items are '[employee name] fulfils the responsibilities specified in his/her job description', '[employee name] performs the tasks that are expected as part of the job', and '[employee name] meets performance expectations'. The Cronbach's alpha for this study was .83.

#### 6.2.2.1.7 Helping behaviour

Supervisors were also asked to rate the helping behaviour of their employees. Van Dyne and LePine (1998) scale was used to measure helping behaviour of the employees. The scale consisted of 7 items with response options as the following: 1 (never), 2 (seldom), 3 (occasionally), 4 (often), or 5 (always/frequently). Sample items are 'This particular employee/co-worker volunteers to do things for this work group', 'this particular employee /co-worker helps orient new employees this group'. The Cronbach's alpha was .95.

#### 6.2.2.2 Team level variables

##### 6.2.2.2.1 Overall supervisory justice

Colquitt and Shaw's (2005) scale was used to measure overall justice of the supervisor. This measure reflects what is termed "*entity judgment*", which asks individuals to assess the entity (e.g., organisation, group, or supervisor) as a whole. The scale consisted of 6 items with response options using a five -point Likert scale (1 = strongly disagree to 5 = strongly agree). Sample items are 'In general, the treatment I receive around here is fair.' 'In general, I can count on my supervisor to be fair', 'Overall, I am treated fairly by my supervisor'. The scale's alpha reliability for this study was .82. Additionally, in order to assess the perception of overall supervisor justice among the team members, the individual ratings of overall supervisor justice were aggregated to the team-level, using a direct consensus model (Chan, 1998). This was justified statistically by calculating the median within-group interrater reliability  $rwg(j)$  as well as intraclass correlations, ICC (1) and ICC (2). Both  $rwg(j) = .82$  and ICCs ( $ICC(1) = .12$  and  $ICC(2) = .20$ ) supported the aggregation of ethical leadership to the team level (Bliese, 2000).

#### 6.2.2.2.2 Ethical leadership

Brown's and his colleagues (2005) scale was used to measure ethical leadership. The scale consisted of 10 items with response options using a five -point Likert scale (1 = strongly disagree to 5 = strongly agree). Sample items are 'He/she discusses business ethics or values with employees ', 'He/she can be trusted, and 'He/she makes fair and balanced decisions'. The Cronbach's alpha for this study was .96.

As in Study 1, the individual ratings of ethical leadership were aggregated to the team-level, using a direct consensus model (Chan, 1998). This was justified statistically by calculating the median within-group interrater reliability  $rwg(j)$  as well as intraclass correlations, ICC (1) and ICC (2). Both  $rwg(j) = .96$  and ICCs ( $ICC(1) = .44$  and  $ICC(2) = .71$ ) values provide support to the aggregation of ethical leadership to the team level (Bliese, 2000).

#### 6.2.2.3 Control variables

As in Study 1, gender, age, education, tenure and organisation were used as control variables at the within level to account for the effect of these controls on in study1. Gender was coded as 1 for male and 0 for female. Age was coded in the following categories – "under 30, 30-39, 40-49 and 50 – Above". Education was coded as "1 for High School- below, 2 for Diploma , 3 for Undergraduate, 4 for Postgraduate". Tenure was coded "1 for 3 years or less, 2 for 4-5 years, 3 for 6-10 years, 4 for 11-15 years, 5 for More than 15 years". Organisations were coded 1 for STC Company, 2 for Mobily comapy.

#### 6.2.3 Data analysis

First, the description of means, standard deviations, correlations and internal consistencies (Cronbach's alpha) between all the variables was tested using IBM SPSS version 21. Second, the distinctiveness of the variables was tested using a series of CFAs. As in Study 1, all tests of hypotheses were conducted using MPlus Version 7.3 (Muthén & Muthén, 2015). MPlus is a statistical modeling software that enables the researchers to analyse a variety of statistics, such as individual level data, multilevel data and cross sectional effects, via hierarchical linear regressions. As in Study 1, Stride's, Gardner, Catley and Thomas (2015) syntax codes were adapted to the multilevel context in order to test the proposed models. All individual variables were included at the within level, the team level variable (i.e., ethical leadership) was included at the between level. The indirect effects (i.e., mediations and serial mediations) were calculated by multiplying the sequential effects under model constraints (See Appendix E). The conditional indirect effects (moderation, moderated mediation and serial moderated mediations) were calculated by adding the interaction term to the serial mediation at the mean, -1 and +1 SD. This method of assessing mediation has been

proposed by Preacher, Zhang, & Zyphur, (2011). The interactional effect was plotted using an Excel spreadsheet (Dawson, 2014).

## 6.3 Results

### 6.3.1 Descriptive statistics and correlations

Means, standard deviations, correlations and internal consistencies (Cronbach's alpha) between the measures from Study 2 are reported in (Table 6.1) below.

Table 6.1: Descriptive statistics, reliability estimates, and intercorrelations between measures of the variables in Study 2

No	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Gender	0.74	0.43														
2	Age	1.76	0.68	-.15													
3	Education	2.21	0.92	-.17**	.37**												
4	Tenure	2.11	0.78	.17**	.33**	.14**											
5	Organisation	1.69	0.46	.38**	.14**	.08	.05										
6	Distributive justice	3.47	1.41	-.05**	.40**	.24**	.18**	.23**	(.95)								
7	Procedural justice	3.81	0.93	.01	.25**	.09	.02	.30**	.63**	(.89)							
8	Interactional justice	4.20	0.82	.07	.26**	.12*	.10	.22**	.51**	.63**	(.92)						
9	Social exchange	4.16	0.80	.02	.38**	.17**	.15**	.17**	.47**	.59**	.74**	(.95)					
10	Supervisor Identification	4.39	0.87	.07	.34**	.14**	.18**	.14**	.41**	.48**	.75**	.77**	(.95)				
11	Job performance	3.16	0.59	-.08	.18**	.06	-.05	.07	.26**	.13**	.25**	.31**	.32**	(.83)			
12	Helping behaviour	3.47	1.06	.40**	.08	.15*	.24**	.33**	.25**	.24**	.38**	.45**	.46**	.21**	(.95)		
13	Overall justice of supervisor	4.03	0.80	.04*	.36**	.15**	.20**	.18**	.44**	.53**	.71**	.82**	.76**	.28**	.36**	(.82)	
14	Ethical leadership	4.25	0.82	.08	.03	.19*	.23**	.24**	.54**	.56**	.62**	.66**	.65**	.55**	.60**	.41**	(.96)

Note.  $n = 349$ . \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed). Cronbach's alpha coefficients are in parentheses. Organisations from technology sector.

Table 6.1 presents the descriptive statistics and intercorrelations between the eighteen variables. Using Cohen's (1988) criteria in the interpretation of small ( $r = .10$  to  $.29$ ), medium ( $r = .30$  to  $.49$ ), and large ( $r = .50$  to  $1.0$ ) values to determine the magnitude of the strength of the intercorrelations among the variables.

The relationship between distributive justice and social exchange was significantly positive ( $r = .47, p < .01$ ), the relationship between procedural justice and social exchange was significantly positive ( $r = .59, p < .01$ ) and also the relationship between interactional justice and social exchange was significantly positive ( $r = .79, p < .01$ ). Moreover, the relationship between social exchange and supervisor identification was significantly positive ( $r = .77, p < .01$ ). Additionally, the relationship between supervisor identification and individual performance was significantly positive ( $r = .35, p < .001$ ) and also the relationship between supervisor identification and helping behaviour was significantly positive ( $r = .46, p < .01$ ). In addition, the relationship between distributive justice and job performance was positive ( $r = .07, p < .01$ ), the relationship between procedural justice and job performance was positive ( $r = .14, p < .01$ ), and also the relationship between interactional justice and job performance was positive ( $r = .29, p < .01$ ). With regard to helping behaviour, there was a positive relationship between helping behaviour and distributive justice ( $r = .26, p < .01$ ), procedural justice ( $r = .25, p < .01$ ) and interactional justice ( $r = .38, p < .01$ ). At the team level, a strong and positive correlation was found between overall supervisory justice and ethical leadership ( $r = .41, p < .001$ ).

### 6.3.2 Confirmatory factor analyses

#### 6.3.2.1 Confirmatory factor analyses - Individual level variables

The distinctiveness of all individual level variables was tested using a series CFAs. To do so, various alternative models were compared with the hypothesized seven-factor model (distributive justice, procedural justice, interactional justice, social exchange, supervisor identification, job performance and helping behaviour).

As shown in (Table 6.2), the CFA of the seven-factor model (i.e. all three justice dimensions, social exchange, supervisor identification, performance and helping behaviour) demonstrated the following fit statistics: ( $\chi^2 = 679.633, df = 210, p < .001; SRMR = .055; RMSEA = .093; CFI = .90; TLI = .87$ ). Although TLI is slightly lower than the generally acceptable value of  $.90$ , the others indices are within the acceptable range, and thus, these results suggest that the seven factor model presented an acceptable fit (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996; Browne & Mels, 1990; Bentler, 1990).

Fundamentally, this model also presented a better fit than alternative models: (i) a two-factor model (i.e., all three justice dimensions, social exchange and supervisor identification collapsed into one factor and job performance and helping behaviour collapsed into a second factor), which demonstrated the following fit statistics ( $\chi^2 = 9530.191$ ,  $df = 122$ ,  $p < .001$ ;  $SRMR = .177$ ;  $RMSEA = .139$ ;  $CFI = .52$ ;  $TLI = .51$ ); (ii) a one-factor model in which all items loaded together (i.e., all three justice dimensions, social exchange, supervisor identification, performance and helping behaviour), which demonstrated the following fit statistics ( $\chi^2 = 18882.691$ ,  $df = 1275$ ,  $p < .001$ ;  $SRMR = .161$ ;  $RMSEA = .149$ ;  $CFI = .46$ ;  $TLI = .44$ )

Table 6.2: Results of confirmatory factor analyses - individual level variables Study 2

Model	$\chi^2$	df	P Value	SRMR	RMSEA	CFI	TLI
Seven-Factors Model (i.e., Distributive Justice, Procedural Justice, interactional Justice, Social exchange, supervisor identification, job performance, helping behaviour)	679.633	210	.0000	.055	.093	.90	.87
Two-factor model: justice dimensions and social exchange and supervisor identification collapsed into factor one and job performance and helping behaviour collapsed into factor two	9530.191	122	.0000	.177	.139	.52	.51
One-Factor Model (i.e., Distributive Justice & Procedural Justice & interactional Justice & Social exchange & supervisor identification & job performance & helping behaviour)	18882.691	127	.0000	.161	.149	.46	.44

Note:  $N = 330$ .  $\chi^2$  = chi-square; df: degrees of freedom; Standardized Root Mean Square Residual (SRMR); Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI).

### 6.3.2.2 Confirmatory factor analyses –Team level variables

As shown in (Table 6.3), the two-factor model (i.e., overall supervisory justice and ethical leadership loading into two separate factors), which demonstrated the following fit statistics: ( $\chi^2 = 395.160$ ,  $df = 103$ ,  $p < .001$ ;  $SRMR = .029$ ;  $RMSEA = .090$ ;  $CFI = .95$ ;  $TLI = .94$ ), presented a better fit than a one-factor model collapsing these two variables, ( $\chi^2 = 609.350$ ,  $df = 104$ ,  $p < .001$ ;  $SRMR = .035$ ;  $RMSEA = .118$ ;  $CFI = .91$ ;  $TLI = .90$ ), thus supporting the distinctiveness of these variables (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996; Browne & Mels, 1990; Bentler, 1990).

Table 6.3: Results of confirmatory factor analyses –team level variables Study 2

No	Model	$\chi^2$	df	P value	SRMR	RMSEA	CFI	TLI
1	Two-Factor Model (overall supervisory justice and Ethical leadership)	395.160	103	.000	.029	.090	.95	.94
2	One-Factor Model (overall supervisory justice and Ethical leadership collapsed into one factor )	609.350	104	.000	.035	.118	.91	.90

Note: df: degrees of freedom; Standardized Root Mean Square Residual (SRMR): Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI).

### 6.3.4 Testing of hypotheses

As in study1, the second step in the analysis was to run structural models depicting the hypothesized relationships between the variables. In all analyses, the outcome variables were regressed on the control variables (gender, age, education, tenure). All analyses were run separately for all three-justice dimensions and each of the outcomes (job performance and helping behaviour), social exchange and supervisor identification, as a model including all variables simultaneously would not converge because of the complexity of the relationships.

As in Study 1, in order to justify the need to use this multilevel approach it was first examined whether the outcomes variables (i.e., job performance and helping behaviour) varied between teams. For job performance the ICC = .28 and for helping behaviour the ICC = .22, suggestion that both variables had significant group variance and therefore a multilevel analytical approach was pursued.

#### 6.3.4.1 Individual level analysis

All the hypotheses were tested using hierarchical linear regression analyses following the same steps as in study1 but adding an additional link to the mediation chain, thus resulting in a serial mediation. The types of relationships being tested are the following: first, the main effects (i.e., direct effects), which represent the relationships between the organisational justice dimensions and social exchange; distributive (H1) procedural (H2) interactional justice (H3), and the relationship between social exchange and supervisor identification (H4), and the relationship between supervisor identification and job performance and helping behaviour (H4a and H4b). Second, the moderation effect of ethical leadership on the relationship

between social exchange and supervisor identification, (i.e., H5). Third, the same mediations as tested in Study 1, linking justice dimensions to supervisor identification via social exchange (H6a, H6b and H6c). Fourth, the moderated mediation effect of ethical leadership on the indirect relationship between justice dimensions and supervisor identification via social exchange. Fifth, the same moderated mediation hypotheses as tested in Study 1, retesting the effect of ethical leadership on the indirect relationship between justice dimensions and supervisor identification via social exchange (H7, H8 and H9). Sixth, the mediation chains linking social exchange to job performance (H10a) and helping behaviour (H10b) via supervisor identification. Seventh, the mediation effect of supervisor identification on the indirect relationship between social exchange and job performance and helping behaviour (H11a and H11b). Eighth, the full serial mediation, i.e., the effects of organisational justice dimensions on the outcomes (i.e., job performance and helping behaviour) via social exchange and supervisor identification (H12a – H14b). Finally, the serial moderated mediation, i.e., the conditional indirect effect of organisational justice dimensions on performance/ helping behaviour via social exchange and supervisor identification moderated by ethical leadership (i.e., H15a – H17b).

With regard to team level variables, the direct effect of overall supervisory justice on ethical leadership (H18) was examined.

#### 6.3.4.1.1 Results of the main effects of organisational justice perception on social exchange (H1- H4b)

As seen in Table 6.4, the effect of distributive justice on social exchange was not significant ( $B = -.014$ ,  $SE = .033$ ,  $p = .67$ ), while the relationship between procedural justice and social exchange was significant ( $B = .176$ ,  $SE = .051$ ,  $p < .001$ ), as well as the relationship between interactional justice and social exchange ( $B = .577$ ,  $SE = .045$ ,  $p < .001$ ). These results reveal support for hypotheses 2 and 3 but not hypothesis 1, as was the case in study 1. As hypothesized, social exchange was positively related with supervisor identification ( $B = .821$ ,  $SE = .059$ ,  $p < .001$ ), supporting hypothesis 4, as was the case in study 1. New hypotheses in this study referred to the positive relationship between supervisory identification and job performance (H4a) ( $B = .223$ ,  $SE = .087$ ,  $p < .01$ ), and helping behaviour (H4b) ( $B = .425$ ,  $SE = .159$ ,  $p < .001$ ), which were both supported.

Table 6.4: Results of the direct effects of organisational justice dimensions, social exchange, supervisory identification, job performance and helping behaviour (Hypotheses 1- 4b)

No	Hypothesized model	Betas	SE	T	P value
H1	Distributive justice → social exchange	-.014	.033	-.419	.67
H2	Procedural justice → social exchange	.176	.051	3.418	.001
H3	Interactional justice → social exchange	.577	.045	12.740	.001
H4	Social exchange → supervisor identification	.821	.059	13.945	.001
H4a	Supervisor identification → job performance	.223	.087	2.557	.01
H4b	Supervisor identification → helping behaviour	.425	.159	2.676	.007
	Gender	.060	.055	1.105	.26
	Age	.218	.038	5.701	.001
	Education	.021	.028	.741	.45
	Tenure	.039	.033	1.176	.24
	Organisation	-.100	.051	-1.975	.04
	Distributive justice → job performance	-.036	.061	-.590	.55
	Procedural justice → job performance	.007	.045	.166	.86
	Interactional justice → job performance	.064	.112	.573	.56
	Distributive justice → helping behaviour	.034	.086	.399	.69
	Procedural justice → helping behaviour	-.024	.093	-.255	.79
	Interactional justice → helping behaviour	.054	.119	.454	.65

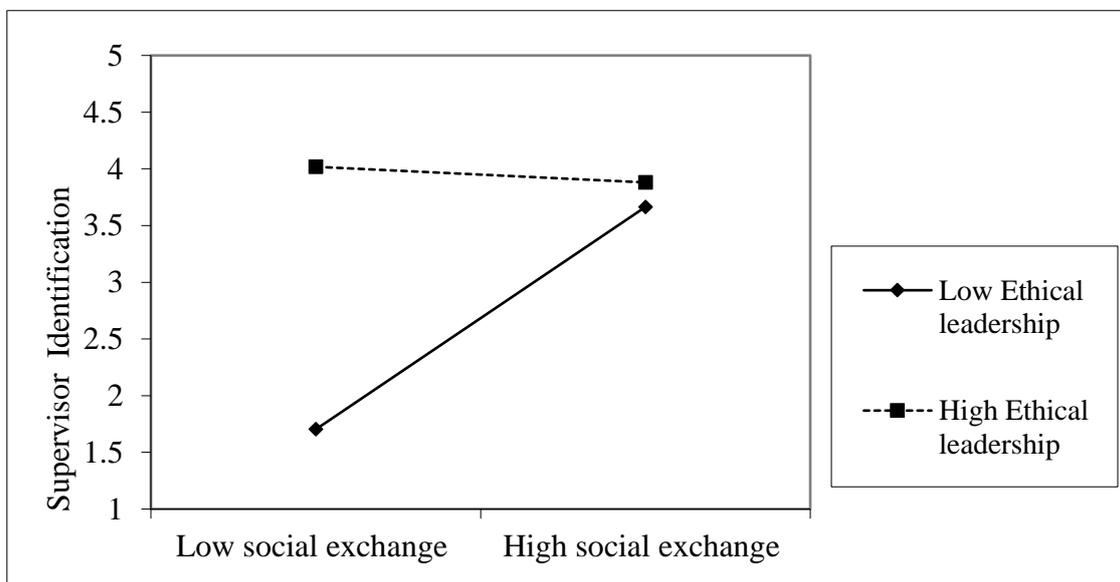
#### 6.3.4.1.2 Cross level analysis moderation effect (H5)

Hypothesis 5 suggests that ethical leadership moderates the relationship between social exchange and supervisor identification. As shown in Table 6.5, this interaction is significant ( $B = -.480, SE = .111, p < .001, [-.765, -.298]$ ), simple slope tests show that the effect of social exchange on supervisor identification was significant when ethical leadership was low ( $B = .604, SE = .071, p < .001, [.421, .721]$ ) but not significant when ethical leadership was high ( $B = -.142, SE = .166, p = .392, [-.571, .131]$ ). This result provides support for hypothesis 5 in the sense that it identifies an interaction effect, but as was the case in S1, the pattern is different from that hypothesized. This interaction is shown in Figure 3.

Table 6.5: Results of cross-level moderation effect of ethical leadership on the relationship between social exchange and supervisor identification (Hypothesis 5)

No	Hypothesized model		Betas	SE	t	P value	95%CI lower	Upper
H5	Ethical leadership X social exchange supervisor identification (interaction)	→	-.480	.111	-4.332	.000	-.765	-.298
	Ethical leadership X social exchange supervisor identification – 1 SD (3.999 )	→	.604	.071	8.508	.000	.421	.721
	Ethical leadership X social exchange supervisor identification M (4.253)	→	.482	.068	7.052	.000	.306	.595
	Ethical leadership X social exchange supervisor identification +1 SD (5.555)	→	-.142	.166	-.856	.392	-.571	.131

Figure3: Interaction between social exchange and ethical leadership on supervisor identification Study2.



### 6.3.4.1.3 Results of the mediating effects of social exchange on the relationships between organisational justice dimensions and supervisor identification (H6a – H6c)

Table 6.6 presents the results of the proposed indirect effects. It was hypothesized that social exchange would mediate the relationship between distributive justice and supervisor identification ( $B = -.011$ ,  $SE = .027$ ,  $p = .67$ ). This result did not provide support for hypothesis 6a. It was also hypothesized that social exchange would mediate the relationship between procedural justice and supervisor identification ( $B = .144$ ,  $SE = .043$ ,  $p < .001$ ). This result provided support for hypothesis 6b. It was also hypothesized that social exchange would mediate the relationship between interactional justice and supervisor identification (H6c) ( $B = .474$ ,  $SE = .047$ ,  $p < .001$ ), which was supported. These results mirror the findings reported in study 1.

Table 6.6: Results of the mediating effect of social exchange on the relationships between organisational justice dimensions and supervisor identification

No	Hypothesized model	Betas	SE	T	P value
H6a	Effect from distributive justice → social exchange → supervisor identification	-.011	.027	-.419	.67
H6b	Effect from procedural justice → social exchange → supervisor identification	.144	.043	3.333	.001
H6c	Effect from interactional justice → social exchange → supervisor identification	.474	.047	10.113	.000

### 6.3.4.1.4 Moderated mediation effects (H7, H8 and H9)

Next, the moderated mediation hypotheses were tested all together (H7, H8, H9). The overall moderated mediation hypotheses suggested that the effects of the three justice dimensions on supervisor identification via social exchange are stronger when ethical leadership is high. The findings are shown in Table 6.7; this interaction is significant ( $B = -.468$ ,  $SE = .105$ ,  $p < .001$ ,  $[-.674, -.261]$ ). In relation to the effect of distributive justice on supervisor identification via social exchange, this effect was not significant at either level of ethical leadership – for low level of ethical leadership ( $B = -.007$ ,  $SE = .018$ ,  $p = .680$ ,  $[-.043, .028]$ ), and for high level of ethical leadership ( $B = .003$ ,  $SE = .007$ ,  $p = .689$ ,  $[-.010, .015]$ ). Thus, hypothesis 7 was not supported.

In relation to H8, procedural justice had a positive indirect effect on supervisor identification when ethical leadership was at a low level ( $B = .095$ ,  $SE = .036$ ,  $p < .01$ ,  $[.023, .166]$ ), but not at a high level ( $B = .033$ ,  $SE = .032$ ,  $p = .294$ ,  $[-.095, .029]$ ). Similar findings

were again obtained in relation to interactional justice (H9) (-1SD:  $B = .311$ ,  $SE = .057$ ,  $p < .001$ ,  $[.199, .423]$ ; +1SD:  $B = -.109$ ,  $SE = .113$ ,  $p = .334$ ,  $[-.330, .122]$ ). Hypotheses 8 and 9 received only partial support, as the obtained moderated mediation effect did not reflect the predicted pattern (enhancing effect of procedural and interactional justice on supervisor identification when ethical leadership is high).

Table 6.7: Results of the moderated mediation effect of ethical leadership on the indirect relationship between justice dimensions and supervisor identification via social exchange (H7, H8, and H9)

No	Variable	Beta	SE	T value	P value	95% CI	
						Lower	Upper
	Moderated mediation interaction	-.468	.105	-4.439	.000	-.674	-.261
H7	Ethical leadership X social exchange distributive justice → identification - SD (3.999)	-.007	.018	-.413	.680	-.043	.028
	Ethical leadership X social exchange distributive justice → identification M (4.253)	-.006	.014	-.410	.682	-.034	.022
	Ethical leadership X social exchange distributive justice → identification + SD( 5.555)	.003	.007	.401	.689	-.010	.015
H8	Ethical leadership X social exchange procedural justice → identification - SD (3.999)	.095	.036	2.607	.009	.023	.166
	Ethical leadership X social exchange procedural justice → identification M (4.253)	.074	.032	2.308	.021	.011	.136
	Ethical leadership X social exchange procedural justice → identification + SD(5.999)	.033	.032	-1.050	.294	-.095	.029
H9	Ethical leadership X social exchange interactional justice → identification - SD(3.999)	.311	.057	5.441	.000	.199	.423
	Ethical leadership X social exchange interactional justice → identification M (4.253)	.242	.056	4.297	.000	.132	.353
	Ethical leadership X social exchange interactional justice → identification + SD (5.555)	-.109	.113	-.967	.334	-.330	.112

#### 6.3.4.1.5 Moderated mediation effects (H10a and 10b)

Extending Study 1, Hypothesis 10a suggests that ethical leadership moderates the indirect effect of social exchange on job performance via supervisor identification. The findings are shown in Table 6.8. This interaction is significant ( $B = -.475$ ,  $SE = .145$ ,  $p < .001$ ,  $[-.758, -.192]$ ). The effect of social exchange on job performance via supervisor identification was significant when ethical leadership was low ( $B = .574$ ,  $SE = .088$ ,  $p < .001$ ,  $[.400, .747]$ ), but not significant

when ethical leadership was high ( $B = -.165$ ,  $SE = .195$ ,  $p = .396$ ,  $[-.548, .217]$ ). This result provides partial support for hypothesis 10a.

Similar findings were again obtained in relation to helping behaviour (Hypothesis 10b), which suggests that ethical leadership moderates indirect effects of social exchange on helping behaviour via supervisor identification. As shown in Table 6.8, this interaction is significant ( $B = -.487$ ,  $SE = .136$ ,  $p < .001$ ,  $[-.754, -.220]$ ). The indirect effect of social exchange on helping behaviour was significant when ethical leadership was low ( $B = .567$ ,  $SE = .068$ ,  $p < .001$ ,  $[.434, .700]$ ) but not significant when ethical leadership was high ( $B = -.191$ ,  $SE = .212$ ,  $p = .367$ ,  $[-.607, .244]$ ). This result provides partial support for hypothesis 10b.

Table 6.8: Results of cross-level moderation effect of ethical leadership on the relationship between social exchange and job performance and helping behaviour via supervisor identification (Hypotheses 10a-10b)

No	Hypothesized model	Betas	SE	t	P value	95%CI lower	Upper
H10a	Ethical leadership X social exchange → supervisor identification → performance (interaction)	-.475	.145	-3.001	.001	-.758	-.192
	Ethical leadership X social exchange → supervisor identification → performance - 1SD (3.999)	.574	.088	6.485	.000	.400	.747
	Ethical leadership X social exchange → supervisor identification → performance M (4.253)	.453	.076	5.927	.000	.303	.603
	Ethical leadership X social exchange → supervisor identification → performance + 1 SD (5.555)	-.165	.195	-.848	.396	.548	.217
H10b	Ethical leadership X social exchange → supervisor identification → helping behaviour (interaction)	-.487	.136	-3.574	.000	-.754	-.220
	Ethical leadership X social exchange → supervisor identification → helping behaviour - 1SD (3.999)	.567	.068	8.353	.000	.434	.700
	Ethical leadership X social exchange → supervisor identification → helping behaviour M (4.253)	.443	.071	6.240	.000	.304	.582
	Ethical leadership X social exchange → supervisor identification → helping behaviour + 1 SD (5.999)	-.191	.212	-.903	.367	-.607	.244

#### 6.3.4.1.6 Mediation effects (Hypotheses 11a and 11b)

As shown in Table 6.9, the proposed mediation of supervisor identification on the relationships between social exchange and performance was significant (H11a) ( $B = .183$ ,  $SE = .070$ ,  $p < .001$ ). In addition, the relationship between social exchange and helping behaviour via supervisor identification, was significant (H11b) ( $B = .349$ ,  $SE = .125$ ,  $p < .001$ ). Therefore, H11a and H11b were both supported.

Table 6.9: Results of the mediating effect of supervisor identification on the relationships between social exchange and performance and helping behaviour (Hypotheses 11a and 11b)

No	Hypothesized model	Betas	SE	T	P value
H11a	Effect from social exchange → supervisor identification → performance	.183	.070	2.619	.009
H11b	Effect from social exchange → supervisor identification → helping behaviour	.349	.125	2.799	.005

#### 6.3.4.1.7 Overall mediation effects (H12a- 14b)

The study also predicted that distributive justice has a positive effect on job performance (Hypothesis 12a) and helping behaviour (Hypothesis 12b) via social exchange and supervisor identification. As shown in Table 6.10, distributive justice has a non-significant relationship with job performance ( $B = -.003$ ,  $SE = .006$ ,  $p = .672$ ) and with helping behaviour via social exchange and supervisor identification ( $B = -.005$ ,  $SE = .011$ ,  $p = .668$ ). Thus, these results provide no support for hypothesis 12a and 12b. It was further hypothesised that procedural justice positively affects job performance (Hypothesis 13a) and helping behaviour (Hypothesis 13b) via social exchange and supervisor identification. The findings (Table 6.10) showed that procedural justice has a positive relationship with job performance via social exchange and supervisor identification ( $B = .032$ ,  $SE = .014$ ,  $p < .01$ ) and with helping behaviour via social exchange and supervisor identification, which was significant ( $B = .061$ ,  $SE = .023$ ,  $p < .01$ ). Thus, these results provide support for hypothesis 13a and hypothesis 13b.

The study also hypothesised that interactional justice is related to job performance via social exchange and supervisor identification (Hypothesis 14a) and helping behaviour

(Hypothesis 14b). As shown in Table 6.10, interactional justice related significantly to job performance and helping behaviour via social exchange and supervisor identification ( $B = .106$ ,  $SE = .042$ ,  $p < .01$ ) ( $B = .201$ ,  $SE = .076$ ,  $p < .01$ ). Thus, these results provide support for hypotheses H14a and H14b.

Table 6.10: Results of testing the overall mediating effects of organisational justice dimensions on job performance and helping behaviour via social exchange and supervisor identification (Hypotheses 12a- 14b)

No	Hypothesized model	Betas	SE	T	P value
H12a	Distributive justice → social exchange → supervisor identification → job Performance	-.003	.006	-.423	.672
H12b	Distributive justice → social exchange → supervisor identification → helping behaviour	-.005	.011	-.429	.668
H13a	Procedural justice → social exchange → supervisor identification → job performance	.032	.014	2.278	.023
H13b	Procedural justice → social exchange → supervisor identification → helping behaviour	.061	.023	2.629	.009
H14a	Interactional justice → social exchange supervisor identification → job performance	.106	.042	2.542	.011
H14b	Interactional justice → social exchange supervisor identification → helping behaviour	.201	.076	2.657	.008

#### 6.3.4.1.8 Serial moderated mediation effects (H15a – H17b)

Extending study1, the full moderated mediation hypotheses were tested (H15a – H17b). The study hypothesised that ethical leadership at the team level would influence the relationship between all justice dimensions and job performance via social exchange and supervisor identification. The interactional effect was significant ( $B = -.464$ ,  $SE = .102$ ,  $p < .000$ ,  $[-.664, -.265]$ ). The results are showed in Table 6.11. The findings revealed that the indirect relationship between distributive justice and job performance via social exchange and supervisor identification was not significant for both levels of ethical leadership, 1 SD below average ethical leadership ( $B = .000$ ,  $SE = .001$ ,  $p = .922$ ,  $[-.001, .001]$ ), and for 1 SD above average ethical leadership ( $B = .000$ ,  $SE = .000$ ,  $p = .920$ ,  $[-.000, .000]$ ). Thus, hypothesis 15a did not receive support. Furthermore, the result of the conditional indirect relationship between procedural justice and job performance via social exchange and supervisor identification was

not significant 1 *SD* below average ethical leadership ( $B = .001, SE = .007, p = .919, [-.013, .014]$ ), nor 1 *SD* above average ethical leadership ( $B = .000, SE = .002, p = .917, [-.005, .004]$ ). The same result was obtained for the relationship between interactional justice and job performance via social exchange and supervisor identification, 1 *SD* below average ethical leadership ( $B = .002, SE = .022, p = .918, [-.041, .045]$ ), and for 1 *SD* above average ethical leadership ( $B = -.001, SE = .007, p = .916, [-.015, .014]$ ). These results reveal no support for H16a and H17a.

Regarding helping behaviour in Table 6.12, the study also hypothesised that ethical leadership at the team level would influence the relationship between all justice dimensions and helping behaviour via social exchange and supervisor identification, the interactional effect was significant ( $B = -.458, SE = .116, p < .000, [-.685, -.231]$ ). The indirect relationship between distributive justice and helping behaviour via social exchange and supervisor identification was neither significant when ethical leadership was 1 *SD* below average ( $B = .000, SE = .001, p = .779, [-.002, .002]$ ), or 1 *SD* above average ethical leadership ( $B = .000, SE = .000, p = .768, [-.001, .001]$ ). Furthermore, the indirect relationship between procedural justice and helping behaviour via social exchange and supervisor identification was not significant for both levels of ethical leadership, for 1 *SD* below average ethical leadership ( $B = .004, SE = .010, p = .709, [-.015, .022]$ ), and for 1 *SD* above average ethical leadership ( $B = -.001, SE = .003, p = .692, [-.007, .004]$ ). The indirect relationship between interactional justice and helping behaviour via social exchange and supervisor identification was not significant when ethical leadership was high or low, for 1 *SD* below average ethical leadership ( $B = -.012, SE = .031, p = .705, [-.049, .072]$ ), and for 1 *SD* above average ethical leadership ( $B = -.004, SE = .009, p = .695, [-.022, .015]$ ). These results reveal no support for H15b, H16b and H17b. Therefore, the proposed serial moderated mediation was not supported. It is also surprising that the interaction effect, which was consistently significant across all analyses in all studies was significant does not reach significance in these analyses. This is likely due to the decrease in power resulting of the added variables.

Table 6.11: Results of the moderated mediation effect of ethical leadership on the indirect relationship between justice dimensions and job performance via social exchange and supervisor identification (H15a- H17a)

No	Variable	Beta	SE	T value	P value	95% CI	
						Lower	Upper
	Moderated mediation interaction	-.464	.102	-4.568	.000	-.664	-.265
H15a	Ethical leadership X social exchange → distributive justice → identification → job performance - SD (3.999)	.000	.001	-.098	.922	-.001	.001
	Ethical leadership X social exchange → distributive justice → identification → job performance M (4.253)	.000	.000	-.098	.922	-.001	.001
	Ethical leadership X social exchange → distributive justice → identification → job performance + SD( 5.555)	.000	.000	.100	.920	.000	.000
H16a	Ethical leadership X social exchange → procedural justice → identification → job performance - SD (3.999)	.001	.007	.102	.919	-.013	.014
	Ethical leadership X social exchange → procedural justice → identification → job performance M (4.253)	.001	.005	.102	.919	-.010	.011
	Ethical leadership X social exchange → procedural justice → identification → job performance + SD(5.999)	.000	.002	-.105	.917	-.005	.004
H17a	Ethical leadership X social exchange → interactional justice → identification → job performance - SD(3.999)	.002	.022	.103	.918	-.041	.045
	Ethical leadership X social exchange → interactional justice → identification → job performance M (4.253)	.002	.017	.103	.918	-.032	.036
	Ethical leadership X social exchange → interactional justice → identification → job performance + SD (5.555)	-.001	.007	-.105	.916	-.015	.014

Table 6.12: Results of the moderated mediation effect of ethical leadership on the indirect relationship between justice dimensions and helping behaviour via social exchange and supervisor identification (H15b- H17b)

No	Variable	Beta	SE	T value	P value	95% CI	
						Lower	Upper
	Moderated mediation interaction	-.458	.116	-3.955	.000	-.685	-.231
H15b	Ethical leadership X social exchange → distributive justice → identification → helping behaviour - SD (3.999)	.000	.001	-.281	.779	-.002	.002
	Ethical leadership X social exchange → distributive justice → identification → helping behaviour M (4.253)	.000	.001	-.279	.780	-.002	.001
	Ethical leadership X social exchange → distributive justice → identification → helping behaviour + SD (5.555)	.000	.000	.295	.768	-.001	.001
H16b	Ethical leadership X social exchange → procedural justice → identification → helping behaviour - SD (3.999)	.004	.010	.374	.709	-.015	.022
	Ethical leadership X social exchange → procedural justice → identification → helping behaviour M (4.253)	.003	.008	.369	.712	-.012	.018
	Ethical leadership X social exchange → procedural justice → identification → helping behaviour + SD(5.555)	-.001	.003	.396	.692	-.007	.004
H17b	Ethical leadership X social exchange → interactional justice → identification → helping behaviour - SD(3.999)	.012	.031	.378	.705	-.049	.072
	Ethical leadership X social exchange → interactional justice → identification → helping behaviour M (4.253)	.009	.025	.374	.708	-.039	.057
	Ethical leadership Social exchange → interactional justice → identification → helping behaviour + SD (5.555)	-.004	.009	-.392	.695	-.022	.015

#### 6.3.4.2 Team level analysis

Hypothesis 18 predicts that overall team perceptions of the justice of supervisors has a direct positive effect on team perceptions of ethical leadership. These relationships were tested by regressing ethical leadership on overall perceptions of supervisory justice on the between section of the Mplus model. As shown in Table 6.13, overall justice of supervisors was significantly related to ethical leadership ( $B = 1.241$ ,  $SE = .157$   $p < .001$ ), thus supporting hypothesis 18.

Table 6.13: Results of the direct effect of overall justice on the ethical leadership at team level (Hypothesis 18)

No	Hypothesized model	Betas	SE	t	P value
H18	overall supervisory justice → ethical leadership	1.241	.157	7.921	.000

#### 6.4 Discussion

The first objective of Study 2 was to replicate the findings of Study 1, which a) showed that the relationship between social exchange and supervisor identification was moderated by team perceptions of ethical leadership; b) revealed social exchange as a mediating mechanism for the relationships between each of procedural and interactional justice, and supervisor identification; and c) showed that the aforementioned mediating effect was conditional on the team perceptions of ethical leadership in such a way that the effect was stronger when ethical leadership was low. By testing whether these findings could be replicated in a different and larger sample, this second study allowed a higher degree of confidence in the robustness of the results.

The second objective was to extend Study 1 by a) including key work outcomes, and testing the overall mediating effects of social exchange and supervisor identification on the relationship between the justice dimensions and these outcomes (i.e. job performance and helping behaviour), and the role played by the perceptions of ethical leadership in this serial mediation effect; and b) by testing the role of overall justice as a team-level predictor of ethical leadership.

By replicating Study 1, the results of the direct effects between the justice dimensions and social exchange demonstrate that procedural and interactional justice were strongly and positively related to social exchange. As in Study 1, the effect of social exchange on supervisor identification was significant and positive, as expected.

Extending Study 1, the results of the direct effects of supervisor identification on job performance and helping behaviour were significant. Recent studies support this finding. For example, Wang and Jiang (2015), and Miscenko and Day (2016) find that supervisor identification had a positive effect on work related behaviours, including job performance and helping behaviour.

By replicating Study 1, the test for the moderating effect of ethical leadership on the relationship between social exchange and supervisor identification revealed that this relationship becomes stronger when ethical leadership is low rather than high, and, although this shows that there is an interaction effect as expected, this effect follows a different pattern from what was originally hypothesised. As explained previously, this finding then suggests that, instead of an incremental effect, ethical leadership has a compensatory effect on the relationship between social exchange and supervisory identification. That this pattern is confirmed in the second study strengthens the confidence in the robustness of the effect.

Additionally, extending Study 1, it was found that the indirect effect of social exchange on job performance via supervisor identification was conditional on ethical leadership, although the pattern, reflecting the interaction effect described before, did not reflect the predicted pattern (the enhancement as a result of the indirect effect of social exchange on job performance via supervisor identification, which is moderated by ethical leadership), but instead showed that the effect was stronger when ethical leadership was low. In more detail, the effect of social exchange on job performance via supervisor identification was significant when ethical leadership was low, but not significant when ethical leadership was high. Similar results were obtained for the relationship between social exchange and helping behaviour via supervisor identification. The effect of social exchange on helping behaviour via supervisor identification was significant when ethical leadership was low, but not significant when ethical leadership was high. As before, this relationship did not reflect the predicted pattern (the enhancement as a result of the indirect effect of social exchange on helping behaviour via supervisory identification, which is moderated by ethical leadership). One possible interpretation is that Western people focus more on the rules of leadership, which is in contrast to Asian people, who give more consideration to the interpersonal relationship with their supervisor. As a collective society, it can also be noted that in Saudi Arabia the influence of the social relationship with managers is much stronger than that in Western countries.

Replicating Study 1, it was found that there is a mediating effect of social exchange on the relationship between procedural and interactional justice and supervisor identification, but not for the effect of distributive justice. Some scholars suggest that income distribution and procedures tend to be established by the organisation, so these are likely to be associated with the organisation as a whole and less likely to influence the social exchange with the supervisor, while interactional justice is often received from one's supervisor, and thus more

obviously associated with one's individual manager (Cropanzano et al., 2002) and therefore more likely to influence social exchange. In addition, empirical studies show that social exchange mediates the relationship between each of the justice dimensions and different outcomes (e.g. Masterson et al., 2000; Rup and Cropanzano, 2002; Cropanzano, Prehar and Chen, 2002; Colquitt et al., 2001; Cohen-Charash and Spector, 2001; Aryee et al., 2002). Wang and his colleagues (2010) observe that interactional justice is positively related to social exchange with a supervisor, however, distributive and procedural justice tend to be more related to organisational commitment. Thus this study adds to this literature by providing clear evidence for the higher relevance of procedural and interactional justice in predicting social exchange with supervisor.

Also replicating Study 1, the test for the conditional effect of justice dimensions on supervisor identification via social exchange, depending on ethical leadership, revealed, as in Study 1, that the effects of interactional and procedural justice on supervisor identification were significant when ethical leadership was low, but were not significant when ethical leadership was high.

Extending Study 1, the mediating effects of supervisor identification on the relationships between social exchange and each of the outcomes (job performance and helping behaviour) were examined and supported by the results. This is in line with previous research, for instance a study by Tavares et al., (2016) identified a significant relationship between perceived organisational support (POS) and OCB via higher organisational identification. This study extended Tavares and his colleagues (2016) study by examining the mediating role of supervisor identification on the relationship between social exchange and both job performance and helping behaviour.

Furthermore, extending Study 1, the results of the serial/overall mediation effects demonstrated that there was not a significant relationship between distributive justice and the outcomes (i.e. job performance and helping behaviour) via social exchange and supervisor identification. However, procedural justice and interactional justice were significantly related to both job performance and helping behaviour via social exchange and supervisor identification.

These results mirror existent literature. For example, Organ and Konovsky (1989) suggested that employees' perception of the degree of justice in their organisation is leading to the presence of OCBs in the workplace, since just treatment is expected to lead to an effective change in the employees' mindsets concerning their relationship with their supervisor. Likewise, the results of Asamani and Opoku Mensah's (2013) field study showed that organisational justice dimensions can influence employees' OCB differently. As they found that procedural and interactional justice were significantly related to OCB, whereas distributive justice was not significantly related to OCB. This study extended these studies by

examining the effect of the three dimensions of justice on both job performance and helping behaviour.

This study also builds upon and extends work by Masterson and his colleagues (2000), Cropanzano et al., (2002), and Wang et al., (2010), who examined the role of social exchange with supervisor as a mediator on the relationship between justice and work outcomes. In this study we examine this relationship in greater detail and add an additional step in this causal chain, identifying supervisor identification as the link between social exchange and performance and helping behaviour.

Further extending Study 1, a serial moderated mediation linking all three justice dimensions to each of the outcomes (i.e. job performance and helping behaviour) via social exchange and supervisor identification depending on ethical leadership was tested. In the opposite of what was expected, no support was found for this condition on the moderator. This is surprising, as the previously tested conditional indirect effect linking social exchange to helping behaviour and performance via identification with the supervisor was significant for both, with the mediation being stronger when ethical leadership was low. This is therefore likely a consequence of a lack of power in the dataset to test such complex hypotheses involving chain mediations and moderation effects, and should not detract from the robustness of the finding documented across two studies revealing a compensatory interplay between ethical leadership and social exchange in predicting identification with the supervisor.

Furthermore, the research findings showed that demographic variables have little or no major effect on employees' justice perceptions. Employees' perceptions of justice were unrelated to their gender, education and tenure, except age. The research findings showed that there is significant relationship between age and employees' perceptions of justice, in contrast with Study 1 but similar to a study by Al-Zu'bi (2010), who found a strong relationship between age and organisational justice. This is because most responses were from younger people (aged 30-39) in study1. Studies found that younger people were more concerned about organisational justice than older people (Brienza & Bobocel, 2017).

Finally, Study 2 found support for the relationship between overall supervisory justice and ethical leadership at the team level. These findings highlight the role of overall supervisory justice in reinforcing high ethical standards in the workplace. As Brown and his colleagues (2005) demonstrate that the supervisor/leader is the legitimate source to create an overall fair working environment by providing employees with fair payment, transparent procedures and equal treatments. Prior research supports these findings (e.g. Mayer Aquino, Greenbaum, & Kuenzi, 2012; Philipp & Lopez, 2013; Xu et al., 2016; Schminke et al., 2015; Walumbwa et al., 2011 Resick et al., 2013). Mo and Shi (2016) maintain that there is a significant relationship between employees' perception of justice and ethical leadership. Fein et al., (2013) found a

strong relationship between the three dimensions of justice perceptions and ethical climate. This study extended prior research by examining overall supervisory justice and ethical leadership at a team level.

By examining all organisational justice dimensions as done in this study, scholars can better understand how justice perceptions influence employees' performance and behaviours (Masterson et al., 2000; Rup and Cropanzano, 2002; Cropanzano, Prehar and Chen, 2002; Colquitt et al., 2001; Cohen-Charash and Spector, 2001; Aryee et al., 2002). The findings highlight the importance of the role of ethical leadership as a moderator in enhancing the relationships among two of the three organisational justice dimensions and supervisor. These relationships appear to be the most direct antecedents of employees' attitudes and behaviours, and they provide a mechanism to explain how the perceived organisational justice from one single event can have long-term effects within organisations. To illustrate, within the entity framework, the single event justice must first be evaluated before they can affect the judgments of the social entity. Put differently, the justice event can come first before social entity justice. The paradigm of event justice informs us events can be viewed as unjust. While the paradigm of social entity informs us individual and people can be seen as unjust. Thus, it is possible that the perceptions events impact more global evaluations of social entities. The event paradigm focused on issues that occur early in the process, and the social entity paradigm focused on issues that occur later the process (Cropanzano et al., 2001).

In this research, the hypothesised model provides important insights into the study of the relationship between organisational justice and employees outcomes. First, the results indicated that organisational justice affects job performance and helping behaviour indirectly through the mediating effects of social exchange and supervisor identification. Second, among the three types of organisational justice, procedural and interactional justice are the best predictors of job performance and helping behaviour. One possible reason as to why distributive justice did not predict social exchange with the supervisor is because distributive justice is more related to organisational exchange rather than supervisor exchange (Colquitt et al., 2001; Cohen-Charash and Spector, 2001).

Finally, although social exchange variables have popularly been examined as the mediators between organisational justice and workplace outcomes (e.g. Aryee et al., 2002; Colquitt, 2008; Cropanzano and Rupp, 2008; Cropanzano et al., 2002; Masterson et al., 2000; Moorman, 1991), this research suggests that supervisor identification is important to fully understand the mediating mechanism. This further develops the relationship between organisational justice and job performance by extending the mediating mechanisms of the organisational justice's influence on the work outcomes. In particular, the social exchange theory explains a lot of the consequences of employees' organisational justice perception on

work outcomes, such supervisory identification (Blader and Tyler, 2009; He and Brown, 2013; Wang and Jiang 2015).

In the next chapter, the findings of Study 1 and Study 2 are integrated and discussed in light of the underlying theories and previous empirical evidence. Moreover, the theoretical and practical implications of the research findings are discussed and future research directions are offered in light of the limitations of this research.

## Chapter Seven

### General Discussion and Conclusion

#### 7.1 Introduction

Drawing on an integrated model of SET and SIT, this thesis proposed and tested a multilevel model of the processes linking organizational justice with the work outcomes of job performance and helping behaviour. Specifically, we examined supervisor social exchange and supervisor identification as serial mediating mechanisms and team-level ethical leadership as a cross level moderator of the supervisor social exchange-supervisor identification relationship. A Saudi sample of employees and their supervisors were used to test the thesis' hypotheses across two studies, Study 1 was used to provide an initial test of the hypothesized relationships of the mediating role of supervisor social exchange on the relationship between organizational justice and supervisor identification as well as the cross-level moderating influence of unit-level ethical leadership on the supervisor social exchange-supervisor identification relationship. Study 2 was used to replicate the findings obtained in Study 1 as well extended these findings. Specifically, it extended Study 1 by examining a) the serial mediating effects of social exchange and supervisor identification on the relationship between the justice dimensions and the work outcomes of job performance and helping behaviour and (b) by examining team-level supervisor overall justice as an antecedent of ethical leadership and therefore a distal driver of the moderated mediation paths we hypothesized.

The following section presents an integrated summary of the findings across the two studies and discusses the theoretical and practical implications of these findings. Finally, the limitations and strengths of this thesis, and recommendations for future research directions are discussed.

#### 7.2 Summary of key findings

The CFA results in both studies revealed support for the proposed multi-dimensional nature of justice. Furthermore, CFAs results revealed support for the hypothesised factor structure, indicating that the hypothesized seven-factor model had a superior fit relative to the other plausible models, highlighting the distinctiveness of the variables across the two studies.

Results of the MSEM analysis revealed three salient findings across the two studies. First, the dimensions of organisational justice related to social exchange with supervisors

which, in turn, mediated the relationships between justice dimensions and supervisor identification. Second, team-level ethical leadership moderated the relationship between social exchange with supervisor and supervisor identification. Third, team-level ethical leadership moderated the relationship between the dimensions of organisational justice and supervisor identification.

The findings of Study 2 extend those reported in Study 1 in a number of ways. First, the dimensions of organisational justice related to and the work outcomes of job performance and helping behaviour via social exchange and supervisor identification. Second, team-level ethical leadership moderated the relationship between dimensions of organisational justice related to and the work outcomes of job performance and helping behaviour via social exchange with supervisor and supervisor identification. Third, team-level supervisor overall justice related to ethical leadership.

### 7.2.1 Individual-level analysis

#### 7.2.1.1 The direct effects

The findings obtained from both studies revealed a non-significant relationship between distributive justice and supervisor social exchange (Hypothesis 1 was not supported) while procedural and interactional justice were both significantly related to social exchange thereby supporting Hypothesis 2 and 3. Furthermore, supervisor social exchange was shown to significantly relate to supervisor identification supporting Hypothesis 4. In extending these findings, Study 2 revealed supervisor identification significantly related to job performance (Hypothesis 4a) and helping behaviour (Hypothesis 4b). This finding suggests that the perception of justice in pay and reward systems will not affect social quality exchange, trust and reciprocation with the supervisor and instead supervisory social exchange is only affected by procedural and interactional justice (i.e., by whether employees perceive that their supervisors listen to them and treat them with respect and integrity). Thus, it seems that distributive justice fails to exert an effect on supervisory trust, it is also ineffective in leading to social exchange with the supervisor. This is likely because participants assume that decisions regarding the distribution of resources, although being enacted by the supervisor, are at large determined by the organisation's directives and rules, and are thus beyond the discretion of the supervisor and therefore not used as information to influence the level of social exchange developed with the supervisor. This assumption is even more likely to be the case in the Saudi context, characterised by high power distance, which leaves little autonomy and discretion to direct managers, who also have to respond to several higher layers in the organisation and follow allocated rules.

#### 7.2.1.2 Cross-level effects

The findings obtained from both studies revealed unexpected findings about the moderating effect of ethical leadership on the relationship between social exchange and supervisor identification; they showed that this relationship becomes stronger when ethical leadership is low rather than high, which although showing that there is an interaction effect as expected, follows a different pattern from what was originally hypothesized. This finding then suggests that, instead of an incremental effect, ethical leadership has a compensatory effect on the relationship between social exchange and supervisory identification. The fact that this pattern is confirmed in the second study strengthens our confidence in the robustness of the effect. Therefore, these findings only provided partial support for Hypothesis 5. Additionally, Philipp and Lopez (2013) examine the moderating role of ethical leadership. Ethical leadership moderated the relationships between psychological contracts and organizational outcomes. When ethical leadership was high, the negative relationships between transactional contracts and commitment were weaker than when ethical leadership was low.

#### 7.2.1.3 Mediating effects

Across both studies, the findings revealed that supervisor social exchange did not mediate the distributive justice-supervisor identification relationship (Hypothesis 6a was not supported). In contrast, both procedural (Hypothesis 6b was supported) and interactional (Hypothesis 6c was supported) justice related to supervisor identification but indirectly through supervisor social exchange. These findings underscore the importance of procedures and dignified treatment of employees, but not fairness of the pay policies as resources in the development and maintenance of supervisory social exchange.

#### 7.2.1.4 Moderated mediation effects

Across the two studies, the results of the moderated mediation analysis showed that unit-level ethical leadership did not moderate the hypothesized moderation mediation model involving distributive justice. Thus, Hypothesis 7 did not receive support. However, although unit-level ethical leadership moderated the moderation mediation model involving both procedural and interactional justice, contrary to our expectation, the results revealed these relationships to be stronger when unit ethical leadership was low rather than high. Thus, Hypothesis 8 and 9 received partial support. This finding suggests that the effects of interactional and procedural justice on supervisor identification were significant when ethical leadership was low, but were not significant when ethical leadership was high.

In Study 2, the moderating effect of ethical leadership was extended to examine the relationship between social exchange and job performance through the mediation effect of supervisor identification (Hypothesis 10a). The findings showed that the relationship between social exchange and job performance via supervisor identification was significant when ethical leadership was low rather than high. Therefore, a pattern was found, as opposed to finding a prediction. A similar result was obtained for helping behaviour: a low level of ethical leadership moderated positively the relationship between social exchange and helping behaviour via supervisor identification. Thus, these results showed partial support for Hypothesis 10a and Hypothesis 10b.

#### 7.2.1.5 Serial and overall mediation effects

Extending Study 1, the mediating effects of supervisor identification on the relationships between social exchange and each of the outcomes (job performance and helping behaviour) in Study 2 were positive, supporting Hypotheses 11a and 11b.

Extending Study 1, Study 2 showed that the relationship between distributive justice and job performance via social exchange and supervisor identification was not significant, which provided no support for Hypothesis 12a. Additionally, the relationship between distributive justice and helping behaviour via social exchange and supervisor identification was not significant, which provided no support for Hypothesis 12b.

Extending Study 1, there was a positive relationship between procedural and job performance via social exchange and supervisor identification, so Hypothesis 13a received support. As there was a positive relationship between procedural and helping behaviour via social exchange and supervisor identification, so Hypothesis 13b was also well supported. With regards to interactional justice, there were positive and strong relationships between interactional justice and each of job performance and behaviour via helping social exchange and supervisor identification, which supported Hypothesis 14a and Hypothesis 14b.

#### 7.2.1.6 Serial moderated mediation effects

Extending Study 1, in Study 2, the moderated mediation effects of ethical leadership were extended to examine the effects of ethical leadership on the relationship between the organisational justice dimensions and the outcomes; for job performance these are Hypotheses 15a, 16a and 17a, and for helping behaviour these are Hypotheses 15b, 16b and 17b. The results showed that this effect was not significant at all, so did not support Hypotheses 15a, 16a and 17a or Hypotheses 15b, 16b and 17b.

## 7.2.2 Team-level analysis

### 7.2.2.1 Direct effect

Finally, it was found in Study 2 that overall supervisory justice was positively related to ethical leadership. Thus, Hypothesis 18 was supported.

## 7.3 Theoretical implications

The findings across the two studies presented in this thesis have a number of theoretical implications. First, the significant relationship between dimensions of organisational justice and employees' outcomes (i.e., job performance and helping behaviour) through the mediating effect of both social exchange with supervisor and supervisor identification highlights the utility of integrating the two theoretical perspectives (i.e., social exchange and social identity) to explain the effects of organisational justice on employees' outcomes. Although these two theories have been examined separately as mediators in the justice literature (He & Brown, 2013), scholars have recently started to integrate these two theoretical perspectives to explain employee behaviour (Flynn, 2005; Hekman, Bigley, Steensma, & Hereford, 2009; Umphress, Bingham, & Mitchell, 2010; van Knippenberg, van Dick, & Tavares, 2007, Tavares et al., 2016). Thus, this thesis responds to calls made by He and Brown (2013) and Tavares and her colleagues (2016), who argue that identification and social exchange can be integrated to explain and understand employee behaviour.

These social exchange constructs have widely been seen as mediators between organisational justice and employee outcomes (e.g., Aryee et al., 2002; Aryee & Chay, 2001; Masterson et al., 2000; Rupp & Cropanzano, 2002; Wayne et al., 2002; Wang, Liao, Xia & Chang, 2010). The research findings presented here showed that employees' attitudes and behaviours can be affected by organisational justice via both social exchange with supervisors and supervisor identification. This finding is consistent with previous results (e.g., Loi et al., 2014; Rupp et al., 2014; Huang, Wang & Xie, 2014), and supports the notion that when employees received equal reward and were fairly treated by their supervisor, they tended to have better relations with the supervisor and view that supervisory relationship as an important factor in their definition of self (Huang et al., 2014). It is thus an important factor in their decision to devote more to the organisation in order to maintain this relationship by engaging in OCB. This finding provides new insights into the relationship between organisational justice and employees' performance by illustrating the mechanisms behind the effect of organisational justice on work performance. In particular, the findings illustrate the importance of core motives – high quality social exchange and supervisor identification – that

drive job performance and helping behaviour. According to the Loi et al., (2014) and Choi et al., (2014), the quality of the supervisor-subordinate relationship is fundamental in reinforcing an employee's social identification. Therefore, the organisation should pay great attention to developing high quality social exchange, as well as high social identification among employees. Doing so will increase employee outcomes.

Second, this study sheds new light on the moderating effect of team ethical leadership on the relationship between employees' perception of organisational justice and employees' performance. This is consistent with existing research, which has highlighted the importance of understanding leadership-related factors as boundary conditions of organisational justice (van Knippenberg et al., 2007; Collins & Mossholder, 2014; Lee&Wei, 2017). This thesis found that team ethical leadership played a boundary role in the indirect effect of justice dimensions on supervisor identification via social exchange (i.e., moderated mediation). This study shows empirically that high levels of ethical leadership serve as a compensatory boundary condition. In other words, where there is a high level of ethical leadership, organisational justice was related to supervisor identification. Consistent with social learning and social exchange theories, the findings showed that employees feel indebted to highly ethical leaders as they are fair, trustworthy and care about their needs. Thus, ethical leaders can influence the identity of employees (supervisor identification). As noted by van Knippenberg et al., (2007) the characteristics of the leader have implications for organisational justice. Moreover, Brown & Treviño (2006) highlight the importance of linking justice with ethical leadership, because ethical leaders are the most important moral agents influencing subordinates' behaviours and attitudes.

Lastly, we saw that a supervisor's overall justice influences employees' perceptions of ethical leadership and enhances our understanding of ethical leadership. Understanding the antecedents of ethical leadership in the workplace is thus important, because it can potentially create successfully actionable knowledge that organisations can leverage to develop ethical leaders (Mayer et al., 2012). Ethical leadership can create a fair and safe climate to attract and retain employees.

Justice plays an important role in developing ethical behaviour (Brown et al., 2005; Mo & Shi, 2017). Perceived overall fairness in the organisation, such as fair outcomes, clear procedures and fair treatment from the supervisor, is extremely important in triggering ethical leadership. Employees working under ethical leaders were more prone to perceive respect and dignity and receive fair outcomes. As a result, creating a fair climate in the workplace means developing ethical behaviours in leaders. This finding is consistent with prior studies by Liu & Loi (2012) and Xu, Lio & Ngo (2016), who found a positive relationship between

justice and ethical leadership. Indeed, the finding showed that employees' perceptions of the overall justice of a supervisor can enhance the leaders' ethical behaviour and decision making. As Elçi et al., (2015) point out, employees' organisational justice perceptions are strongly related to ethical contexts. Thus, this finding contributes to the ethical leadership literature, as there is a lack of research on the antecedents of ethical leadership, especially on the relationship between justice and ethical leadership (van Knippenberg, van Dick, & Tavares, 2007). This finding also offers an opportunity to determine the extent to which a supervisor treating subordinates fairly shapes perceptions of ethical leadership.

#### 7.4 Practical implications

The findings of this study bring about a number of practical implications. First, the significant relationship between organisational justice dimensions and employees' outcomes (i.e., job performance and helping behaviour), through the mediating effect of both social exchange with the supervisor and supervisor identification, highlights the importance of investing in both social identity and social exchange in order to enhance employee performance. Therefore, management practitioners should build a high-quality social relationship with their employees in order to facilitate this (i.e., supervisor identification). This in turn promotes positive outcomes in the organisation. As the findings revealed that social exchange with supervisors has a direct effect on supervisor identification and an indirect effect on job performance and helping behaviour, high-quality supervisor-subordinate relationships are a fundamental element for success in promoting employee identification to the supervisor and for them performing well and being willing to help others. Prior studies have proven that social exchange relationships with the supervisor are associated with supervisors' behaviours and personality (Loi et al., 2014 Choi et al., 2014). Therefore, it is important for the organisation to hire and train managers that reinforce quality supervisor-subordinate relationships. We know we are hiring leaders with strong morals when leaders demonstrate proper conduct through their actions and relationships and promote this kind of conduct to employees via interaction, communication and decision making. Some characteristics of an ethical leader would appear, such as listening to what employees saying, making fair decisions whilst having the best interest of employees in mind. In addition, organisations may find it useful to select and recruit more ethical leaders, who are able to build employees' trust and increase the organisational outcomes. To do so, organisations should strongly hold their ethics codes and hire leaders with high moral intensity. Furthermore, organisations should also train the leaders about the importance of having ethical norms and behaviours.

Second, the findings of this study reinforce the practical value in fostering ethical leadership behaviour in organisations. Managers might find it fruitful to hire and promote more

ethical leaders who are able to enhance fair perceptions in the workplace. To do so, organisations should hire leaders with strong morals. The findings of this study thus reinforce the practical value in fostering ethical leadership behaviour in the organisations. Managers might find it fruitful to hire and promote more ethical leaders, who will thus be able to enhance fair perceptions in the organisations (Brown & Treviño 2006).

As an ethical leader acts as a moral agent in the organisation to promote justice in the workplace, it is expected that ethical leaders' behaviour plays an important role in influencing employees' perceptions of organisational justice (Brown & Treviño, 2006a; Brown et al., 2005; Brown & Mitchell, 2010; Walumbwa et al., 2011). Fien, et al., (2013) argue that ethical leaders have the most powerful impact on employees' perceptions of organisational justice. Therefore, organisations should consider hiring ethical leaders and provide an ethical training programme for leaders that focuses on the importance of role modelling and ethical standards in the organisation. By doing this, employees can build trust, develop strong relationships with their supervisor and have a strong identification or emotional attachment with them. This will, in turn, make the employees identify more strongly and be more willing to engage in extra-role behaviour by helping others. As stated by Treviño et al., (2006), two way communication between employees and the leader can positively influence their behaviour in this regard.

#### 7.5 Strengths, limitations, and directions for future research

The study has several strengths. First, a methodological one. It used two studies that, in turn, used data from nine organisations across different sectors in Saudi Arabia. This means that the research findings can be generalised to a wide range of organisations or sectors in the country, and may apply to Saudi employees as well. Conducting further study that replicates the obtained findings was necessary for improving the generalizability of the findings to the wider Saudi population and confirm research findings. However, there are several reasons to perform replication. The most popular reasons to replicate studies is to confirm research findings, increase reliability and validity, and improve generalisation (Morrison, Matuszek & Self, 2010). Therefore, study 2 sought to confirm the findings of study 1. Replicating these findings in this way can enhance our confidence about the results obtained. Second, a subsidiary strength is the reliance on multi-source data in study 2. This study involved the distribution of questionnaires to both team members and team managers (i.e. multiple sources) in order to minimise problems associated with common method biases (Podsakoff et al., 2003) and reduce any feelings of "survey fatigue", given the lengthy nature of some of the scales used.

Despite these strengths there are a number of limitations that need to be taken into consideration when interpreting the findings. First, a cross-sectional research design was

used with data collected at a single point in time. Although the hypothesized serial mediated moderation model is grounded in theory and supported by existing literature, the cross-sectional design does not allow firm causal inference to be drawn (Chang et al., 2010). For example, supervisor identification can be an antecedent of organisational justice dimensions. That is to say, when employees have a strong identification or emotional attachment with their supervisor, they may be treated with dignity and respect and received a reward from their supervisor. In this respect, we cannot entirely rule out this reverse relationship due to the cross-sectional design of this research study. Therefore, researchers should adopt a longitudinal or multi-wave design to establish the causal basis of the relationships examined across the two studies.

Second, this study focused on ethical leadership style as the most important style affecting employees' perceptions of organisational justice. Therefore, future research should examine the moderating influence of similar leadership constructs (e.g., transformational and authentic leadership) on the relationship between organisational justice and employee outcomes. These styles do not conflict with the focus of linking organisational justice with ethical leadership literature. As Brown and Treviño (2006) mentioned, ethical leadership can differ from similar leadership constructs and explain more differences in outcomes compared to others. Yet, future research may moderate similar leadership styles, such as transformational leadership, to examine the moderating role in examining the relationship between organisational justice perception and workplace outcomes. As Collins & Mossholder, (2014) and Lee & Wei, (2017) note. There has been a lack of research examining leadership styles as boundary conditions of effects of organisational justice. This is surprising, as leadership is considered to be the main factor in shaping employees' behaviour and attitudes in the workplace (Collins & Mossholder, 2014; Lee & Wei, 2017).

Lastly, this thesis used purely quantitative methods (a multilevel survey design), as is the norm in justice research. Further research should explore why organisational justice dimensions influence job performance and helping behaviour via social exchange and supervisor identification by using a qualitative method (e.g. interviews or focus groups ) to complete these findings. Although it has been theoretically argued that ethical leadership is more likely to affect organisational justice than other positive styles of leadership (Transformational leadership, Bass, 1985), this hypothesis could have been tested using real-world experiences and with the rich information provided by qualitative data.

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## Appendices

### Appendix A: Research ethics materials

#### I. Consent Form



**Consent form** (to be filled and signed by each participant)

**Full title of Project:** The impact of organisational justice on employee performance – a multilevel approach

**Name of Researcher** : Munirah sarhan Alqahtani  
**Position** : Full time PhD Student

**Contact address of Researcher:**

Doctoral Researcher  
Aston Business School, Aston University  
Birmingham B4 7ET  
UK Mobile : [REDACTED]  
Saudi Mobile : [REDACTED]  
Email : [REDACTED]

**You are filling this form because you have decided to participate in the study.  
Please tick in the box beside each statement that you are agree with:**

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.

I agree to take part in the above study.

I agree that my data gathered in this study may be stored (after it has been anonymised) in a specialist data centre and may be used for future research.



## II. Participant Briefing Sheet



**Study title:** The impact of organisational justice on employee performance – a multilevel approach

*You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.*

This study examines the effect of organisational context, on employees' performance and behaviours to develop social exchange and social identity theories at individual level and team level. This study will provide a comprehensive picture of how organisational context is the most influential element in the workplace and it has a significant effect on behavioural outcomes and performance.

However, you are invited to participate and take part in this study because your participation will add a significant value to this study. It will contribute to a greater understanding of employees' perceptions of an organisation's management practices, reveal important aspects of the work environment and suggest ways to how to enhance well balanced and productive climate. Thus, you will be receiving email contains link into the survey. *It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw privately at any time and without giving a reason.*

This research will be conducted in two periods. First period, you all be asked to fill the questionnaire through the link which will be sending to your email. In, two months' time you will receive another email for completion of a second questionnaire. All information will be collected, it will be kept strictly confidential and all data will be analysed by the researcher herself and supervisory team.

Data generated by this research will be retained in accordance with Aston University's policy on Academic Integrity. The data generated in the course of the research will be kept and stored securely in electronic form for the duration of the PhD study. Confidentiality and anonymity will be ensured in data collection, storage, sharing, and publication of the research. No organisation/individual names will be mentioned to any third parties. This includes the owners, managers, and colleagues in your organisation. In other words, no one will know who shared what with me.

The results of this study will be written in a thesis for the degree of Doctor of Philosophy in Management in Aston University. The research will also be published in international journals but no participating organisations and individuals will be identified in the publications.

This research is funded by higher education in Saudi Arabia and is conducted as part of a PhD programme in Management at Aston Business School in Birmingham. This research has been reviewed and given favourable opinion by Aston University Research Ethics Committee.

### **Contact for Further Information**

Name of researcher: Munirah Alqahtani

Name of supervisors: Claudia Sacramento / Sam Aryee

If you have any concerns about the way in which the study has been conducted, you should contact the Secretary of the Aston Business School Research Ethics Committee on [REDACTED] or telephone [REDACTED]

Thank you for taking time to read the information sheet and for your participation in this study, your support is much appreciated

Date 20/7/2015

### III. Supervisors' Information Sheet



Dear supervisor,

My name is Munirah Alqahtani, a full-time PhD student of Aston University in the UK. I am writing to invite you to participate in a study on large organisations in Saudi Arabia. The title of the study is "The impact of organisational justice on employee performance – a multilevel approach."

Before you decide whether to take part, it is important for you to understand, why the research is being done and what it will involve. I will be grateful if you could take the time to read the below information and the enclosed Participant Information Sheet.

The study you are invited to participate in is funded by the higher education in Saudi Arabia and conducted at Aston University. It will investigate the relationship between organisational justice and employees' performance.

If you participate in this research, you will receive a copy of the published results. Your participation will contribute in building our understanding of the nature of organisational justice in the Saudi context. Your participation will offer valuable insights and lead the way to generating useful guidelines for all large organisations in Saudi. This could help improve the outcomes of future strategy and the overall performance of firms including yours.

With regards to handling the information that I will get from your organisation, I assure you that all the information you will share will be kept confidential during the study and will be anonymised in the final report. No organisation or individual will be mentioned or referred to when the findings will be eventually shared and published. All collected data (in paper and online survey) will be destroyed upon the completion of the PhD study according to Aston Business School recommendations for 'Data Collection, Storage and Analysis'. Please be assured that this research is conducted in strict accordance with the Aston University Research Ethics Committee. If you will have any concerns, at any point in time, about your participation and the way this study will be conducted, please contact the Secretary of the Aston Business School Research Ethics Committee on [REDACTED] or telephone [REDACTED]

If you agree that your organisation participates in this research, I kindly request you to select 7-14 employees to complete the employees' questionnaire. You will be asked to rate your employees' performance and you will be asked to also reflected on their own supervisors behaviours thus allowing to exam the dissemination of Human resource practices throughout the organisation.

To further discuss this research and the nature of your involvement in person, please feel free to contact me on [REDACTED] or [REDACTED]

Thank you so much for taking the time to read this letter. Your participation is highly needed and I am looking forward to receiving a positive response.

Yours sincerely,

**Munirah Alqahtani**

Doctoral Researcher

Work Organisational Psychology

Aston Business School

Aston University

#### IV. Ethical Approval Study 1



Munirah Alqahtani  
ABS Research Student  
Date: 26/08/15

Dear Munirah,

I am pleased to be able to inform you that the ABS Research Ethics Committee has approved your ethics application. For future reference please quote 13:06/15.



*JR* Best wishes

Professor John Rudd  
(Associate Dean of Research)

## V. Ethical Approval study 2



ABS Research Student: Munirah Alqahtani

Date: 04 August 2016

Dear Munirah

Title	The impact of organisational justice on employee performance – a multilevel approach.
REC REF	09: 07/16

### Confirmation of Ethical Approval

I am pleased to be able to inform you that the ABS Research Ethics Committee has approved the above research on the basis described in the Application Form, Protocol and supporting documentation as listed below.

### Approved Documents

The final list of documents reviewed and approved by the committee is as follows:

Document	Version	Date
Ethics Application – Study 2	V1	11/07/16
Questionnaire – Subordinates Study 2	V1	11/07/16
Questionnaire (Arabic)	V1	11/07/16

### Reporting Requirements

The details of the investigation will be retained. You should notify the ABS Ethics Committee of any adverse events which occur in connection with this study and/or which may alter its ethical consideration, and/or any difficulties experienced by the volunteer subjects.

If you intend to make any future protocol amendments these must be approved by the Ethics Committee prior to implementation

Good luck with your research.

Best wishes

   
Professor Richard Crisp  
(Associate Dean of Research)

## Appendix B: Employee survey (Study1)

### Employee-Organisation Relationship Survey – Study1

Dear Respondent

We are writing to kindly request your participation in the above study by completing the attached survey. Respondents were randomly selected from employees in your organization.

The objective of the study is to examine employees' experience of their organizations' human resource practices and the influence of these practices on their quality of work life.

Your participation is important to the study because it will contribute to a greater understanding of employees' perceptions of an organization's human resource practices, reveal important aspects of the employment relationship, and suggest ways to satisfy employee and organizational needs or goals.

Please read each question carefully and answer it according to how you personally feel about it. There are no RIGHT or WRONG answers. For the study to be meaningful, it is important that you complete all the questions in this survey. This research is being conducted as a part of a PhD project.

In accordance with the ethics of behavioural science research, individual responses will be completely CONFIDENTIAL. Please return completed questionnaires to the survey coordinator in your organization.

Yours sincerely,

Your name ..... Department name .....



## Section A

(i) The statements below describe employees' perceived fairness of the treatment they receive from their immediate supervisor. For each statement, indicate the extent to which it describes the procedures your immediate supervisor uses in making decisions that affect you.

	<b>Extremely small extent</b>	<b>Very Small Extent</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Large Extent</b>	<b>Very Large Extent</b>	<b>Extremely large extent</b>
<b>1. Are you able to express your views during those procedures?</b>	1	2	3	4	5	6	7
<b>2. Are you able to appeal the decisions arrived at by those procedures?</b>	1	2	3	4	5	6	7
<b>3. Can you influence the decisions arrived at by those procedures?</b>	1	2	3	4	5	6	7
<b>4. Are those procedures based on accurate information?</b>	1	2	3	4	5	6	7
<b>5. Are those procedures applied consistently?</b>	1	2	3	4	5	6	7
<b>6. Do those procedures uphold ethical and moral standards?</b>	1	2	3	4	5	6	7
<b>7. Are those procedures free of bias?</b>	1	2	3	4	5	6	7

(ii) The questions below refer to the work outcomes you receive from your supervisor such as pay, rewards, evaluations, promotions, assignments, etc. For each question, indicate the extent of the fairness of that particular outcome.

	<b>Extremely small extent</b>	<b>Very Small Extent</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Large Extent</b>	<b>Very Large Extent</b>	<b>Extremely Large Extent</b>
<b>1. Do those outcomes reflect the effort you have put into your work?</b>	1	2	3	4	5	6	7
<b>2. Do those outcomes reflect what you have contributed to your work?</b>	1	2	3	4	5	6	7
<b>3. Are those outcomes appropriate for the work you have completed?</b>	1	2	3	4	5	6	7
<b>4. Are those outcomes justified, given your performance?</b>	1	2	3	4	5	6	7

(iv)The questions below refer to the fairness of the interactions you have with your supervisor when making decisions that affect you. For each question, indicate the extent of the fairness of your immediate supervisor’s interactions with you or treatment of you.

	<b>Extremel y small extent</b>	<b>Very Small Extent</b>	<b>Small Extent</b>	<b>Mode rate Extent</b>	<b>Large Extent</b>	<b>Very Large Extent</b>	<b>Extremely large extent</b>
<b>1. Does he/she treat you in a polite manner?</b>	1	2	3	4	5	6	7
<b>2. Does he/she refrain from improper remarks or comments?</b>	1	2	3	4	5	6	7
<b>3. Does he/she treat you with dignity?</b>	1	2	3	4	5	6	7
<b>4. Does he/she treat you with respect?</b>	1	2	3	4	5	6	7

(iv)The questions below refer to the explanations your supervisor offers as decision-making procedures are implemented. For each question, indicate the extent of the fairness of your immediate supervisor’s explanations of procedures and decisions.

	<b>Extremely small extent</b>	<b>Very Small Extent</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Large Extent</b>	<b>Very Large Extent</b>	<b>Extremely large Extent</b>
<b>1. Is he/she candid when communicating with you?</b>	1	2	3	4	5	6	7
<b>2. Does he/she tailor communications to meet individuals ‘needs?</b>	1	2	3	4	5	6	7
<b>3. Does he/she explain decision-making procedures thoroughly?</b>	1	2	3	4	5	6	7
<b>4. Does he/she communicate details in a timely manner?</b>	1	2	3	4	5	6	7
<b>5. Are his/her explanations regarding procedures reasonable?</b>	1	2	3	4	5	6	7

## Section B

(i) Below are several terms that can be used to describe a work relationship. For each, please indicate whether that term accurately describes your relationship with your supervisor. Please indicate to what extent you agree with the following statements.

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Disagree somewhat</b>	<b>Undecided</b>	<b>Agree somewhat</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	My supervisor and I have a two-way exchange relationship	1	2	3	4	5	6	7
<b>2</b>	I do not have to specify the exact conditions to know my supervisor will return a favour	1	2	3	4	5	6	7
<b>3</b>	If I do something for my supervisor, my supervisor will eventually repay me	1	2	3	4	5	6	7
<b>4</b>	I have a balance of inputs and outputs with my supervisor	1	2	3	4	5	6	7
<b>5</b>	My efforts are reciprocated by my supervisor	1	2	3	4	5	6	7
<b>6</b>	My relationship with my supervisor is composed of comparable exchanges of giving and taking	1	2	3	4	5	6	7
<b>7</b>	When I give effort at work, my supervisor will return it	1	2	3	4	5	6	7
<b>8</b>	Voluntary actions on my part will be returned in some way by my supervisor	1	2	3	4	5	6	7

### Section C

(i) Below are statements that describe a relational bond an employee may have with their immediate or direct supervisor. For each statement, indicate the extent of your agreement or disagreement as it describes the relational bond you have with your immediate supervisor.

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Undecided</b>	<b>Somewhat agree</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	I view the success of my supervisor as my own success	1	2	3	4	5	6	7
<b>2</b>	I am proud to tell others I work with this supervisor	1	2	3	4	5	6	7
<b>3</b>	My supervisor is a role model	1	2	3	4	5	6	7
<b>4</b>	I highly identify with my supervisor of my group	1	2	3	4	5	6	7
<b>5</b>	I consider my supervisor as a symbol	1	2	3	4	5	6	7

(ii) The statements below describe employees' perceptions of their work environment. For each statement, indicate the extent of your agreement or disagreement as a description of your work environment as you perceive it.

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree or disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	There is an opportunity for communicating my ideas and concerns about how to improve the quality of our work	1	2	3	4	5
<b>2</b>	My immediate supervisor listens to and acts upon what my colleagues and I have to say	1	2	3	4	5
<b>3</b>	Senior management values employees and demonstrates a belief that people add value	1	2	3	4	5
<b>4</b>	My immediate supervisor values employees and demonstrates a belief that employees add value	1	2	3	4	5
<b>5</b>	I have received the training I need to support the company's goals and strategies	1	2	3	4	5
<b>6</b>	I receive training and education as an ongoing part of my job	1	2	3	4	5
<b>7</b>	I am given an opportunity to improve my work-related skills at my present company	1	2	3	4	5
<b>8</b>	The recognition I receive is appropriate to my achievements	1	2	3	4	5
<b>9</b>	I am recognized when I give extra effort in my job	1	2	3	4	5
<b>10</b>	The recognition I get in this job is based on how good a job I do	1	2	3	4	5

**Section D– Demographic and background information**

**1-Gender** : Male  Female

**2- Age** : under30  30-39  40-49  51- above

**3 -Marital status:** Single  Married

**4-Education** : High school- below  Diploma  Undergraduate  Postgraduate

**5-Work experience:** 3 years or less experience  4 -5 years  6 -10 years   
11-15 years  More than 15 years

**6- Average number of hours worked per week:**

Under 20 hours  20-30 hours  31-40 hours  over 40 hours

**7- Length of Relationship with supervisor:**

7 years and less  8 – 13years  14 years and above

**8 – Occupation:**

Administrative  Business Management  Computer Specialist  Engineer   
Human Resources  Information Technology  Program Management  Other .....

**THE END**

Kindly go over the questionnaire and ensure you have answered all the questions. Please insert the answered questionnaire in the attached envelope. Once again, many thanks for your time and patience in completing the questionnaire.

## دراسة العلاقة بين الموظف والمنظمة الادارية

عزيزي الموظف ..

ارجو التكرم بالمشاركة في الدراسة المذكورة أعلاه و تعبئة الاستبيان المرفق .علما بانه تم اختيار العينة عشوائياً من الموظفين في مؤسستك.

الهدف من هذه الدراسة هو دراسة تصورات الموظفين ذوي الخبرة على المنظمة و تطبيق الموارد البشرية و تأثير هذا التطبيق على بيئة العمل.

مشاركتك في هذه الدراسة أمر مهم و فعّال لانها سوف تساهم في زيادة وعي الموظفين في فهم تطبيق الموارد البشرية، و يكشف عن جوانب هامة في علاقة العمل، واقتراح سبل تلبية الاحتياجات للموظف و تحقيق أهداف المنظمة.

يرجى قراءة كل سؤال بعناية و الاجابة عليه بحسب ما تشعر به . ليس هناك إجابات صحيحة أو إجابات خاطئة في هذه الدراسة ، فمن المهم أن تقوم بإكمال الاجابة على جميع الأسئلة في هذه الدراسة الاستقصائية.

وفقا لأخلاقيات البحث في العلوم السلوكية، جميع الردود فردية و سرية تماما .يرجى إعادة الاستبيان بعد الاجابة عليه لمنسق الدراسة في مؤسستك.

وتفضلوا بقبول فائق الاحترام،،

اسم الموظف :.....



القسم (أ)

(1) الأسئلة أدناه تصف الى اي مدى يشعر الموظف بالمساواة من خلال الاجراءات المتبعة في صنع القرارات، فكل سؤال

يبين مدى وصف هذه الاجراءات .

الأسئلة							
الى مدى محدود للاغاية	الى مدى محدود جدا	الى مدى كبير	الى مدى متوسط	الى مدى محدود	الى مدى محدود جدا	الى مدى كبير للاغاية	
1	2	3	4	5	6	7	هل تستطيع أن تعبر عن أفكارك خلال هذه الاجراءات ؟
1	2	3	4	5	6	7	هل أنت قادر على طلب اعادة النظر في القرارات التي تم التوصل اليها في هذه الاجراءات ؟
1	2	3	4	5	6	7	هل يمكن لك أن تؤثر على القرارات التي تم التوصل اليها في هذه الاجراءات ؟
1	2	3	4	5	6	7	هل هذه الاجراءات قائمة على الدقة في المعلومات؟
1	2	3	4	5	6	7	هل يتم تطبيق هذه الإجراءات بشكل مستمر ؟
1	2	3	4	5	6	7	هل هذه الإجراءات ذات معايير أخلاقية وأدبية؟
1	2	3	4	5	6	7	هل هذه الاجراءات خالية من التحيز ؟

(2) الأسئلة أدناه تشير إلى أي مدى تصف نتائج الاعمال التي تقوم بها مثل المكافآت ، والعلاوات والترقيات والانتدابات وغيرها .

الأسئلة							
الى مدى محدود للاغاية	الى مدى محدود جدا	الى مدى كبير	الى مدى متوسط	الى مدى محدود	الى مدى محدود جدا	الى مدى كبير للاغاية	
1	2	3	4	5	6	7	هل هذه النتائج تعكس الجهود المبذولة في عملك ؟
1	2	3	4	5	6	7	هل هذه النتائج تعكس ما تساهم به في عملك ؟
1	2	3	4	5	6	7	هل هذه النتائج ملائمة لطبيعة عملك ؟
1	2	3	4	5	6	7	هل هذه النتائج تعتمد على حسب أدائك؟

(3) الأسئلة أدناه تشير إلى أي مدى يتم التفاعل بينك وبين مشرفك المباشر عند اتخاذ القرارات التي تؤثر في طريقة المعاملة.

الأسئلة							
الى مدى محدود للاغاية	الى مدى محدود جدا	الى مدى كبير	الى مدى متوسط	الى مدى محدود	الى مدى محدود جدا	الى مدى كبير للاغاية	
1	2	3	4	5	6	7	هل يتم التعامل معك بأسلوب مهذب ؟
1	2	3	4	5	6	7	هل يتم الامتناع عن القاء التعليقات الغير لائقة ؟
1	2	3	4	5	6	7	هل يتم التعامل معك بكرامة ؟
1	2	3	4	5	6	7	هل يتم التعامل معك باحترام؟

(4) الأسئلة أدناه تشير إلى أي مدى يتم توضيح إجراءات اتخاذ القرارات وتنفيذها بينك وبين مشرفك المباشر.

الأسئلة							
الى مدى محدود للاغاية	الى مدى كبير جدا	الى مدى كبير	الى مدى متوسط	الى مدى محدود	الى مدى محدود جدا	الى مدى كبير للاغاية	
1	2	3	4	5	6	7	هل لديهم صراحة عند التواصل معك ؟
1	2	3	4	5	6	7	هل يهتمون في التواصل لتلبية احتياجات "الموظفين" ؟
1	2	3	4	5	6	7	هل لديهم توضيح لكيفية اتخاذ القرارات بدقة ؟
1	2	3	4	5	6	7	هل يوضحون التفاصيل في الوقت المناسب؟
1	2	3	4	5	6	7	هل يقومون بتوضيح الإجراءات بشكل معقول؟

القسم (ب)

( 1 ) فيما يلي عدة عبارات تصف طبيعة العلاقات في العمل ، يرجى الإشارة إلى ما إذا كانت هذه العبارة تصف بدقة علاقتك مع المشرف المباشر.

العبارات	اعارض بشدة	اعارض	اعارض إلى حد ما	متردّد	موافق إلى حد ما	موافق	موافق بشدة
1 العلاقة بيني و بين المشرف علاقة تبادل	1	2	3	4	5	6	7
2 لا يتوجب علي شرح بعض الظروف لانني اعرف ان المشرف سيقف في صالحني	1	2	3	4	5	6	7
3 لدى علم بان اي عمل اقوم به لمشرفي سوف يكافئني لاحقاً	1	2	3	4	5	6	7
4 اقوم بعملية التوازن بين مجهودي و نتائج عملي مع مشرفي	1	2	3	4	5	6	7
5 جهودي تقابل بالمثل من المشرف	1	2	3	4	5	6	7
6 علاقتي مع المشرف علاقة مماثلة تتألف من تبادل الأخذ و العطاء بنفس المقدار	1	2	3	4	5	6	7
7 اعلم انه عندما أبذل مجهود في عملي، سوف يعود علي بالنفع لاحقاً مع مشرفي	1	2	3	4	5	6	7
8 اعلم بان قيامي ببعض الاعمال التطوعية سوف يعود بالنفع علي من مشرفي	1	2	3	4	5	6	7

( 2 ) العبارات أدناه تصف سلوكيات المشرف أو الرئيس المباشر في مكان العمل. فكل عبارة تشير الى مدى الاتفاق أو الاختلاف في وصفك لتصرفات و سلوكيات مشرفك أو رئيسك المباشر.

العبارات	أعارض بشدة	أعارض	أعارض إلى حد ما	متردّد	موافق نوعاً ما	موافق	موافق بشدة
1 يناقش مشرفي المباشر مع الموظفين جميع القيم الاخلاقية في العمل	1	2	3	4	5	6	7
2 مشرفي المباشر يمكن الوثوق به	1	2	3	4	5	6	7
3 مشرفي المباشر يصنع قرارات عادلة ومتوازنة	1	2	3	4	5	6	7
4 مشرفي المباشر يضرب به المثل في كيفية عمل الأشياء بطريقة اخلاقية صحيحة	1	2	3	4	5	6	7
5 مشرفي المباشر يضع مصالح الموظفين في عين الاعتبار	1	2	3	4	5	6	7
6 مشرفي المباشر لا يعرف النجاح فقط بالنتائج ولكن أيضاً يعرف كيفية الحصول على نتائج فعّاله	1	2	3	4	5	6	7
7 مشرفي المباشر يستمع الى ما يقوله الموظفون	1	2	3	4	5	6	7
8 عند اتخاذ القرارات، يسألنا المشرف المباشر " ما هو الصواب لفعله ؟	1	2	3	4	5	6	7
9 يعيش مشرفي المباشر الحياة الشخصية بطريقة أخلاقية	1	2	3	4	5	6	7
10 يضبط مشرفي المباشر الموظفين الذين ينتهكون الضوابط والمعايير الأخلاقية في العمل	1	2	3	4	5	6	7

القسم (ج)

(1) وفيما يلي العبارات تصف العلاقة بينك و بين المشرف المباشر. فكل عبارة تبين مدى الاتفاق أو الخلاف في وصف علاقتك مع المشرف المباشر

العبارات	اعراض بشدة	اعراض	اعراض إلى حد ما	متردّد	موافق نوعا ما	موافق	موافق بشدة
1 أرى أن نجاح مشرفي هو نجاحي	1	2	3	4	5	6	7
2 أنا فخور أن أقول للأخريين بانني أعمل مع هذا المشرف	1	2	3	4	5	6	7
3 مشرفي هو القدوة لي في عملي	1	2	3	4	5	6	7
4 انا اعترف بشكل كبير بدور مشرفي في العمل	1	2	3	4	5	6	7
5 أعتبر مشرفي مثلاً يُحتذى به	1	2	3	4	5	6	7

القسم (د)

البيانات الشخصية، يرجى وضع علامة في الخانة المناسبة.

- (1) النوع: ذكر  أنثى
- (2) العمر: أقل من 30  من 30, أقل  39 من 40, أقل  49 من 51, أعلاه
- (3) الوضع الاجتماعي: متزوج  أعزب
- (4) التعليم: الثانوية – أدناه  دبلوم  بكالوريوس  ماجستير - دكتوراه
- (5) الخبرة في مجال العمل: 3 سنوات أو أقل  من 4 إلى 5 سنوات  من 6 إلى 10 سنة  من 11 إلى 15 سنة
- (6) أكثر من 15 عاما.  متوسط عدد ساعات العمل في الاسبوع:
- (7) أقل من 20 ساعة  من 20 إلى 30 ساعة  من 31 إلى 40 ساعة  أكثر من 40 ساعة
- (8) مدة العمل مع المشرف الحالي:
- من 7 سنوات أو أقل  من 8 سنوات إلى 13 سنة  من 14 سنة فما فوق
- المهنة:
- الأعمال الإدارية  الأعمال التسويقية  مهندس  متخصص في الكمبيوتر

إدارة الموارد البشرية  تكنولوجيا المعلومات

أخرى .....

النهاية ..

تأكد من الإجابة على كافة الأسئلة ثم يرجى إدخال الاستبيان في الطرف المرفق. مرة أخرى شكرا جزيلاً على وقتك و صبرك

في اكمال هذا الاستبيان...

## **Appendix C: Employees survey (Study 2)**

### **Employee-Organisation Relationship Survey (2)**

Dear Respondent

We are writing to kindly request your participation in the above study by completing the attached survey. Respondents were randomly selected from employees in your organization.

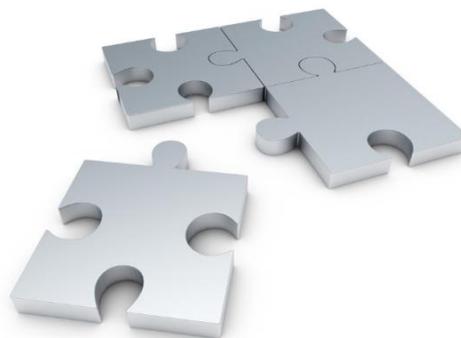
The objective of the study is to examine employees' experience of their organizations' human resource practices and the influence of these practices on their quality of work life.

Your participation is important to the study because it will contribute to a greater understanding of employees' perceptions of an organization's human resource practices, reveal important aspects of the employment relationship, and suggest ways to satisfy employee and organizational needs or goals.

Please read each question carefully and answer it according to how you personally feel about it. There are no RIGHT or WRONG answers. For the study to be meaningful, it is important that you complete all the questions in this survey. After four weeks, you will receive another questionnaire need to be completed which is part of this research study. This research is being conducted as a part of a PhD project.

In accordance with the ethics of behavioural science research, individual responses will be completely CONFIDENTIAL. Please return completed questionnaires to the survey coordinator in your organization.

Yours sincerely,



### Section A

(i) Below are several terms that can be used to describe a work relationship. For each, please indicate whether that term accurately describes your relationship with your supervisor. Please indicate to what extent you agree with the following statements.

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	My supervisor and I have a two-way exchange relationship	1	2	3	4	5
<b>2</b>	My relationship with my supervisor is composed of comparable exchanges of giving and taking	1	2	3	4	5
<b>3</b>	My efforts are reciprocated by my supervisor	1	2	3	4	5
<b>4</b>	I do not have to specify the exact conditions to know my supervisor will return a favour	1	2	3	4	5
<b>5</b>	My supervisor and I can freely share our ideas, feelings, and hopes	1	2	3	4	5
<b>6</b>	My relationship with my supervisor is based on mutual trust	1	2	3	4	5
<b>7</b>	If I do something for my supervisor, my supervisor will eventually repay me	1	2	3	4	5
<b>8</b>	My working relationship with my supervisor is effective	1	2	3	4	5
<b>9</b>	I can talk freely to my supervisor about difficulties I am having at work and know that my supervisor will want to listen	1	2	3	4	5
<b>10</b>	If I shared my problems with my supervisor, I know that my supervisor would respond constructively and caringly	1	2	3	4	5
<b>11</b>	I would have to say that my supervisor and I have both made considerable emotional investments in our working relationship	1	2	3	4	5
<b>12</b>	I have a balance of inputs and outputs with my supervisor	1	2	3	4	5

(ii)The statements below describe a leader’s attitude and behaviours at the workplace. For each statement, indicate the extent of your agreement or disagreement as a description of your immediate supervisor’s behaviours in his/her interactions with you.

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	My immediate supervisor discusses business ethics or values with employees	1	2	3	4	5
<b>2</b>	My immediate supervisor can be trusted	1	2	3	4	5
<b>3</b>	My immediate supervisor makes fair and balanced decisions.	1	2	3	4	5
<b>4</b>	My immediate supervisor sets an example of how to do things the right way in terms of ethics	1	2	3	4	5
<b>5</b>	My immediate supervisor has the best interests of employees in mind	1	2	3	4	5
<b>6</b>	My immediate supervisor defines success not just by results but also the way that they are obtained	1	2	3	4	5
<b>7</b>	My immediate supervisor listens to what employees have to say	1	2	3	4	5
<b>8</b>	When making decisions, my immediate supervisor asks “what is the right thing to do?”	1	2	3	4	5
<b>9</b>	My immediate supervisor conducts his/her personal life in an ethical manner	1	2	3	4	5
<b>10</b>	My immediate supervisor disciplines employees who violate ethical standards	1	2	3	4	5

### Section B

(I) Below are statements that describe perceived fairness of supervisors. For each statement, indicate the extent of your agreement or disagreement by circling the response that best describes how you feel about it.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<b>1. Overall, my supervisor treats me fairly</b>	1	2	3	4	5
<b>2. Most of the people who work with my supervisor would say they are often treated fairly</b>	1	2	3	4	5
<b>3. In general, I can count on my supervisor to be fair</b>	1	2	3	4	5
<b>4. In general, the treatment I receive from my supervisor is fair</b>	1	2	3	4	5
<b>5. Usually, the way things work with my supervisor are not fair</b>	1	2	3	4	5
<b>6. Generally, this supervisor treats his/her employees fairly</b>	1	2	3	4	5

(ii) The statements below describe employees' perceived fairness of the treatment they receive from their immediate supervisor. For each statement, indicate the extent to which it describes the procedures your immediate supervisor uses in making decisions that affect you.

	Extremely small extent	Small Extent	Moderate Extent	Large Extent	Extremely large extent
<b>1. Are you able to express your views during those procedures?</b>	1	2	3	4	5
<b>2. Are you able to appeal the decisions arrived at by those procedures?</b>	1	2	3	4	5
<b>3. Can you influence the decisions arrived at by those procedures?</b>	1	2	3	4	5
<b>4. Are those procedures based on accurate information?</b>	1	2	3	4	5
<b>5. Are those procedures applied consistently?</b>	1	2	3	4	5
<b>6. Do those procedures uphold ethical and moral standards?</b>	1	2	3	4	5
<b>7. Are those procedures free of bias?</b>	1	2	3	4	5

(iii) The questions below refer to the work outcomes you receive from your supervisor such as pay, rewards, evaluations, promotions, assignments, etc. For each question, indicate the extent of the fairness of that particular outcome.

	<b>Extremely small extent</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Large Extent</b>	<b>Extremely Large Extent</b>
<b>1. Do those outcomes reflect the effort you have put into your work?</b>	1	2	3	4	5
<b>2. Do those outcomes reflect what you have contributed to your work?</b>	1	2	3	4	5
<b>3. Are those outcomes appropriate for the work you have completed?</b>	1	2	3	4	5
<b>4. Are those outcomes justified, given your performance?</b>	1	2	3	4	5

(iv) The questions below refer to the fairness of the interactions you have with your supervisor when making decisions that affect you. For each question, indicate the extent of the fairness of your immediate supervisor's interactions with you or treatment of you.

	<b>Extremely small extent</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Large Extent</b>	<b>Extremely large extent</b>
<b>1. Does your supervisor treat you in a polite manner?</b>	1	2	3	4	5
<b>2. Does your supervisor refrain from improper remarks or comments?</b>	1	2	3	4	5
<b>3. Does your supervisor treat you with dignity?</b>	1	2	3	4	5
<b>4. Does your supervisor treat you with respect?</b>	1	2	3	4	5

(v) The questions below refer to the explanations your supervisor offers as decision-making procedures are implemented. For each question, indicate the extent of the fairness of your immediate supervisor's explanations of procedures and decisions.

	Extremely small extent	Small Extent	Moderate Extent	Large Extent	Extremely large Extent
1. Is your supervisor candid when communicating with you?	1	2	3	4	5
2. Does your supervisor tailor communications to meet individuals 'needs?	1	2	3	4	5
3. Does your supervisor explain decision-making procedures thoroughly?	1	2	3	4	5
4. Does your supervisor communicate details in a timely manner?	1	2	3	4	5
5. Are your supervisor explanations regarding procedures reasonable?	1	2	3	4	5

### Section C

(i) Below are statements that describe a relational bond an employee may have with their immediate or direct supervisor. For each statement, indicate the extent of your agreement or disagreement as it describes the relational bond you have with your immediate supervisor.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1 I view the success of my supervisor as my own success	1	2	3	4	5
2 I am proud to tell others I work with this supervisor	1	2	3	4	5
3 My supervisor is a role model	1	2	3	4	5
4 I highly identify with the supervisor of my group	1	2	3	4	5
5 I consider my supervisor as a symbol	1	2	3	4	5

### Section D– Demographic and background information

1-Gender : Male  Female

2- Age : under30  30-39  40-49  51- above

3 -Marital status: Single  Married

**4-Education** : High school- below       Diploma       Undergraduate       Postgraduate

**5-Work experience:** 3 years or less experience       4 -5 years       6 -10 years   
11-15 years       More than 15 years

**6- Average number of hours worked per week:**

Under 20 hours       20-30 hours       31-40 hours       over 40 hours

**7- Length of Relationship with supervisor:**

Less than 1 year       1-3 years       4 -7years       8 – 13years       14 years and above

**8 – Occupation:**

Administrative       Business Management       Computer Specialist       Engineer   
Human Resources       Information Technology       Program Management       Other .....

**THE END**

Kindly go over the questionnaire and ensure you have answered all the questions. Please insert the answered questionnaire in the attached envelope. Once again, many thanks for your time and patience in completing the questionnaire...

Code.....

## دراسة العلاقة بين الموظف والمنظمة الادارية(1)

عزيزي الموظف ..

ارجو التكرم بالمشاركة في الدراسة المذكورة اعلاه و تعبئة الاستبيان المرفق .علما بانه تم اختيار العينة عشوائياً من الموظفين في مؤسستك.

الهدف من هذه الدراسة هو دراسة تصورات الموظفين ذوي الخبرة على المنظمة و تطبيق الموارد البشرية و تأثير هذا التطبيق على بيئة العمل.

مشاركتك في هذه الدراسة أمر مهم و فعال لانها سوف تساهم في زيادة وعي الموظفين في فهم تطبيق الموارد البشرية، و يكشف عن جوانب هامة في علاقة العمل، واقتراح سبل تلبية الاحتياجات للموظف و تحقيق أهداف المنظمة.

يرجى قراءة كل سؤال بعناية و الاجابة عليه بحسب ما تشعر به . ليس هناك إجابات صحيحة أو إجابات خاطئة في هذه الدراسة ، فمن المهم أن تقوم بإكمال الاجابة على جميع الأسئلة في هذه الدراسة الاستقصائية.

وفقا لأخلاقيات البحث في العلوم السلوكية، جميع الردود فردية و سرية تماما .يرجى إعادة الاستبيان بعد الاجابة عليه لمنسق الدراسة في مؤسستك.

وتفضلوا بقبول فائق الاحترام،،

اسم الموظف :.....



القسم (أ)

(1) فيما يلي عدة عبارات تصف طبيعة العلاقات في العمل ، يرجى الإشارة إلى ما إذا كانت هذه العبارة تصف بدقة علاقتك مع المشرف المباشر.

العبارات	أعارض بشدة	أعارض	متردد	موافق	موافق بشدة
1	1	2	3	4	5
علاقتي مع المشرف المباشر علاقة تبادلية ثنائية					
2	1	2	3	4	5
علاقتي مع المشرف علاقة مماثلة تتألف من تبادل الأخذ والعطاء بنفس المقدار					
3	1	2	3	4	5
جهودتي تقابل بالمثل من المشرف					
4	1	2	3	4	5
لا يتوجب علي شرح بعض الظروف لأنني اعرف ان المشرف سيقف في صالحتي					
5	1	2	3	4	5
مشرفي وانا نتشارك بحرية افكارنا ، و المشاعر ، و الآمال					
6	1	2	3	4	5
علاقتي مع المشرف قائمة على الثقة المتبادلة					
7	1	2	3	4	5
لدى علم بان اي عمل اقوم به لمشرفي سوف يكافئني لاحقاً					
8	1	2	3	4	5
علاقتي مع المشرف علاقة فعالة					
9	1	2	3	4	5
أستطيع التحدث بحرية مع مشرفي عن الصعوبات التي تواجهني في العمل ، لأنني أعرف ان مشرفي يريد أن يستمع					
10	1	2	3	4	5
إذا شاركت مشرفي مشاكلتي أعرف أن مشرفي سوف يستجيب لي بشكل بناء و بعناية					
11	1	2	3	4	5
أرغب بقول أن مشرفي و انا جعلنا المشاركات الوجدانية جزء من عملنا					
12	1	2	3	4	5
اقوم بعملية التوازن بين مجهودي و نتائج عملي مع مشرفي					

(2) العبارات أدناه تصف سلوكيات المشرف أو الرئيس المباشر مكان العمل .فكل عبارة تشير الى مدى الاتفاق أو الاختلاف في وصفك لتصرفات و سلوكيات مشرفك أو رئيسك المباشر.

العبارات	أعارض بشدة	أعارض	متردد	موافق	موافق بشدة
1	1	2	3	4	5
يناقش مشرفي المباشر مع الموظفين جميع القيم الاخلاقية في العمل					
2	1	2	3	4	5
مشرفي المباشر يمكن الوثوق به					
3	1	2	3	4	5
مشرفي المباشر يصنع قرارات عادلة ومتوازنة					

5	4	3	2	1	مشرفي المباشر يضرب به المثل في كيفية عمل الأشياء بطريقة أخلاقية صحيحة	4
5	4	3	2	1	مشرفي المباشر يضع مصالح الموظفين في عين الاعتبار	5
5	4	3	2	1	مشرفي المباشر لا يعرف النجاح فقط بالنتائج ولكن أيضا يعرف كيفية الحصول على نتائج فعالة	6
5	4	3	2	1	مشرفي المباشر يستمع الى ما يقوله الموظفون	7
5	4	3	2	1	عند اتخاذ القرارات، يسألنا المشرف المباشر " ما هو الصواب لفعله ؟	8
5	4	3	2	1	يعيش مشرفي المباشر حياته بطريقة أخلاقية صحيحة	9
5	4	3	2	1	يضبط مشرفي المباشر الموظفين الذين ينتهكون الضوابط والمعايير الأخلاقية في العمل	10

(3) البيانات أدناه تصف تجربة السيطرة أو الاستقلال في العمل. يشير كل بيان الى مدى الاتفاق أو الاختلاف في وصف مدى السيطرة أو الاستقلال في الاستمتاع عند تنفيذ مسؤوليات العمل .

موافق بشدة	موافق	غير موافق ( محايد )	أعارض	أعارض بشدة	
5	4	3	2	1	1 العمل الذي اقوم به يهمني
5	4	3	2	1	2 أنشطة عملي هادفة و ذات معنى بالنسبة لي شخصيا
5	4	3	2	1	3 العمل الذي اقوم به هادف و له معنى
5	4	3	2	1	4 أنا أثق في قدرتي على القيام بعملتي
5	4	3	2	1	5 أنا واثق من نفسي و قدراتي على أداء عملي
5	4	3	2	1	6 أنا أتقن المهارات اللازمة لعملي
5	4	3	2	1	7 أنا على درجة كبيرة من الاستقلال الذاتي في تحديد كيفية العمل
5	4	3	2	1	8 أستطيع أن أقرر كيف أقوم بعملتي
5	4	3	2	1	9 لدي فرصة كبيرة في الاستقلال والتصرف بحرية في عملي
5	4	3	2	1	10 أستطيع ان احدث تغيير في عملي
5	4	3	2	1	11 أستطيع السيطرة على ما يحدث في العمل
5	4	3	2	1	12 لدي تأثير كبير على ما يحدث في عملي

#### القسم (ب)

(1) العبارات أدناه تصف مدى تعامل المنظمة مع الموظفين. فكل عبارة تشير الى مدى الاتفاق أو الاختلاف في وصف بيئة عملك:

موافق بشدة	موافق	متردد	أعارض	أعارض بشدة	العبارات
5	4	3	2	1	1 بشكل عام، أنا أعامل بإنصاف من قبل مشرفي
5	4	3	2	1	2 معظم الموظفين الذين يعملون هنا يرون انهم يعاملون معاملة عادلة من قبل المشرف
5	4	3	2	1	3 بشكل عام، يمكن القول بان هذا المشرف منصف و عادل في التعامل

5	4	3	2	1	بشكل عام, مشرفي يعاملني معاملة عادلة	4
5	4	3	2	1	عادة ما تحدث هنا امور من قبل المشرف غير منصفه	5
5	4	3	2	1	يعامل المشرف نوعا ما موظفيه بشكل عادل	6

(2) الأسئلة أدناه تصف الى اي مدى يشعر الموظف بالمساواة من خلال الاجراءات المتبعة في صنع القرارات, فكل سؤال يبين مدى وصف هذه الاجراءات .

الأسئلة						
الى مدى محدود للغاية	الى مدى محدود	الى مدى متوسط	الى مدى كبير	الى مدى كبير للغاية		
1	2	3	4	5	هل تستطيع أن تعبر عن أفكارك خلال هذه الاجراءات ؟	1
1	2	3	4	5	هل أنت قادر على طلب اعادة النظر في القرارات التي تم التوصل اليها في هذه الاجراءات ؟	2
1	2	3	4	5	هل يمكن لك أن تؤثر على القرارات التي تم التوصل اليها في هذه الاجراءات ؟	3
1	2	3	4	5	هل هذه الاجراءات قائمة على الدقة في المعلومات؟	4
1	2	3	4	5	هل يتم تطبيق هذه الإجراءات بشكل مستمر ؟	5
1	2	3	4	5	هل هذه الإجراءات ذات معايير أخلاقية وأدبية؟	6
1	2	3	4	5	هل هذه الاجراءات خالية من التحيز ؟	7

(3)الأسئلة أدناه تشير إلى اي مدى تصف نتائج الاعمال التي تقوم بها مثل المكافآت ، والعلاوات والترقيات والانتدابات وغيرها .

الأسئلة						
الى مدى محدود للغاية	الى مدى محدود	الى مدى متوسط	الى مدى كبير	الى مدى كبير للغاية		
1	2	3	4	5	هل هذه النتائج تعكس الجهود المبذولة في عملك ؟	1
1	2	3	4	5	هل هذه النتائج تعكس ما تساهم به في عملك ؟	2
1	2	3	4	5	هل هذه النتائج ملائمة لطبيعة عملك ؟	3
1	2	3	4	5	هل هذه النتائج تعتمد على حسب أداءك؟	4

(4)الأسئلة أدناه تشير إلى اي مدى يتم التفاعل بينك و بين مشرفك المباشر عند اتخاذ القرارات التي تؤثر في طريقة المعاملة.

الأسئلة						
الى مدى محدود للغاية	الى مدى محدود	الى مدى متوسط	الى مدى كبير	الى مدى كبير للغاية		
1	2	3	4	5	هل يتم التعامل معك بأسلوب مهذب ؟	1
1	2	3	4	5	هل يتم الامتناع عن لقاء التعليقات الغير لائقة ؟	2

3	هل يتم التعامل معك بكرامة؟	1	2	3	4	5
4	هل يتم التعامل معك باحترام؟	1	2	3	4	5

(5) الأسئلة أدناه تشير إلى أي مدى يتم توضيح إجراءات اتخاذ القرارات وتنفيذها بينك وبين مشرفك المباشر.

الأسئلة		الى مدى محدود للغاية	الى مدى محدود	الى مدى متوسط	الى مدى كبير	الى مدى كبير للغاية
1	هل لديهم صراحة عند التواصل معك؟	1	2	3	4	5
2	هل يهتمون في التواصل لتلبية احتياجات "الموظفين"؟	1	2	3	4	5
3	هل لديهم توضيح لكيفية اتخاذ القرارات بدقة؟	1	2	3	4	5
4	هل يوضحون التفاصيل في الوقت المناسب؟	1	2	3	4	5
5	هل يقومون بتوضيح الإجراءات بشكل معقول؟	1	2	3	4	5

القسم (ج)

(1) وفيما يلي العبارات تصف العلاقة بينك و بين المشرف المباشر. فكل عبارة تبين مدى الاتفاق أو الخلاف في وصف علاقتك مع المشرف المباشر

العبارات	اعارض بشدة	اعارض	متردّد	موافق	موافق بشدة
1 أرى أن نجاح مشرفي هو نجاحي	1	2	3	4	5
2 أنا فخور أن أقول للأخرين بانني أعمل مع هذا المشرف	1	2	3	4	5
3 مشرفي هو القدوة لي في عملي	1	2	3	4	5
4 انا اعترف بشكل كبير بدور مشرفي في العمل	1	2	3	4	5
5 أعتبر مشرفي مثالاً يُحتذى به	1	2	3	4	5

القسم (د)

البيانات الشخصية، يرجى وضع علامة في الخانة المناسبة.

- (1) النوع: ذكر  أنثى
- (2) العمر: أقل من 30  من 30, أقل  39 من 40, أقل  49 من 51, أعلاه
- (3) الوضع الاجتماعي: متزوج  أعزب
- (4) التعليم: الثانوية – أدناه  دبلوم  بكالوريوس  ماجستير - دكتوراه
- (5) الخبرة في مجال العمل: 3 سنوات أو أقل  من 4 إلى 5 سنوات  من 6 إلى 10 سنة  من 11 إلى 15 سنة
- (6) أكثر من 15 عاماً  متوسط عدد ساعات العمل في الاسبوع:
- أقل من 20 ساعة  من 20 إلى 30 ساعة  من 31 إلى 40 ساعة  أكثر من 40 ساعة
- (7) مدة العمل مع المشرف الحالي:
- أقل من سنة  من سنة - 3 سنوات  من 7 سنوات – أربع سنوات
- من 8 سنوات إلى 13 سنة  من 14 سنة فما فوق
- (8) المهنة:
- الأعمال الإدارية  الأعمال التسويقية  مهندس  متخصص في الكمبيوتر
- إدارة الموارد البشرية  تكنولوجيا المعلومات

أخرى .....

النهاية ..

تأكد من الإجابة على كافة الأسئلة ثم يرجى إدخال الاستبيان في الطرف المرفق مرة أخرى شكرا جزيلا على وقتك و صبرك  
في اكمال هذا الاستبيان...

## **Appendix D: Supervisor survey (Study 2)**

### Employee-Organisation Relationship Survey- study2

Dear Supervisor:

We are writing to kindly request your participation in the above study by completing the attached survey.

The objective of the study is to examine employees' experience of their organizations' human resource practices and the influence of these practices on their quality of work life. In the first part, 'About Yourself,' you are requested to answer a few questions about your demographic characteristics.' In the second part, 'Ratings of Employee Performance,' you are requested to rate your employees' work performance which is necessary for the objectives of the research.

Your participation is important to the study because it will contribute to a greater understanding of employees' perceptions of an organization's human resource practices, reveal important aspects of the employment relationship, and suggest ways to satisfy employee and organizational needs or goals.

Please read each question carefully and answer it according to how you personally feel about it. There are no RIGHT or WRONG answers. For the study to be meaningful, it is important that you complete all the questions in this survey. This research is being conducted as a part of a PhD project.

In accordance with the ethics of behavioural science research, individual responses will be completely CONFIDENTIAL. Please return completed questionnaires to the survey coordinator in your organization.

Yours sincerely,

### Section A: About Yourself

(i) Please provide the appropriate answer to each of the demographic background questions in this section. Your responses will not be identified. Please tick the appropriate box.

**1-Gender** : Male  Female

**2- Age** : under30  30-39  40-49  51- above

**3 - Education:** High school- below  Diploma  Undergraduate  Postgraduate

**4-Work experience:** 3 years or less  4 -5 years  6 -10 years   
11-15 years  More than 15 years

**5- Number of years you have held a supervisory position:**

7 years and less  8-13  14 years and above

### Section B

#### Ratings of Direct Reports' Performance

Subordinate names - Please identify for each letter the name of one of your subordinates. Afterwards under the respective letter complete your assessments for that particular subordinate in relation to each of the indicated behaviours.

- (1) Name of Employee A:.....
- (2) Name of Employee B:.....
- (3) Name of Employee C:.....
- (4) Name of Employee D:.....
- (5) Name of Employee E:.....
- (6) Name of Employee F:.....
- (7) Name of Employee G:.....

(i) The statements below describe behaviours employees may engage in at work. For each of these behaviours indicate the frequency with which this particular employee engages in that behaviour.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Never</b>	Seldom	Occasionally	Often	Always/Frequently

This particular employee...

	<b>Employees</b>						
	A	B	C	D	E	F	G
<b>1... volunteers to do things for this work group</b>							
<b>2. ... helps orient new employees in this group</b>							
<b>3. ... attends functions that help the work group</b>							
<b>4. ... assists others in this group with their work for the benefit of the group</b>							
<b>5. ... gets involved to benefit this work group</b>							
<b>6. ... helps others in this group learn about the work</b>							
<b>7. ... helps others in this group with their work responsibilities</b>							

(ii)The statements below describe employees’ task or role-related performance.. For each of these items, indicate the frequency with which this particular employee performs in at work.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Never</b>	Seldom	Occasionally	Often	Always/Frequently

This particular employee...

	<b>Employees</b>						
	A	B	C	D	E	F	G
<b>1...fulfills the responsibilities specified in his/her job description</b>							
<b>2... performs the tasks that are expected as part of the job</b>							
<b>3... meets performance expectations</b>							
<b>4. ...adequately completes responsibilities</b>							
<b>5. ... engages in activities that will directly affect his/her performance evaluation.</b>							
<b>6. ... neglects aspects of the job he/she is obligated to perform.</b>							
<b>7. ... fails to perform essential duties</b>							

**THE END**

Please go over the questionnaire and ensure you have answered all questions including the ratings of performance of each of your direct reports participating in this survey. Once again, many thanks for your time and patience in completing the questionnaire. Code .....

## العلاقة بين الموظف والمنظمة الادارية دراسة

عزيزي المدير:

ارجو التكرم بالمشاركة في الدراسة المذكورة أعلاه وتعبئة الاستبيان المرفق.

الهدف من هذه الدراسة هو دراسة تأثير اداء الموظفين ذوي الخبرة على المنظمة وتطبيق الموارد البشرية و تأثير هذا التطبيق على بيئة العمل. في الجزء الأول، " عن نفسك " يتطلب منك الإجابة على بعض الأسئلة حول الخصائص الديموغرافية " في الجزء الثاني، " تقييم أداء الموظفين " يتطلب منك تقييم أداء الموظفين. وأخيراً، في الجزء الثالث يتطلب منك التعبير عن وجهة نظرك اتجاه علاقتك مع مديرك المباشر.

مشاركتك في هذه الدراسة أمر مهم وفعال لأنها سوف تساهم في زيادة وعي الموظفين في فهم تطبيق الموارد البشرية، و يكشف عن جوانب هامة في علاقة العمل، واقتراح سبل تلبية الاحتياجات للموظف و تحقيق أهداف المنظمة.

يرجى قراءة كل سؤال بعناية و الإجابة عليه بحسب ما تشعر به . ليس هناك إجابات صحيحة أو إجابات خاطئة في هذه الدراسة، فمن المهم أن تقوم بإكمال الإجابة على جميع الأسئلة في هذه الدراسة الاستقصائية.

وفقا لأخلاقيات البحث في العلوم السلوكية، جميع الردود فردية و سرية تماما .يرجى إعادة الاستبيان بعد الإجابة عليه لمنسق الدراسة في مؤسستك.

وتفضلوا بقبول فائق الاحترام،

القسم (أ) عن نفسك

(1) في هذا القسم ، يرجى الاجابة على الاسئلة التالية مع وضع علامة في الخانة المناسبة :

اسم المدير :.....

1- الجنس:  م  أنثى

2- العمر : أقل من  30  من 30, أقل 39  من 40, أقل 49  من 51, أعلاه

3- التعليم:

الثانوية – أدناه  دبلوم  البكالوريس  الماجستير- الدكتوراه

4 - عدد سنوات العمل في هذا المجال:

(أ) من 3 سنوات أو أقل  (ب) من 4 إلى 5 سنوات  (ج) من 6 إلى 10 سنة  (د) من 11 إلى 15 سنة

(هـ) أكثر من 15 عاما

5- عدد سنوات العمل كمدير :

(أ) 7 سنوات أو أقل  (ب) من 8 إلى 13 سنة  (ج) 14 سنة فما فوق

القسم (ب) تقييم أداء الموظفين  
يرجى كتابة اسم كل موظف عند كل حرف و بعد ذلك يتم التقييم بناء على ترتيب الحروف المحددة ادناه.

- (1) اسم الموظف (أ): .....
- (2) اسم الموظف(ب): .....
- (3) اسم الموظف (ج): .....
- (4) اسم الموظف (د): .....
- (5) اسم الموظف (هـ): .....
- (6) اسم الموظف (و): .....
- (7) اسم الموظف (ز): .....

(1) العبارات أدناه تصف سلوكيات الموظفين أثناء العمل - فكل من هذه التصرفات تدل مدى اتصاف هذا الموظف بهذا السلوك.

5	4	3	2	1
دائماً/كثيراً ما	كثيراً ما	أحياناً	نادراً ما	لا

هذا الموظف.....

الموظفين							
ز	و	هـ	د	ج	ب	أ	
							1 يقوم ببعض الاعمال التطوعية من أجل فريق العمل
							2 يقوم بتوجيه الموظفين الجدد في فريق العمل
							3 يحضر بعض الانشطة ليسانف فريق العمل
							4 يساعد اعضاء فريق العمل من أجل مصلحة الفريق
							5 يسعى لتطوير مصالح فريق العمل
							6 يساعد الآخرين في فريق العمل ليتعلموا كيفية انجاز الاعمال
							7 يساعد الآخرين في انجاز مسؤولياتهم

(2) العبارات أدناه تصف أداء الموظفين أثناء العمل - فكل بيان يشير الى مدى الاختلاف و الاتفاق حول ما تصف به أداء هذا الموظف السلوك.

5	4	3	2	1
دائماً/كثيراً ما	كثيراً ما	أحياناً	نادراً ما	لا

هذا الموظف.....

الموظفين							
ز	و	هـ	د	ج	ب	أ	
							1 ينجز الكثير من المسؤوليات المحددة في الوصف الوظيفي
							2 يؤدي الكثير من المهام كجزء من العمل
							3 ينجز الاداء المتوقع منه
							4 يتحمل كافة المسؤوليات المطلوبة منه
							5 ينجز نشاطات مهمة تؤثر بشكل مباشر على تقييم أداءه
							6 يهمل إنجاز بعض الاعمال التي عليه القيام به
							7 يفشل في إنجاز الاعمال اللازمة

النهاية ..

يرجى التأكد من الإجابة على كافة الأسئلة بما فيها تقييم أداء الموظفين , مرة اخرى شكراً جزيلاً على وقتك و صبرك في اكمال هذا الاستبيان...

## Appendix E: MPlus syntaxes

### Direct effects (H1, H2, H3, H4) + mediation effects of social exchange study 1 (H6a, H6b, H6c) as an example

USE VARIABLES ARE

mdj mpj mtrsj mso mids gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

CLUSTER = team;

within = gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7

mdj mpj mtrsj mso mids;

Analysis:

Type = twolevel random;

MODEL:

%Within%

mIDs on mso (bw)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mso on mdj (a1w)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mso on mpj (a2w)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mso on mtrsj (a3w)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mdj with mpj;

mdj with mtrsj;

mtrsj with mpj;

mids ON mdj mpj mtrsj;

```

%between%

Model constraint:

NEW(med1 med2 med3);

med1 = a1w*bw;
med2 = a2w*bw;
med3 = a3w*bw;

output: SAMPSTAT STANDARDIZED TECH4 CINT;

```

Moderation effect of Ethical leadership on social exchange, identification (H5) study 1 as an example

USEVARIABLES ARE

```

mso mids gd age edu tn
org_2 org_3 org_4 org_5 org_6 org_7
gel;

CLUSTER = team;

within = gd age edu tn
org_2 org_3 org_4 org_5 org_6 org_7
mso;

between = gel;

```

Analysis:

```
Type = twolevel random;
```

MODEL:

```

%Within%

s|mIDs on mso;

mids ON gd age edu tn
org_2 org_3 org_4 org_5 org_6 org_7;

%between%

S on gel (int);

mids on gel;

[s](bw);

s with mids;

```

Model constraint:

NEW(med1lo med1me med1hi);

med1lo = (bw+int\*4.888);! moderated -se-mids wwhen EI is low

med1me = (bw+int\*5.427);

med1hi = (bw+int\*5.966);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

### Moderated mediation (H7,H8,H9) as an example study 1

USEVARIABLES ARE

mdj mpj mtrsj mso mids gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7

gel;

CLUSTER = team;

within = gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7

mdj mpj mtrsj mso;

between = gel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mIDs on mso;

mids ON gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mso on mdj (a1w)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

mso on mpj (a2w)

gd age edu tn

org\_2 org\_3 org\_4 org\_5 org\_6 org\_7;

```

mso on mtrsj (a3w)
gd age edu tn
org_2 org_3 org_4 org_5 org_6 org_7;
mdj with mpj;
mdj with mtrsj;
mtrsj with mpj;
mids ON mdj mpj mtrsj;
%between%
S on gel (int);
mids on gel;
[s](bw);
s with mids;

Model constraint:
NEW(med1lo med1me med1hi med2lo med2me med2hi med3lo med3me med3hi);
med1lo = a1w*(bw+int*4.888);
med1me = a1w*(bw+int*5.427);
med1hi = a1w*(bw+int*5.966);
med2lo = a2w*(bw+int*4.888);
med2me = a2w*(bw+int*5.427);
med2hi = a2w*(bw+int*5.966);
med3lo = a3w*(bw+int*4.888);
med3me = a3w*(bw+int*5.427);
med3hi = a3w*(bw+int*5.966);
output: SAMPSTAT STANDARDIZED TECH4 CINT;

```

## Study 2

Direct effects (H1, H2, H3, H4, H4a, H4b) + Overall mediations (H6a-H6e) + (H11a, Hb) of study 2 as an example

USEVARIABLES ARE

```
mdj mpj mINTJ mso mids mLHP mLPF
dg age edu tn org;
CLUSTER = team;
within = dg age edu tn
org mdj mpj mintj mso mids mLHP mLPF;
Analysis:
```

```
    Type = twolevel random;
```

```
MODEL:
```

```
%Within%
```

```
mlpf on mIDs(bw1)
```

```
dg age edu tn org;
```

```
mlhp on mIDs (bw2)
```

```
dg age edu tn org;
```

```
mIDs on mso (bw)
```

```
dg age edu tn org;
```

```
mso on mdj (a1w)
```

```
dg age edu tn org;
```

```
mso on mpj (a2w)
```

```
dg age edu tn org;
```

```
mso on mintj (a3w)
```

```
dg age edu tn org;
```

```
mdj with mpj;
```

```
mdj with mintj;
```

```
mintj with mpj;
```

```
mlpf ON mdj mpj mintj;
```

```
mlhp ON mdj mpj mintj;
```

```
%between%
```

```
Model constraint:
```

```
NEW(med1 med2 med3 med4 med5 med6 med7 med8 med9 med10 med11);
```

```
med1 = a1w*bw;
```

```
med2 = a2w*bw;
```

```

med3 = a3w*bw;
med4= bw* bw1;
med5= bw*bw2;
med6= a1w*bw*bw1;
med7= a2w*bw*bw1;
med8= a3w*bw*bw1;
med9= a1w*bw*bw2;
med10= a2w*bw*bw2;
med11= a3w*bw*bw2;

output: SAMPSTAT STANDARDIZED TECH4 CINT;

```

Cross level moderation effect ethical leadership on social exchange, identification (H 5)

```

USEVARIABLES ARE team mso gmel mids dg age edu tn org;

CLUSTER = team;

within = dg age edu tn

org mso;

between = gmel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mids on mso;

mids ON dg age edu tn org;

%between%

S on gmel (int);

mids on gmel;

[s](bw);

s with mids;

Model constraint:

NEW(med1lo med1me med1hi);

med1lo = (bw+int*3.999);! moderated -so-mids wwhen EI is low

```

```
med1me = (bw+int*4.253);
```

```
med1hi = (bw+int*5.555);
```

```
output: SAMPSTAT STANDARDIZED TECH4 CINT;
```

### Moderated mediation effects (H7, H8, H9) as an example of study2

USEVARIABLES ARE

```
mdj mpj mintj mso mIDS dg age edu tn gmEL
```

```
org ;
```

```
CLUSTER = team;
```

```
within = mdj mpj mintj mso
```

```
dg age edu tn org;
```

```
between = gmel;
```

Analysis:

```
Type = twolevel random;
```

MODEL:

```
%Within%
```

```
s| mids on mso;
```

```
mids ON dg age edu tn org;
```

```
mso on mdj (a1w)
```

```
dg age edu tn org;
```

```
mso on mpj (a2w)
```

```
dg age edu tn org;
```

```
mso on mintj (a3w)
```

dg age edu tn org;

mdj with mpj;

mdj with mintj;

mintj with mpj;

mids on mdj mpj mintj;

% between%

S on gmEL (int);

mids on gmEL;

[s](bw);

s with mids;

Model constraint:

NEW(med1lo med1me med1hi med2lo med2me med2hi med3lo med3me med3hi);

med1lo = a1w\*(bw+int\*3.999);

med1me = a1w\*(bw+int\*4.253);

med1hi = a1w\*(bw+int\*5.555);

med2lo = a2w\*(bw+int\*3.999);

med2me = a2w\*(bw+int\*4.253);

med2hi = a2w\*(bw+int\*5.555);

med3lo = a3w\*(bw+int\*3.999);

med3me = a3w\*(bw+int\*4.253);

med3hi = a3w\*(bw+int\*5.555);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

Moderation effect of ethical leadership on social exchange, identification and job performance (H 10a)

USEVARIABLES ARE team mso mpf gmel mids dg age edu tn org;

CLUSTER = team;

within = dg age edu tn

org mso;

between = gmel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mpf mids on mso;

mpf mids ON dg age edu tn org;

%between%

S on gmel (int);

mpf mids on gmel;

[s](bw);

s with mpf mids;

Model constraint:

NEW(med1lo med1me med1hi);

med1lo = (bw+int\*3.999);! moderated -so-mids- pf wwhen EI is low

med1me = (bw+int\*4.253);

med1hi = (bw+int\*5.555);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

Cross level moderation effect of ethical leadership on social exchange, identification and helping behaviour (H 10b)

USEVARIABLES ARE team mso mhp gmel mids dg age edu tn org;

CLUSTER = team;

within = dg age edu tn

org mso;

between = gmel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mhp mids on mso;

mhp mids ON dg age edu tn org;

%between%

S on gmel (int);

mhp mids on gmel;

[s](bw);

s with mhp mids;

Model constraint:

NEW(med1lo med1me med1hi);

med1lo = (bw+int\*3.999);! moderated -so-mids- hp wwhen EI is low

med1me = (bw+int\*4.253);

med1hi = (bw+int\*5.555);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

Serial moderated mediation effects (job performance) (H15a, H16a, H17a) as an example of study2

USEVARIABLES ARE

mlpf mdj mpj mintj mso mIDS dg age edu tn gmEL

org ;

CLUSTER = team;

within = mdj mpj mintj mso mIDS

dg age edu tn org;

between = gmel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mlpf on mids;

mids ON dg age edu tn org;

mso on mdj (a1w)

dg age edu tn org;

mso on mpj (a2w)

dg age edu tn org;

mso on mintj (a3w)

dg age edu tn org;

mdj with mpj;

mdj with mintj;

mintj with mpj;

mlpf ON mdj mpj mintj;

%between%

S on gmEL (int);

mlpf on gmEL;

[s](bw);

s with mlpf;

Model constraint:

NEW(med1lo med1me med1hi med2lo med2me med2hi med3lo med3me med3hi);

med1lo = a1w\*(bw+int\*3.999);

med1me = a1w\*(bw+int\*4.253);

med1hi = a1w\*(bw+int\*5.555);

med2lo = a2w\*(bw+int\*3.999);

med2me = a2w\*(bw+int\*4.253);

med2hi = a2w\*(bw+int\*5.555);

med3lo = a3w\*(bw+int\*3.999);

med3me = a3w\*(bw+int\*4.253);

med3hi = a3w\*(bw+int\*5.555);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

### Serial moderated mediation effects (H15b, H16b, H17b) as an example of study2

USEVARIABLES ARE

mlhp mdj mpj mintj mso mIDS dg age edu tn gmEL

org ;

CLUSTER = team;

within = mdj mpj mintj mso mIDS

dg age edu tn org;

between = gmel;

Analysis:

Type = twolevel random;

MODEL:

%Within%

s|mlhp on mids;

mids ON dg age edu tn org;

mso on mdj (a1w)

dg age edu tn org;

mso on mpj (a2w)

dg age edu tn org;

mso on mintj (a3w)

dg age edu tn org;

mdj with mpj;

mdj with mintj;

mintj with mpj;

mlhp ON mdj mpj mintj;

%between%

S on gmEL (int);

mlhp on gmEL;

[s](bw);

s with mlhp;

Model constraint:

NEW(med1lo med1me med1hi med2lo med2me med2hi med3lo med3me med3hi);

med1lo = a1w\*(bw+int\*3.999);

med1me = a1w\*(bw+int\*4.253);

med1hi = a1w\*(bw+int\*5.555);

med2lo = a2w\*(bw+int\*3.999);

med2me = a2w\*(bw+int\*4.253);

med2hi = a2w\*(bw+int\*5.555);

med3lo = a3w\*(bw+int\*3.999);

med3me = a3w\*(bw+int\*4.253);

med3hi = a3w\*(bw+int\*5.555);

output: SAMPSTAT STANDARDIZED TECH4 CINT;

## Team level

Direct effect of overall justice on the ethical leadership (H 18)

VARIABLE: NAMES ARE qid team mEL mGJS ;

USEVARIABLES ARE mgjs mel;

CLUSTER = team;

within = ;

ANALYSIS: TYPE = TWOLEVEL;

MODEL:

% within%

% between%

mel ON mgjs;

OUTPUT:SAMPSTAT STANDARDIZED TECH4 CINT;

Appendix E: Overview of the findings from testing Study 1 and Study 2 Hpotheses

No	Hypothesized relationships	Type of hypothesized	Supported/ not supported	Study
1	H1: Distributive justice is positively related to social exchange with supervisor	Direct	Not Supported	Study 1+ Study 2
2	H2: Procedural justice is positively related to social exchange with supervisor	Direct	Supported	Study 1+ Study 2
3	H3: Interactional justice is positively related to social exchange with supervisor	Direct	Supported	Study 1+ Study 2
4	H4: Social exchange with supervisor is positively related to supervisor identification	Direct	Supported	Study 1+ Study 2
5	H4a: Supervisor identification related positively with job performance	Direct	Partially Supported	Study 2
6	H4b: Supervisor identification is positively related to helping behaviour	Direct	Supported	Study 2
7	H5: The positive effect of social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Moderation (conditional indirect effect)	Supported	Study 1+Study 2
8	H6a: Distributive justice is positively related to supervisor identification via social exchange with supervisor	Mediation	Not Supported	Study 1+ Study 2
9	H6b: Procedural justice is positively related to supervisor identification via social exchange with supervisor	Mediation	Supported	Study 1+ Study 2
10	H6c: Interactional justice is positively related to supervisor identification via social exchange with supervisor	Mediation	Supported	Study 1+ Study 2
11	H7: The positive effect of distributive justice on supervisor identification via social exchange with supervisor is stronger when ethical leadership is high as compared to low	Moderated Mediation (conditional indirect effect)	Not Supported	Study 1+ Study 2
12	H8: The positive effect of procedural justice on supervisor identification via social exchange with supervisor is stronger when ethical leadership is high as compared to low	Moderated Mediation (conditional indirect effect)	Partially Supported	Study 1+ Study 2
13	H9: The positive effect of interactional justice on supervisor identification via social exchange with supervisor is stronger when ethical leadership is high as compared to low	Moderated Mediation (conditional indirect effect)	Partially Supported	Study 1 + Study 2

14	H10a: The positive effect of social exchange on job performance via supervisor identification is stronger when ethical leadership is high as compared to low	Moderated Mediation (conditional indirect effect)	Supported	Study 2
15	H10b: The positive effect of social exchange on helping behaviour via supervisor identification is stronger when ethical leadership is high as compared to low	Moderated Mediation (conditional indirect effect)	Supported	Study 2
16	H11a: Social exchange with supervisor is positively related to job performance via supervisor identification	Mediation effect	Supported	Study 2
17	H11b: Social exchange with supervisor is positively related to helping behaviour via supervisor identification	Mediation effect	Supported	Study 2
18	H12a: Distributive justice has a positive effect on job performance mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Not Supported	Study 2
19	H12b: Distributive justice has a positive effect on helping behaviour mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Not Supported	Study 2
20	H13a: Procedural justice has a positive effect on job performance mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Supported	Study 2
21	H13b: Procedural justice has a positive effect on helping behaviour mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Supported	Study 2
22	H14a: Interactional justice has a positive effect on job performance mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Supported	Study 2
23	H14b: Interactional justice has a positive effect on helping behaviour mediated by social exchange with supervisor and supervisor identification	Overall mediation effect	Supported	Study 2
24	H15a: The positive effect of distributive justice on employee job performance via social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2
25	H15b: The positive effect of distributive justice on helping behaviour via social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2

26	H16a: The positive effect of procedural justice on employee job performance via social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2
27	H16b: The positive effect of procedural justice on helping behaviour via social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2
28	H17a: The positive effect of interactional justice on employee job performance via social exchange with supervisor and supervisor identifications is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2
29	H17b: The positive effect of interactional justice on helping behaviour via social exchange with supervisor and supervisor identification is stronger when ethical leadership is high as compared to low	Serial Moderated Mediation (conditional indirect effect)	Not Supported	Study 2
30	H18: Overall supervisory justice is positively related to ethical leadership at the team level	Direct effect at team level	Supported	Study 2