The Mediating Relationship between Authentic Leadership, Organizational Justice & Engagement

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A thesis
Submitted in partial fulfillment of the requirements for the degree of Masters of Business Administration

Adnan Kassar School of Business
December 2016
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Thesis Title: The Mediating Relationship Between Organizational Justice, Authentic Leadership & Engagement

Program: MBA

Department: Management

School: Business

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This paper would not have been possible without the support of many people. I would like to thank my advisor and all members that participated on my committee for their work. A special thank you to Dr. Jordan Srour for helping me make sense of all the data I had and for the countless hours she spent reading and reviewing this paper. Her guidance, patience and support are highly appreciated.

Finally, a big thank you goes to my family who has supported me in my education.
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Zeina Sidani

ABSTRACT

In the face of today’s fast changing and competitive environment, each business aims to be distinguished, more innovative and agile. To do so, all members of the organization need to be engaged, from the janitor all the way to the top. However, encouraging employees to become engaged is not easy. This thesis examines the conditions which might lead to engaging employees. In particular, it focuses on two antecedents of engagement: authentic leadership and organizational justice. Two models are tested to better understand the mediating relationship between the three variables. Finally, after an extensive discussion of the statistical results, the practical implications of the study along with the future recommendations are suggested.

Keywords: Authentic Leadership, Leadership, Organizational Justice, Procedural Justice, Distributive Justice, Interactional Justice, Engagement.
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Chapter One

Scope of the Study

This chapter includes an introduction, a highlight of the importance of the study and finally the research questions that are going to be addressed.

1.1 Introduction

In the face of today’s fast changing and competitive environment, each business aims to be distinguished, more innovative and agile. To do so, all members of the organization need to be enthusiastic and dedicated to their jobs, from the janitor all the way to the top. In other words, every worker needs to be engaged. However, this is not an easy task as it requires a lot of hard work. To illustrate, an organization needs to provide its employees with an environment that applies fair reward systems, and allows for open communication between decision makers and their subordinates in order to have engaged employees (Moorman, 1991). Therefore, many researchers believe that organizational justice is a primary driver of work engagement (Ram & Prabhakar, 2011; Moliner, Martinez-Tur, Ramos, Peiro & Cropanzano, 2008).

To further enhance employees' engagement and in turn, a firm’s success, there also needs to be good management and leadership styles. Alfred Marshall states: “If world capital, machinery and tools, suddenly be destroyed, but expert managers remain; development and growth will be flourishing” (see Darvish and Rezaei, 2011, p. 422). In other words, having knowledgeable, moral and effective leaders is vital for the growth of firms. On the other hand, having ineffective leaders can have negative effects. In fact,
the downfall of corporations such as Enron, Arthur Anderson, WorldCom and Tyco is attributed to the lack of their leaders’ morality (Darvish & Rezaei, 2011). Hence, the presence of good leaders who are ethical, courageous, confident and reliable is indispensable for the success of the organization. Specifically, firms need authentic leaders.

Being an authentic leader entails being ethical, honest and true to one’s self. As such, authentic leaders are expected to induce trust. Accordingly, the presence of a leader who is supportive and sincere is important for improving workers’ performance and ensuring the firm’s success (Kim, 2014). Such an individual changes employees’ attitudes positively in the business environment. Thus, this paper’s purpose is to examine the mediating effect between authentic leaders, organizational justice and employee engagement.

1.2 Importance of the study

This paper aims to study the relationship between authentic leadership, organizational justice and work engagement through both a review of the literature and an empirical study. Specifically, it explores two potential models, one in which authentic leadership is the mediator between the different types of organizational justice and engagement; the other in which each type of organizational justice acts as a mediator between authentic leadership and engagement. The examination of two contrasting models contributes to the literature on leadership and justice by explicitly questioning their causal relationships. Additionally, the results of this research shall shed light on the importance of organizational justice and authentic leadership in improving work engagement within today's businesses.
1.3 Research Questions

This study was guided by the following research questions:

RQ1: Do structural relations exist between authentic leadership, organizational justice and work engagement?

RQ2: Do the different types of organizational justice mediate the relationship between authentic leadership and work engagement?

RQ3: Does authentic leadership mediate the relationship between the different types of organizational justice and work engagement?

This paper will attempt to answer the above questions by collecting and analyzing qualitative and quantitative data. Chapter 2 includes a review of the literature to establish the prevalent definitions of the three variables—organizational justice, authentic leadership and engagement. Chapter 3 discusses the hypothesis formation. This chapter also provides the theoretical context for the relationships between the three variables as put forth in the extant literature. Chapter 4 describes the methodology by which data was collected for this empirical study. The statistical findings are presented in Chapter 5, where the acceptance or rejection of the hypotheses is justified. In addition, Chapter 6 includes an elaborated discussion of the findings and how they relate to the business world. This chapter also discusses the limitations of this study and provides recommendations for future research.
Chapter Two

Literature Review

This chapter includes a literature review of each of the three variables-organizational justice, authentic leadership and engagement. It discusses the history of each variable, its components and previous research work.

2.1 History of Justice

Neuroscientists believe that fairness is embedded in our brains that is why we look for it in every situation we encounter (Sanfey et al., 2003). This might explain why justice has been highly investigated throughout history. As with many theoretical concepts, it dates back to the Greek philosophy, where Plato and Aristotle were among the first people to investigate it (Ryan, 1993). However, justice was all but forgotten about when Hobbes revisited it during the 17th century (see. Greenberg & Colquitt, 2013). Over the years, the concept remained a topic of interest among philosophers and social scientists, yet, the way justice is studied changed. Instead of discussing what justice is, researchers are now concerned with how justice is perceived (Greenberg & Colquitt, 2013). Consequently, there is no one clear cut definition of fairness. Based on the oxford dictionary fairness is the "just treatment or behavior without favoritism or discrimination" (Oxford Dictionaries, 2016, para. 1). Still, understanding whether or not an action is just, is tricky. It is based on people’s perceptions which differ from one individual to another according to their background, personality and values (Barsky&
Kaplan, 2007). It is an especially difficult task to assess whether an action is just in an organizational setting, as each firm has different values, norms, rules and regulations.

2.2 Organizational Justice

With the growth of the business world in the 20th century, social psychologists shifted their attention to corporations. They started studying and applying different theoretical concepts to organizational settings (Greenberg & Colquitt, 2013). Thus, organizational justice emerged.

Although organizational justice has been investigated for over two decades, it is Jerald Greenberg who was the first to clearly define the concept. He is, therefore, considered the founder of organizational justice. Greenberg considers justice to be related to the employees’ views concerning their organization’s behaviors and decisions. Managerial theorists agree with this view and believe that organizational justice is related to what people perceive as just that is why is has always been studied it in terms of relativity (Crawshaw, Cropanzano, Bell & Nadisic, 2013). Furthermore, organizational justice is concerned with how the organization’s dealings and proceedings affect the employees. Greenberg (1987, 1990) maintains that organizational justice includes all matters of the actions of employees in the workplace, from treatment by supervisors to wages and from access to training to delicate issues such as gender equality. Therefore, the presence or lack of organizational justice could help identify the reasons behind employees’ attitudes and organizational outcomes. For instance, Alsalem and Alhaiani (2007) posit that the absence of organizational justice, inappropriate processes, inequitable outcomes and improper interactions are the reasons behind employees’ retaliations. This is proved by Zapata-Phelan, Scott, Colquitt and Livingston
(2009) who assert that when employees perceive that they are being treated unfairly, their task performance level and in-role behavior are reduced. Thus, organizational injustice results in negative organizational outcomes, such as emotional exhaustion and destructive workplace deviance (Ambrose, Seabright, & Schminke, 2002; Frenkel, Li, & Restubog, 2012).

Conversely, when workers feel they are being treated fairly, they display positive behaviors towards their organizations (Yang & Zhang, 2012; St. Pierre & Holmes, 2010). For example, one research conducted by Al-Zu’bi (2010) in Jordan, shows that organizational justice and job satisfaction are positively linked. Another study by Shahzad, Zakaria and Siddiqui (2014) reveals the positive relationship between organizational justice and organizational citizenship behaviors (OCB) in a Pakistani context. Other scholars find organizational justice to be an antecedent of commitment work performance, perceived support and engagement (Abu Elanain, 2010; Wang, Liao, Xia & Chang, 2010; Yang & Zhang, 2012; Gupta and Kumar, 2012).

However, one cannot study organizational justice without discussing its different components. Over the past two decades, theorists have identified several types of organizational justice. Some consider it to be two dimensional while others deem it to be three and even four dimensional including: distributive, procedural, interactional and informational justice (Colquitt, 2001; Cohen-Charash & Spector, 2001). However, for the purpose of this study, a three factor organizational justice model is adopted. It comprises of distributive, procedural and interactional justice.
2.2.1 Distributive Justice (DJ)

The first type of organizational justice to be identified was distributive justice. It was the main focus of studies between the 1950s and 1970s (Homans, 1961; Deutsch, 1975). Distributive justice focuses on the fact that people are not rewarded and appraised equally. This relates to the equity theory which states that employees are concerned with the relationship between their inputs and outcomes. That is to say, if two employees of the same rank are payed equally, yet one is contributing considerably more to the organization, this employee will perceive the company to be unfair. On the other hand, the one, who is performing less, feels satisfied and fairly compensated (Ryan & Wessel, 2015).

Moreover, distributive justice has been linked to several organizational outcomes and employee behaviors. For example, in China and South Korea, distributive justice was found to impact affective organizational commitment (Jiang, Gollan & Brooks, 2015). İnce and Gül (2011) found positive relations between distributive justice and contribution to the development of the firm. According to George (2014), this type of justice has a negative relationship with turnover rate.

2.2.2 Procedural Justice (PJ)

It was only natural that after studying unfairness in rewards, scholars would try to understand the reason behind this injustice. Therefore, a second type of justice appeared -procedural justice, which refers to the processes through which rewards are distributed. Employees are interested in such procedures since they directly affect them. Leventhal, Karuza, and Fry (1980) identify key factors pertaining to procedural justice, such as: having consistency among workers for a certain time period, decreasing bias,
using accurate and relevant information in decision making, being ethical, allowing space for corrective actions if conflicts arise and permitting involved parties to express their opinions (Leventhal, 1976, 1980; Leventhal, Karuza, & Fry, 1980). Procedural justice includes applying just practices, such as information sharing and fair wages (Colquitt and Chertkoff, 2002). It also shapes employees’ perception of their organization. According to Folger (1987), if workers identify the organization’s strategy as fair towards them, they will become more faithful and committed to the firm. Thus, procedural justice affects turnover rates negatively (George, 2014). Furthermore, procedural justice has been found to affect commitment (López-Cabarcos, Machado-Lopes-Sampaio-de Vázquez-Rodríguez, 2014 and Suliman& Al Kuthiari, 2012).

2.2.3 Interactional Justice (IJ)

The newest form of justice, which is considered by some a mere extension of procedural justice, is interactional justice (Gefen, Ragowsky and Ridings, 2008). In essence, interactional justice is the relation and communication between the person in charge of decision making and the employees affected by these decisions (Moorman, 1991). In this case, individuals put more emphasis on how they are treated and how procedures are explained to them, rather than the processes themselves (İnce & Gül, 2011).

However, according to Colquitt, Conlon, Porter, Wesson and Ng (2001), there are two types of interactional justice: interpersonal justice and informational justice. Interpersonal justice relates to the degree of reverence with which leaders/managers treat their subordinates. Informational justice, on the other hand, is the perceived degree of factuality, honesty and justification managers give their employees when making
decisions. In fact, employees usually seek informational justice from their bosses or line managers i.e. people who are in charge of decision making. Accordingly, interactional justice affects employees’ attitudes towards the organization. To demonstrate, Suliman and Al Kuthiari (2012) assert that interactional justice positively correlates with continuance and affective commitment. In other words, the more employees feel they are respected and that their managers clearly communicate with them the reasons behind decisions affecting them, the more committed they will be. In addition, in their paper “Organizational Justice, Psychological Distress, and Work Engagement in Japanese workers”, Inoue et al. (2010) prove that interactional justice positively affects work engagement. This posits that workers who perceive a presence of interactional justice display positive attitudes toward their organization.

Ultimately, all three types of justice, distributive, procedural and interactional are important to employees. For this reason, several literary works attempt to understand the links between these types to combine them under one umbrella (Greenberg & Colquitt, 2013). However, the components of organizational justice can work separately or together. In practice, if the company intends to implement organizational justice as a whole, it is more advisable to approach each type distinctively (Skarlicki & Folger, 1997; Ambrose & Arnaud, 2005; Ambrose & Schminke, 2007). By the same token, Shahzad et al. (2014) posit that maintaining only one type of justice can decrease the negative effects of injustice.

2.6 Authentic Leader (AL)

With the continuous corporate scandals of 2001 and 2008, trust in the corporate leader plunged. The idea of the CEO as all well knowing and that employees should
follow and trust him/her in order to secure their jobs has been shattered (Twenge & Campbell, 2008). The failure of Enron and other companies in 2001, is attributed to their leaders being conceited and not authentic. According to Onorato and Zhu (2014), the numerous political scandals which have surfaced over the years, where politicians showed management malfeasance and unethical behavior, along with a shift in cultural and societal norms, have all led to a desperate need for a new type of leader. This new leader needs to be authentic and have moral restrictions in order to restore people’s trust in CEOs, managers and politicians.

2.6.1 History of Authentic Leadership

The concept of authenticity is not new; it dates back to the Greek philosophy, specifically to the saying “Know Thyself” (Parke &Wormell, 1956). Both Socrates and Aristotle are also concerned with authenticity. While Socrates encourages people to examine their life worth, Aristotle calls for alignment of the soul with virtue so as to have a complete life (Hutchinson, 1995). History has witnessed many authentic leaders, such as Martin Luther King, Dalai Lama and Gandhi who calls for “truth in thought, truth in speech, and truth in action” (Nair, 1994, p.20)

Although authentic leadership (AL) in managerial research has only been studied for the past 84 years (Gardener, Claudia & Davis., 2011), there still isn’t any consensus regarding its definition. Several researches attempt to explain authentic leadership. For instance, Henderson and Hoy (1983) consider authentic leadership to be the degree to which followers perceive their leader as responsible, non-manipulative and true to him/herself. They posit that it is related to subordinates’ views of their leader. Contrary to their belief, Illies, Nahrgang & Morgeson (2005) argue that “authentic leaders are deeply aware of their values and beliefs, they are self-confident, genuine, reliable and
trustworthy, and they focus on building followers' strengths, broadening their thinking and creating a positive and engaging organizational context” (p.374). In other words, authentic leaders have certain characteristics that deem them authentic. Moreover, George (2003) posits that authentic leaders utilize their instinctive capabilities to lead their subordinates in a meaningful and ethical way. They are aware of their weaknesses and try to overcome them. He also asserts that authentic leaders build long lasting relationships with others and refuse to compromise when it comes to their principles.

On the other hand, Walumbwa, Avolio, Wernsing, Gardner, and Peterson’s (2008, p. 84) define authentic leadership as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development.” This is a more elaborate definition which pertains that an authentic leader has a moral compass and displays ethical behaviors, that affect the overall work environment, employees’ efforts and organizational outcomes. For the purpose of the study, Walumbwa et al.’s (2008) definition will be adopted.

2.6.2 Components of Authentic Leadership

Several researchers have attempted to explain authentic leadership where most of them utilize the concept of Kernis’ four component model of authenticity (Kernis & Goldman, 2006) as applied to leadership (Gardener, Cogliser, Davis & Dickens, 2011). They posit that authentic leadership is composed of four interrelated components which are self-awareness, objective processing, authentic behavior and authentic relational orientation (Illies et al., 2005; Gardner, Avolio, Luthans, May & Walumbwa, 2005). Self-awareness relates to the leaders’ trust and knowledge in their thoughts, feeling,
character, values and motives. However, objective processing is concerned with the objectivity and approval of the leaders’ negative and positive qualities. On the other hand, authentic behavior refers to the leaders acting according to their true needs and values rather than performing in order to evade being reprehended and in pursuit of receiving a reward or satisfying others. Finally, authentic relational orientation relates to the leaders being motivated to be open and truthful in their relationships with others (Yagil, Medler-Liraz 2014; Gardener et al., 2011).

2.6.3 Research on Authentic Leadership

Many AL studies focus on the effect authentic leaders have on their followers. For instance, Ilies, Morgeson and Nahrgang (2005) consider authentic leaders to have positive effects on followers since these leaders support followers’ self-determination. To put it differently, authentic leaders induce trust. This trust, in turn, drives employees to become more committed, engaged and satisfied with their workplace (Dirks and Ferrin, 2002). These emotions and beliefs stimulate increased performance, organizational citizenship behavior and structural empowerment (Wong & Leschinger, 2013; Penger & Černe, 2014). Cianci, Hannah, Tsakumis and Roberts (2014), further assert that authentic leaders prohibit employees’ unethical behaviors even when they are faced with temptation.

2.7 Engagement

Although engagement has been investigated in depth over two decades, scholars have yet to agree on one definition (Shuck & Wollard, 2010). Moreover, this concept has evolved over the course of several years from personal engagement to employee engagement and finally, employee work engagement. These terms are often used
interchangeably in research papers; however, they are not quite the same (see table 1). This becomes clear when looking at the history of engagement.

To begin with, Kahn (1990) was one of the first researchers to discuss personal engagement. He describes it as a multi-dimensional concept where employees might be cognitively, physically and emotionally involved. However, Leiter and Maslach (2001) view engagement from a different angle. They identify it as a concept which is contrary to burnout, denoted as employee burnout/engagement. On the other hand, Harter, Schmidt and Hayes (2002) expand Kahn’s theory and identify employee engagement as an “individual’s involvement and satisfaction as well as enthusiasm for work” (p. 269).

Furthermore, Schaufeli, Bakker and Salanova (2006) consider another view of engagement denoted by work engagement or job engagement. They define it as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Bakker & Salanova, 2006, p.702). To further explain, vigor is having high energy levels, resilience and persistence. However, dedication is characterized by pride, challenge and inspiration. Finally, absorption refers to happiness, deep immersion in one’s work and full concentration. A more recent terminology, introduced by Nasomboon (2014), is employee work engagement. He posits that employee work engagement is the link between employee’s emotional well-being and organizational commitment. Nevertheless, for the purpose of this study, Schaufeli et al.’s definition will be used.
Table 1: Different Definitions of Engagement

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Concept</th>
<th>Definition</th>
</tr>
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<tr>
<td>1990</td>
<td>Kahn</td>
<td>personal engagement</td>
<td>a multi-dimensional concept where employees might be cognitively, physically and emotionally involved</td>
</tr>
<tr>
<td>2001</td>
<td>Leiter &amp; Maslach</td>
<td>burnout/engagement</td>
<td>a concept which is contrary to burnout</td>
</tr>
<tr>
<td>2002</td>
<td>Harter et al.</td>
<td>employee engagement</td>
<td>“individual’s involvement and satisfaction as well as enthusiasm for work” (p.269)</td>
</tr>
<tr>
<td>2006</td>
<td>Schaufeli, Bakker &amp; Salanova</td>
<td>work engagement</td>
<td>“a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p.702).</td>
</tr>
<tr>
<td>2014</td>
<td>Nasomboon</td>
<td>Employee-work engagement</td>
<td>The link between employee’s emotional well-being and organizational commitment.</td>
</tr>
</tbody>
</table>

2.7.1 Engagement & Other Constructs

Although engagement and other work related outcomes, such as job satisfaction and commitment have some common features, engagement is not a combination of such constructs (Macey and Schneider, 2008; Christian, Garza, and Slaughter, 2011). In other words, commitment, motivation and involvement should not be confused with engagement (Saks, 2006; Hallberg and Schaufeli, 2006).

On the one hand, Saks (2006) asserts that commitment varies from engagement. In general, commitment relates to one’s attitude and attachment to his firm. However, engagement is not an attitude, but rather the extent to which one is focused and devoted to the organization. Still, some studies have found a correlation between the two (Meyer et al., 2002).

Furthermore, engagement also differs from job satisfaction. Satisfaction entails people’s attachment to their firm (Luthans & Peterson, 2002). It refers to how they evaluate job descriptions. However, work engagement, is a continuous, rather than a
momentary state, and is not related to an event, person or behavior (Schaufeli, Salanovaz, Gonzales-Roma & Bakker, 2002; Rothbard, 2001).

Moreover, engagement and involvement are distinct concepts. While engagement is cognitive, affective and behavioral, job involvement is related to how cognitively the job is related to an employee’s identity (Lodahl & Kejnar, 1965; Christian et al. 2011). Thus, there needs to be no confusion between engagement, commitment, satisfaction and involvement.

2.7.2 Antecedents of Engagement

Many scholars have been curious about the causes of engagement. For instance, Schaufeli and Salanova (2011) believe the work engagement is linked to the relation between employees and their work; the better the relationship is, the greater engagement is. However, this relationship can be affected by the type of leader along with the organizational environment.

When it comes to leadership, Wallace and Trinka (2009) argue that inspirational leaders engage employees. Similarly, other researchers posit that autonomy, knowledge and the relationship between top-management and employees affects engagement (Nahrgang, Morgeson and Hofmann, 2011; Joshi & Sodhi, 2011). In other words, leaders who encourage autonomy, are transparent and maintain good relationships with their employees improve work engagement.

On the other hand, when discussing the organizational environment, Nahrgang, Morgeson and Hofmann (2011) believe that having a supportive and safe work environment motivates workers and increases their engagement across different industries. However, Ram & Prabhakar (2011) assert that organizational justice predicts engagement. They maintain that rewards (both monetary and non-monetary), perceived
organizational justice, procedural and distributive, job descriptions, along with perceived support can predict and increase engagement. Likewise, Joshi and Sodhi (2011) prove that job content, personal growth opportunities, career growth, job rewards and benefits, work-life balance, and team work are all antecedents of engagement. In this case, procedural justice relates to job content, personal growth opportunities and career growth, while distributive justice pertains to job rewards, job benefits and personal growth.

Still, Wollard & Schuck (2011) view antecedents of engagement differently. They posit that there are two levels of engagement antecedents, the individual-level and the organizational level. At the individual-level, absorption, dedication, high levels of corporate citizenship, taking part in meaningful work, connecting individual and organizational objectives, perceived organizational support, vigor, work-life balance and core self-evaluation affect engagement. However, at the organizational level, research proves that an authentic corporate culture, corporate social responsibility (CSR), clear expectations, job fit, job characteristics, level of task challenge, perception of workplace safety, manager expectations, positive workplace climate, manager self-efficacy, supportive organizational culture and use of strength, trigger engagement (Wollard & Schuck, 2011).

However, this study will focus on two main triggers of engagement which are authentic leadership and organizational justice; which includes procedural, distributive and interactional. Chapter 3 will further elaborate on the relationship between these three constructs.
2.7.3 Consequences of Engagement

According to Dumitrescu, Stanciu, Tichindelean and Vinerean (2015), authors of *Achieving Employee Satisfaction by Pursuing Sustainable Practices*, “by providing opportunities for engagement and involvement, employees will be more connected with their work and will feel that their actions make a difference” (p.37). In other words, having engaged employees is very important as workers will feel there is a bond between them and the firm, and will thus feel that their work is effective. However, engagement is not an end by itself, but a means to an end. To clarify, engaged workers develop positive feelings such as enthusiasm, pleasure and joy (Bakker, Tims & Derks, 2012). In other words, they become emotionally involved with their work. Consequently, the more emotionally involved workers are, the more productive they are going to be (Fredrickson, 2001). Furthermore, Anitha (2014) suggests that engagement directly affects employee performance. It goes without saying, that employee performance is a key determinant of organizational productivity and profitability. Thus, engagement has a direct effect on productivity and job satisfaction (Dikkers, Jansen, de Lange, Vinkenburg & Kooij, 2010; Nasomboon, 2014).

Conversely, workers who are not engaged, become dissatisfied causing a lot of problems for the firm (Vizzuso, 2015). For instance, in regards to performance, engaged people will perform better than non-engaged (Demerouti, Cropanzano, Cropanzano, Bakker, Leiter, 2010). In addition, disengaged employees may display low performance and destructive deviant behavior such as theft (Halbesleben, 2010). They can also opt to leave the organization (Ariani, 2013). Thus, retaining employees requires more than just having good and fair reward systems. It requires engaging them.
In conclusion, some organizations today have realized the importance of engagement for productivity and profitability. For example, Ford along with National City Bank are making great efforts to ensure that their employees are engaged (Attridge, 2009). Unfortunately, there still is a long way to go. According to a new study, where at least 300 employees were interviewed from 142 different countries, only 13% of employees are engaged worldwide (Gallup Organization 2013).
Chapter Three

Hypotheses Formation

This chapter discusses the relationships between all three variables: authentic leadership, organizational justice and engagement. It also includes the six different models that need to be tested.

3.1 Authentic Leadership and Engagement

Authentic Leadership has been identified by several scholars as a predictor of engagement (Hassan & Ahmed, 2011; Schneider, Macey, Barbera & Martin, 2009; Gardner, Avolio, Luthans May & Walumbwa, 2005). In fact, in their paper entitled “Authentic leadership, trust and work engagement”, Hassan & Ahmed (2011) study the effect of authentic leadership on engagement in Malaysia, using a sample of about 400 employees. Their results show that authentic leaders induce trust. This is understandable as authentic leaders believe in open and clear communication, act according to their beliefs, and portray ethical and authentic behavior. Such traits encourage the employees’ respect, and in this way they can trust their authentic leader. Consequently, this trust in the authentic leader increases work engagement (Hassan & Ahmed, 2011). In other words, the trust in the authentic leader induces workers to become more engulfed in and committed to their work mentally, physically and emotionally.

Equally important is Gardner, Avolio, Luthans, Walumbwa & May’s (2005) claim that authentic leadership impacts employees' engagement by increasing their...
levels of involvement, enthusiasm and work satisfaction. In other words, authentic leaders’ behaviors prompt employees to become more involved and passionate about their work. This in turn, allows workers’ engagement and success at work. Thus, the first proposed hypothesis is:

H1: Authentic Leadership is positively related to work engagement.

3.2 Authentic Leadership and Organizational Justice

There is a lot of confusion concerning the relationship between leadership and organizational justice. On the one hand, leadership might lead to organizational justice. Conversely, organizational justice might affect the type of leaders present in the organization. On the other hand, one variable might moderate or mediate the other’s effect on work outcomes.

To begin with, De Cremer & Tyler (2005) claim that leadership styles might guide workers’ attention away or towards organizational justice. The styles that cause employees to focus on justice will increase the justice-employee behavior relationship. However, styles that deviate workers’ attention from justice, will have the opposite effect. For instance, transformational leadership gears employees' attention towards justice (Burns, 1978), and authentic leadership is considered a part of transformational leadership. Therefore, authentic leadership might also direct workers' attention towards fairness.

Moreover, social exchange theory suggests that individuals’ actions rely on rewarding reactions from others (Blau, 1964). Using this theory along with reciprocity, researchers have been able to explain numerous employee behaviors in relation to their leaders’ behavior, such as organizational support, justice and empowerment (Wayne,
Liden & Shore, 1997; Dansereau et al., 1995). One type of leadership to consider is authentic leadership. Kiersch, Byrne, Peters and Kedharnath (2013) believe that having an authentic leader causes organizational justice and creates a fair atmosphere. In other words, having an authentic leader induces organizational trust. To illustrate, authentic leaders are known for their consistent values and transparency in their relationships. Such traits help shape subordinates’ perception of their leaders as trustworthy, transparent and fair (Colquitt, Scott & LePine, 2007; Penger & Černe, 2014). As the leader is the image and mouth piece of the organization, employees will thus perceive their organization as fair and trustworthy. Consequently, authentic leaders help build a trustworthy environment (Ceri-Booms, 2012). This helps improve the whole organization’s performance, by clearing and fortifying the transactional relations among employees.

Furthermore, according to uncertainty management theory, people have a stronger reaction to alterations of justice in case of uncertainty. This uncertainty entails, but is not limited to, missing clear and direct information relating to one’s organization (Lind & Van den Bos, 2002). Authentic leaders, however; are known for their consistent values and transparency in their relationship which induces trust. Thus, with authentic leaders’ uncertainty is reduced to a minimum, which in turn will decrease employees’ reactions regarding any justice inconsistency. For instance, in their study, Bamford, Wong & Laschinger (2013) examine the mediation of six work-life areas on the relationship between authentic leadership and work engagement. Out of these six areas, fairness is the one mostly related to authentic leadership. Thus, employees who perceive their leaders as authentic, also believe them to be fair. Yet, they still believe their organization to be unfair. This is because the final decision concerning reward may not
be limited to the leader/manager, but might include owners/top level managers. In addition, procedures are usually decided on by the owners/top level managers of that particular company. Thus, the type of leader might not affect how employees perceive justice, but having fair rules, regulations and reward systems might. In fact, employees can feel content, even if organizational outcomes are negative, if they perceive organizational procedures to be fair (Mayer, Greenbaum, Kuenzi & Shteynberg, 2009). Consequently, employees' support and positive reactions towards their organizations are strongly influenced by procedural justice (Tyler, 1990).

In fact, organizational justice might shape the type of leader present in an organization. To illustrate, procedural justice is the processes through which rewards are distributed. Some of the key factors in procedural justice are decreasing bias, using accurate and relevant information in decision making along with being ethical (Leventhal, Keruza, and Fry, 1980). Procedural justice also affects distributive and interactional justice, as all three types of justice are a development of one another (Greenberg and Colquitt, 2013). Thus, an organizational environment might promote procedural justice, when rules and regulations are clear, and ethical, and when decisions are based on relevant facts that are unbiased. Such a culture, in turn, shapes the leadership styles present at the firm, i.e. the leader becomes a good and ethical communicator.

In order to assess the true dynamic underlying organizational justice and authentic leadership relational structure, the following hypotheses are proposed:

**H2:** A positive relationship exists between Distributive Justice and authentic leadership.

**H3:** A positive relationship exists between Procedural Justice and authentic leadership.
**H4:** A positive relationship exists between Interactional Justice and authentic leadership.

### 3.3 Organizational Justice and Engagement

Potential employees today are looking for more than just a pay check. They are searching for job packages, decent working conditions and a place where they are acknowledged for their hard work and treated fairly. As such, organizational justice is one of their main concerns, as it relates to fairness in the workplace. One research even suggests that with the increase of perceived justice in the workplace, employee stress, depression and anxiety decreases (Spell & Arnold, 2007).

In fact, justice has been linked to several organizational outcomes such as commitment, job satisfaction, organizational citizenship behavior and work engagement (Aboul-Ela, 2014; Moliner et al. 2008; Cohen-Charash & Spector, 2001). Similarly, Gupta & Kumar (2012) argue that the more employees feel their organization is just, the more committed, loyal and engaged they are going to be. To illustrate, when employees feel that their organization supports their development and promotes a trust based environment, they become more actively engaged and devoted to performing better (Kim, 2014). In other words, the more employees perceive their firm as just, the more engaged and effective they are going to be. This engagement, in turn, influences workers’ innovative behavior significantly (Agarwal, 2014).

Moreover, some studies have gone in depth and identified how each type of justice affects work engagement. For instance, Moliner et al (2008) along with Inoue et al. (2010) argue that procedural justice and work engagement are positively related. In other words, the more employees perceive there is procedural justice, the more likely
they are engaged. Furthermore, a study conducted in an Indian collectivist culture, suggests that procedural and interactional justice are positively correlated with work engagement, with trust mediating this relationship (Agarwal, 2014). That is to say that not only does procedural justice, but also interactional justice affects work engagement. Furthermore, Ram & Prabhakar (2011) posit that rewards (both monetary and non-monetary) and distributive justice stimulate engagement. Accordingly, each type of justice affects engagement.

Comparatively, lack of justice in the workplace might decrease engagement. When employees feel that they are not being fairly rewarded, they will be discouraged and won’t put as much effort into their work, i.e. workers become less engaged. De Cremer, Van Knippenberg, Van Knippenberg, Mullenders and Stinglhamber (2005) propose that employees consider distributive and procedural justice as key indicators of their status within the workplace. In addition, employees’ work outcomes are direct results of uncertainty, particularly that pertaining to the perception of either distributive or procedural justice. Accordingly, the more uncertainty within perceived distributive or procedural justice, the less engaged employees are going to be.

As such, another set of hypotheses are:

**H5:** Distributive justice has a positive direct influence on work engagement  
**H6:** Procedural justice has a positive direct influence on work engagement  
**H7:** Interactional justice has a positive direct influence on work engagement

### 3.4 Modeling

Still, leadership, organizational justice and work engagement might not be directly related. In fact, leadership and justice’s interactive effects on employee
outcomes have been demonstrated in several studies relating to employee emotions, self-esteem and group cooperation (De Cremer & Tyler, 2005; De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber, 2005). For instance, De Cremer (2006) argues that transformational leadership moderates the relationship between procedural justice and employee emotion. In addition, Strom, Sears and Kelly (2014) believe that transactional leadership moderates the relationship between each-procedural and distributive justice- and work engagement. On the other hand, transformational leadership is not a moderator of any of the justice-engagement relationships. Yet, Bamford, Wong & Laschinger (2013) argue that among six work-life areas, fairness is the one mostly related to authentic leadership. It plays the role of a mediator between authentic leadership and work engagement. However, their results show that although employees perceive their leaders to be fair, they still believe their organization to be unjust. Thus, this study aims to clarify the reasons behind such a contradiction.

From the above, two models of mediation for each type of justice are proposed in order to achieve the study’s purpose. Model (a) depicts organizational justice mediating the relationship between authentic leadership and work engagement. Conversely, model (b) portrays the relationship between organizational justice and work engagement with authentic leadership as the mediator. Thus, our final two hypotheses are as follows:

**H8:** Organizational justice (interactional, distributive and procedural) mediates the relationship between authentic leadership and work engagement.

**H9:** Authentic leadership mediates the relationship between organizational justice (interactional, distributive and procedural) and work engagement.
Figures 1(a) through 3(b) show the hypothesized models tested:

**Fig. 1 (a)** Distributive Justice mediating Authentic Leadership & Engagement

**Fig. 1 (b)** Authentic Leadership mediating Distributive Justice & Engagement

**Fig. 2 (a)** Procedural Justice mediating Authentic Leadership & Engagement

**Fig. 2 (b)** Authentic Leadership mediating Procedural Justice & Engagement

**Fig. 3 (a)** Interactional Justice mediating Authentic Leadership & Engagement

**Fig. 3 (b)** Authentic Leadership mediating Interactional Justice & Engagement
Chapter Four

Methodology

This chapter includes a description of the population, sample and sample size along with an in depth explanation of the instruments utilized in the study.

4.1 Sample

To begin with, surveys were manually distributed in an educational setting between November 2015 and April 2016. In addition, the target population for the study included employees working for different privately held companies. Instructors, staff, MBA, and EMBA students were the main target audience. It is worth mentioning that only instructors who held more than one job position were involved in this study. Furthermore, the sample was one of convenience, where any working individual who conceded to filling out the questionnaire, among these groups, was accepted. The survey was administered in English, which is a second or third language in Lebanon. Although 500 eligible participants were invited, only 302 were completed and usable. The following sections discuss the different instruments used to measure the variables.

4.2 Instruments

A statement of the purpose of the study and a reassurance of the anonymity of the participants was placed at the beginning of the survey, which was approved by the Institutional Review Board (IRB) prior to distribution (see Appendix A). In the survey, the preamble mistakenly states that we are studying the moderating effect, however, the
study was readjusted. The true purpose of this paper is to examine the *mediating* effect of both organizational justice and authentic leadership.

It is important to note that the survey consisted of four sections. The first part was divided into 7 demographic questions. They included gender, age, education level, work industry, position and company size.

The second part, however, measured authentic leadership using 16 questions. Respondents rated their direct supervisors' level of authenticity on a 5-point Likert scale, where answers ranged between 1 (Not at all) and 5 (frequently if not always). Furthermore, the questions were based on Walumbwa et al.'s (2008) Authentic Leadership Questionnaire (ALQ, \(\alpha=0.923\)). The scale has four dimensions: (1) Self-awareness (4-items) i.e.: shows that s/he understands how his/her specific actions impact others; (2) Relational Transparency (5-items), i.e.: S/He tells the hard truth; (3) Internalized moral perspective/Transparency (4-items); i.e.: S/He makes decisions based on his/her core beliefs and finally (4) Balanced processing (3-items), i.e.: S/He analyzes relevant data before coming to a decision. This scale has been shown to be reliable and consistent with Cronbach's alpha being between 0.7 and 0.9 (Walimbwa et al. 2008).

Moreover, the third section of the questionnaire was concerned with work engagement. Participants were asked to answer 17 questions using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Based on Kahn's (1990) definition of engagement, Schaufeli et al. created the Utrecht Work Engagement Scale (UWES) and was adopted for the purpose of this study(\(\alpha=0.932\)). The scale measures three dimensions of engagement which are: (1) Vigor (6-items), (2) Dedication (5-items) and (3) Absorption (6-items). Example of the questions posed: "At my work, I feel bursting with energy", "I find the work that I do full of meaning and purpose", and
"Time flies when I'm working". It is worth mentioning that the UWES showed internal consistencies, in prior studies, between .80 and .90 (Montgomery, Peeters, Schaufeli & Den Ouden, 2003).

The fourth and final part of the survey used Niehoff & Moorman’s (1993) 20 question scale to measure the employees' perception of the level of organizational justice in their firm. Participants rated the questions on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Furthermore, Niehoff & Moorman's scale measures three types of justice: (1) Distributive Justice (5-items), (2) Procedural justice (6-items) and (3) Interactional Justice (9-items). Sample questions included: "I think that my pay is fair", "All job-related decisions are applied consistently to all affected employees" and "My manager explains very clearly any decisions made about my job". In addition, the scale has shown an internal validity of 0.82 (Kausto et al., 2005). Cronbach's alpha for the individual scales, however, was 0.9 for each component of justice (Moorman, Blakely, Niehof, 1998; Niehoff and Moorman, 1993). Moreover, in this study, Cronbach's alpha was 0.794, 0.801 and 0.94 for distributive, procedural and interactional justice, respectively.
Chapter Five

Statistical Findings

To analyze the collected data, IBM SPSS Statistics for Windows (Version 23.0) package was used. Findings are summarized below.

5.1 Demographic variables

The sample consisted of 302 participants, the majority of whom were working individuals with at least a Bachelor's Degree. Additionally, most of the respondents worked in the services sector (78%). This is understandable, as this sector is the most prosperous in Lebanon in comparison to other working sectors. In fact, the majority of the sample is highly educated young women. To illustrate, most participants were between the ages of 18-34 (78%) and 165 of them were females (55%), which is representative of our population that is predominantly females. Moreover, half the respondents held a Master's Degree (49.7%). However, they mostly had limited work experience between 0 and 10 years (74.5%), in non-managerial positions (around 57.6 %). To summarize, the frequencies and percentages of gender, age, education and other descriptive construct are shown in table (2) below.
Table 2: Summary of descriptive statistics

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>103</td>
<td>34.1</td>
</tr>
<tr>
<td>Female</td>
<td>165</td>
<td>54.6</td>
</tr>
<tr>
<td>Missing</td>
<td>34</td>
<td>11.3</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>124</td>
<td>41.1</td>
</tr>
<tr>
<td>25-34</td>
<td>114</td>
<td>37.7</td>
</tr>
<tr>
<td>35-44</td>
<td>43</td>
<td>14.2</td>
</tr>
<tr>
<td>45-54</td>
<td>14</td>
<td>4.6</td>
</tr>
<tr>
<td>55-64</td>
<td>7</td>
<td>2.3</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>high school or less</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>baccalaureate or</td>
<td>12</td>
<td>4.0</td>
</tr>
<tr>
<td>technical (BT-TS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University/BA/BS</td>
<td>122</td>
<td>40.4</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>150</td>
<td>49.7</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>9</td>
<td>3.0</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td>WORKEXPERIENCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>168</td>
<td>55.6</td>
</tr>
<tr>
<td>6-10</td>
<td>57</td>
<td>18.9</td>
</tr>
<tr>
<td>11-15</td>
<td>32</td>
<td>10.6</td>
</tr>
<tr>
<td>16-20</td>
<td>21</td>
<td>7.0</td>
</tr>
<tr>
<td>&gt;20</td>
<td>23</td>
<td>7.6</td>
</tr>
<tr>
<td>33.00</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>POSITION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-managerial</td>
<td>174</td>
<td>57.6</td>
</tr>
<tr>
<td>position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational Level</td>
<td>44</td>
<td>14.6</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle level</td>
<td>63</td>
<td>20.9</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top level manager</td>
<td>16</td>
<td>5.3</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5.2 Hypothesis Testing

The scales used for the purpose of this study are well established and tested. Thus, in order to measure our latent variables for authentic leadership and engagement,
and each type of justice (distributive, procedural and interactional), the mean of each variable was calculated. As for outliers, by the very nature of Likert scale, there are no outliers. Moreover, to test for reliability of the scale, Cronbach's alpha was calculated for each scale where values ranged between 0.794 and 0.940 indicating high reliability (see table 3). However, to test for internal validity, the item to scale correlation was computed for each scale. All correlations were positive and significant at the 0.01 level. The reliability and validity of each scale is summarized in table (3) below.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Scale Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach's alpha coefficient</th>
<th>Item to Scale Correlation</th>
<th>Lowest</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributive Justice (n =284)</td>
<td>5</td>
<td>3.3028</td>
<td>0.76967</td>
<td>0.794</td>
<td>0.651</td>
<td>0.821</td>
<td></td>
</tr>
<tr>
<td>Procedural Justice (n=290)</td>
<td>6</td>
<td>3.318</td>
<td>0.735</td>
<td>0.801</td>
<td>0.358</td>
<td>0.817</td>
<td></td>
</tr>
<tr>
<td>Interactional Justice (n=297)</td>
<td>9</td>
<td>3.5792</td>
<td>0.81370</td>
<td>0.940</td>
<td>0.749</td>
<td>0.873</td>
<td></td>
</tr>
<tr>
<td>Engagement (n =275)</td>
<td>17</td>
<td>3.6111</td>
<td>0.67203</td>
<td>0.932</td>
<td>0.472</td>
<td>0.826</td>
<td></td>
</tr>
<tr>
<td>Authentic Leadership (n =268)</td>
<td>16</td>
<td>3.4798</td>
<td>0.78819</td>
<td>0.923</td>
<td>0.457</td>
<td>0.775</td>
<td></td>
</tr>
</tbody>
</table>

5.2.1 Correlations

First, authentic leadership and engagement were found to be strongly correlated, \( r(301) =0.427, p<0.01 \) (see Table 4). Thus, hypothesis (1) is confirmed.
Then, authentic leadership was correlated with each type of organizational justice (distributive, procedural and interactional justice) where authentic leadership and distributive justice were the least correlated, \( r (302) = 0.299, p<0.01 \). Moreover, authentic leadership and procedural justice were found to be significantly linked, \( r (302) = 0.637, p<0.01 \). Finally, interactional justice was found to be the one highly associated with authentic leadership, with \( r (302) = 0.697, p<0.01 \). Consequently, hypotheses 2, 3 and 4 are confirmed.

Furthermore, a correlation analysis was performed to study the relationship between each component of organizational justice and work engagement. The first one included distributive justice and engagement where \( r (301) = 0.340, p<0.01 \). Next, procedural justice and engagement were studied and were found to be highly connected to work engagement, \( r (301) = 0.401, p<0.01 \). Finally, interactional justice proved to be the one mostly correlated with engagement with \( r (300) = 0.438, p<0.01 \).

**Table 4: Correlation Matrix**

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Authentic Leadership</th>
<th>Distributive Justice</th>
<th>Procedural Justice</th>
<th>Interactional Justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Leadership</td>
<td>-----</td>
<td>n=302</td>
<td>n=302</td>
<td>n=301</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( r=0.299^{**} )</td>
<td>( r=0.637^{**} )</td>
<td>( r=0.697^{**} )</td>
</tr>
<tr>
<td>Engagement</td>
<td>n=301</td>
<td>n=301</td>
<td>n=301</td>
<td>n=300</td>
</tr>
<tr>
<td></td>
<td>( r=0.427^{**} )</td>
<td>( r=0.340^{**} )</td>
<td>( r=0.401^{**} )</td>
<td>( r=0.438^{**} )</td>
</tr>
</tbody>
</table>

\( ^{**}p<0.01 \)

### 5.2.2 Regression

To test for mediation, several regression analyses were undertaken (Baron & Kenny, 1986). The first regression studied the independent and dependent variables. The second studied the significance of the relationship between the independent variable and the mediator. The third regression studied the dependent variable with the mediator. The fourth and final regression studied the relationship between the independent and
dependent variable with respect to the mediator. Prior, Guass-Margov assumptions for linear regression were tested and met. The following sections explain the regressions in more detail.

5.2.2.1 Model (1): Distributive Justice, Authentic Leadership and Engagement

Model (1) studied the mediating relationship between distributive justice, authentic leadership and engagement. It considered two types of relationships between the three variables. The first relationship examined the mediation of distributive justice on authentic leadership and engagement (see table5). Conversely, the second relationship assessed the mediation of authentic leadership on distributive justice and engagement. To do so, 5 regression analyses were examined (see table5).

The first regression carried out included distributive justice as the independent variable and engagement as the dependent. Results showed that: $\beta=0.297$, $t (302) =6.254$, $R^2=0.116$ and $f-sig=0.000$. Thus, distributive justice does lead to engagement and hypothesis 2 is verified. The second regression inspected the effect of authentic leadership on engagement and showed that: $\beta = 0.364$, $t (301) = 8.154$, $R^2 = 0.182$, $f-sig = 0.000$. Hence, authentic leadership increased work engagement and hypothesis 1 is confirmed.

For model 1(a), where distributive justice mediates the relationship between authentic leadership and engagement, the regression of authentic leadership on distributive justice was studied, and the findings were as follows: $\beta = 0.364$, $t (302) = 5.432$, $R^2 = 0.090$, $f-sig = 0.000$. However, in the third step for model 1(b), where authentic leadership mediates the relationship between distributive justice and engagement, the opposite was performed. In other words, a regression of distributive
justice on authentic leadership and got: $\beta = 0.292$, $t (302) = 5.432$, $R^2 = 0.090$, $f$-sig $= 0.000$.

In the fourth and final step, a multiple regression analysis was used, where the independent variables were authentic leadership and distributive justice, and the dependent variable was engagement. Results showed that for authentic leadership: $\beta = 0.304$, $t (301) = 5.432$, $R^2 = 0.232$, $f$-sig $= 0.000$. As for distributive justice, $\beta = 0.204$, $t (301) = 4.391$, $R^2 = 0.232$, $f$-sig $= 0.000$.

This proves that when regression was applied to all three variables (authentic leadership, distributive justice and engagement), the beta for authentic leadership ($\beta = 0.304$) was less by 0.06, than the beta obtained from the regression of authentic leadership on engagement in step 2 ($\beta = 0.364$). In other words, distributive justice partially mediated the relationship between authentic leadership and work engagement. This means that hypothesis 8 is supported.

The same thing occurred for distributive justice. When regression was applied to all three variables (authentic leadership, distributive justice and engagement), the beta for distributive justice ($\beta = 0.204$) was less by 0.093, than the beta obtained from the regression of distributive justice on engagement in step 1 ($\beta = 0.297$). Therefore, authentic leadership partially mediated the relationship between distributive justice and work engagement. This validates hypothesis 9.

Therefore, both models are statistically correct. However, to gain more insight, the drop of the slope of the coefficient is used. Consequently, as the difference of the betas relating to distributive justice (0.093) is more than the one for authentic leadership (0.06), model 1(b) is considered the stronger model. It depicts authentic leadership
mediating the relationship between distributive justice and engagement. Thus, hypothesis 8 and 9 are valid, with hypothesis 9 being stronger.

Table 5: Regression of authentic leadership, distributive justice and engagement

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>N</th>
<th>B</th>
<th>T</th>
<th>R²</th>
<th>Adj. R²</th>
<th>f-sig</th>
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<tbody>
<tr>
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<td>Distributive Justice</td>
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</tr>
<tr>
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<td>Authentic Leadership</td>
<td>301</td>
<td>0.364</td>
<td>8.154</td>
<td>0.182</td>
<td>0.179</td>
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</tr>
<tr>
<td>Distributive Justice</td>
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<td>0.090</td>
<td>0.087</td>
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</tr>
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<td>Distributive Justice</td>
<td>302</td>
<td>0.306</td>
<td>5.432</td>
<td>0.090</td>
<td>0.087</td>
<td>0.000</td>
</tr>
<tr>
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<td>Authentic Leadership</td>
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<td>0.304</td>
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<td>0.232</td>
<td>0.226</td>
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<td></td>
</tr>
</tbody>
</table>

5.2.2.2 Model (2): Procedural Justice, Authentic Leadership and Engagement

However, model (2) studied the mediating relationship between procedural justice, authentic leadership and engagement. It examined two types of relationships between the three variables. The first relationship was concerned with the mediation of procedural justice on authentic leadership and engagement (see table 6). However, the second relationship, investigated the mediation of authentic leadership on procedural justice and engagement. To do so, five regression analyses were performed (see table 6).

The first regression carried out included procedural justice as the independent variable and engagement as the dependent one. Results showed that: $\beta = 0.368$, $t = 7.561$, $R^2 = 0.161$ and $f$-sig = 0.000. Therefore, procedural justice led to increased work engagement which supports hypothesis 6. The second regression, however, studied the effect of authentic leadership on engagement and showed that: $\beta = 0.364$, $t = 8.154$, $R^2$
Thus, authentic leadership motivated employees to become more engaged.

For model 2(a), a regression of authentic leadership on procedural justice was performed and found that: $\beta = 0.595$, $t = 14.325$, $R^2 = 0.406$, $f$-sig $= 0.000$. However, for model 2(b), in the third step, the opposite was done. In other words, a regression of procedural justice on authentic leadership was undertaken and found: $\beta = 0.683$, $t = 14.325$, $R^2 = 0.406$, $f$-sig $= 0.000$.

In the fourth and final step, a multiple regression analysis was used, where the independent variables are authentic leadership and procedural justice, and the dependent variables are engagement. Results showed that for authentic leadership: $\beta = 0.246$, $t (301) = 3.261$, $R^2 = 0.210$, $f$-sig $= 0.000$. As for procedural justice, it was found that $\beta = 0.200$, $t (301) = 3.261$, $R^2 = 0.210$, $f$-sig $= 0.000$.

This shows that when regression was applied to all three variables (authentic leadership, procedural justice and engagement), the beta for authentic leadership ($\beta = 0.246$) was less by 0.118, than the beta obtained from the regression of authentic leadership on engagement in step 2 ($\beta = 0.364$). In other words, procedural justice partially mediated the relationship between authentic leadership and engagement. This supports hypothesis 8.

Similarly, for procedural justice, when regression was applied to all three variables (authentic leadership, procedural justice and engagement), the beta for procedural justice ($\beta = 0.200$) was less by 0.168, than the beta obtained from the regression of procedural justice on engagement in step 1 ($\beta = 0.368$). Therefore, authentic leadership partially mediated the relationship between procedural justice and work engagement. Thus, hypothesis 9 is validated.
Therefore, both models are statistically correct. However, to gain more insight, the drop of the slope of the coefficient is used. Consequently, as the difference of the betas relating to procedural justice (0.168) is more than the one for authentic leadership (0.118), model 2 (b) is the stronger model. It depicts that authentic leadership mediating the relationship between procedural justice and engagement. Thus, hypothesis 9 is valid and stronger than hypothesis 8.

Table 6: Regression of authentic leadership, procedural justice and engagement

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>N</th>
<th>B</th>
<th>T</th>
<th>R²</th>
<th>Adj. R²</th>
<th>f-sig</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engagement</strong></td>
<td>Procedural Justice</td>
<td>301</td>
<td>0.368</td>
<td>7.561</td>
<td>0.161</td>
<td>0.158</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Engagement</strong></td>
<td>Authentic Leadership</td>
<td>301</td>
<td>0.364</td>
<td>8.154</td>
<td>0.182</td>
<td>0.179</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Procedural Justice</strong></td>
<td>Authentic Leadership</td>
<td>302</td>
<td>0.595</td>
<td>14.325</td>
<td>0.406</td>
<td>0.404</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Authentic Leadership</strong></td>
<td>Procedural Justice</td>
<td>302</td>
<td>0.683</td>
<td>14.325</td>
<td>0.406</td>
<td>0.404</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Engagement</strong></td>
<td>Authentic Leadership</td>
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<td>0.246</td>
<td>4.326</td>
<td>0.210</td>
<td>0.205</td>
<td>0.000</td>
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<tr>
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<td>Procedural Justice</td>
<td></td>
<td>0.200</td>
<td>3.261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2.2.3 Model (3): Interactional Justice, Authentic Leadership and Engagement

Finally, model (3) studied the mediating relationship between interactional justice, authentic leadership and engagement. It considered two types of relationships between the three variables. The first relationship examined the mediation of interactional justice on authentic leadership and engagement (see table 7). Conversely, the second relationship investigated the mediation of authentic leadership on interactional justice and engagement. To do so, 5 regression analyses were performed (see table 7).
The first regression included interactional justice as the independent variable and engagement as the dependent one. Results show that: $\beta = 0.360, t = 8.399, R^2 = 0.191$ and $f$-sig = 0.000. Therefore, interactional justice leads to increased work engagement, and hypothesis 4 is valid. Moreover, the second regression studied the effect of authentic leadership on engagement and showed that: $\beta = 0.360, t = 8.154, R^2 = 0.182, f$-sig = 0.000. Thus, authentic leadership improves work engagement.

For model 3(a), a regression of authentic leadership on interactional justice was undergone which resulted in: $\beta = 0.719, t = 16.806, R^2 = 0.486, f$-sig = 0.000. However, for model 3(b), in the third step, the opposite was performed where the regression analysis on interactional justice on authentic leadership showed: $\beta = 0.675, t = 16.806, R^2 = 0.486, f$-sig = 0.000.

In the fourth and final step, a multiple regression analysis was used with the independent variables being authentic leadership and interactional justice, and the dependent variables being engagement. Results showed that for authentic leadership: $\beta = 0.197, t (300) = 3.26, R^2 = 0.219, f$-sig = 0.000. However, for interactional justice the results were, $\beta = 0.227, t (300) =, R^2 = 0.219, f$-sig = 0.000.

Consequently, this proves that when regression was applied to all three variables (authentic leadership, interactional justice and engagement), the beta for authentic leadership ($\beta = 0.197$) was less by 0.167, than the beta obtained from the regression of authentic leadership on engagement in step 2 ($\beta = 0.364$). Therefore, interactional justice partially mediated the relationship between authentic leadership and engagement. This supports hypothesis 8.

The same was proven for interactional justice. When regression was applied to all three variables (authentic leadership, interactional justice and engagement), the beta
for interactional justice (β =0.227) was less by a difference of 0.133, than the beta obtained from the regression of interactional justice on engagement in step 1 (β =0.36).

Thus, authentic leadership partially mediated the relationship between interactional justice and work engagement. This shows that hypothesis 9 is valid.

Therefore, both models are statistically correct. However, to gain more insight, the drop of the slope of the coefficient is used. Consequently, as the difference of the betas relating to authentic leadership (0.167) is more than the one for interactional leadership (0.133), model 3 (a) is the stronger model. It depicts interactional justice mediating the relationship between authentic leadership and engagement. Thus, hypotheses 8 and 9 are valid with 8 being stronger.

*Table 7: Regression of authentic leadership, interactional justice and engagement*

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>N</th>
<th>B</th>
<th>T</th>
<th>R²</th>
<th>Adj. R²</th>
<th>f-sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Interactional Justice</td>
<td>300</td>
<td>0.360</td>
<td>8.399</td>
<td>0.191</td>
<td>0.189</td>
<td>0.000</td>
</tr>
<tr>
<td>Engagement</td>
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<td>301</td>
<td>0.364</td>
<td>8.154</td>
<td>0.182</td>
<td>0.179</td>
<td>0.000</td>
</tr>
<tr>
<td>Interactional Justice</td>
<td>Authentic Leadership</td>
<td>301</td>
<td>0.719</td>
<td>16.806</td>
<td>0.486</td>
<td>0.484</td>
<td>0.000</td>
</tr>
<tr>
<td>Authentic Leadership</td>
<td>Interactional Justice</td>
<td>301</td>
<td>0.675</td>
<td>16.806</td>
<td>0.486</td>
<td>0.484</td>
<td>0.000</td>
</tr>
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<td>Engagement</td>
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<td>0.197</td>
<td>3.260</td>
<td>0.219</td>
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<td>0.227</td>
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</tbody>
</table>
Chapter Six

Discussion

Several scholars have called for a better understanding of how justice can impact workers' attitudes (Judge, Piccolo & Ilies, 2004; Van Knippenberg, De Cremer, & Van Knippenberg, 2007). To address this issue, Bamford, Wong & Laschinger (2013) examine the mediation of six work-life areas-workload, control, rewards, community, fairness and values- on the relationship between authentic leadership and work engagement among nurses. They consider fairness to be “the extent that openness and respect are present in the organization and in the decision-making process” (Bamford et al., 2013, p. 531). Their findings show fairness to be the area mostly related to authentic leadership. Nevertheless, despite the strong relationship between authenticity and fairness, nurses still consider their institution to be unfair. Bamford et al. attribute their mixed findings to “broader corporate decisions seen as unfair” (2013, p.537). To better understand these conflicting results, this study examines the mediating relationships of both authentic leadership and organizational justice on work engagement. The results show that authentic leadership partially mediates the relationship between each, distributive and procedural justice, and work engagement. Thus, models 1(b) and 2(b) were more suitable. However, the relationship is reversed when interactional justice is tested. In other words, interactional justice partially mediates the relationship between authentic leadership and work engagement proving that model 3 (a) is more appropriate.
Nevertheless, some scholars view interactional to be an extension of procedural justice. This was the case when one question which relates to procedural justice (Q. 39, see Appendix A) was temporarily removed, as it had the weakest correlation with the scale. The results were inversed and procedural justice was found to mediate authentic leadership and work engagement. In other words, procedural justice did in fact act the same way interactional justice did. This result might be due to the culture where people are not comfortable with addressing an accusatory question such as question 39 which accuses the manager of being bias. Still, this particular question was found to be was significant, positive and did load onto one component with the others, although it had the weakest correlation to the scale. That is why, for the purpose of this study, the question was included in calculating the mean of procedural justice.

Moreover, when all three types of justice are combined into one latent variable (organizational justice), justice mediates the relationship between authentic leadership and engagement. However, the model is very weak and so studying each type of justice separately is best. This is supported by the literature, where Skarlicki & Folger (1997) along with Ambrose & Schminke (2007) posit that if a company wishes to implement organizational justice as a whole, it is more advisable to approach each type distinctively. By the same token, Shahzad et al. (2014) state that maintaining only one type of justice can decrease the negative effects of injustice.

To demonstrate, both distributive justice and procedural justice are tangible forms of justice established by pay scales and policies. On the one hand, distributive justice focuses on the fact that people are not rewarded and appraised equally. On the other hand, procedural justice shapes employees’ perception of their organizations’ policies. Subsequently, employees consider distributive and procedural justice as key
indicators of their status within the workplace (De Cremer et al., 2006). In other words, employees who perceive that they are being treated fairly, consider themselves valuable, essential and respected individuals within the organization. Moreover, workers consider top level managers, rather than their direct manager, to have the final saying in matters relating to their paychecks and bonuses. Thus, their loyalty need only be directed at the firm. This depicts that procedures and monetary rewards are stronger drivers of work engagement than authentic leadership.

Furthermore, the study shows that the presence of authentic leadership explains part of the relationship between these two types of justice-procedural and distributive-and work engagement. Generally speaking, leaders are the representatives of the organization and the ones responsible for applying the rules. Equally important is the fact that authentic leaders are honest, trustworthy and can integrate their beliefs with the company's. What supports this point of view are İnce & Gül’s (2011) findings which prove that individuals put more emphasis on how they are treated and how procedures are explained to them, rather than the processes themselves. Thus, if the leader is authentic, employees will better perceive procedural and distributive justice in the organization which will subsequently increase their engagement.

In addition, employees’ work outcomes are direct results of uncertainty pertaining to the perception of either distributive or procedural justice. For instance, employees who might have a vague understanding of procedures might not trust their organization and thus perform less than others. Therefore, while distributive and procedural justice directly affect work engagement, the relationship is partially mediated by authentic leadership.
In contrast, interactional justice is an intangible form of justice. Moorman (1991) posits that interactional justice is the relation and communication between the person in charge of decision making and the employees affected by these decisions. In other words, an inspiring and a fair leader creates a trustworthy environment especially in terms of the employer-employee relationship. In this way, employees perceive that there is interactional justice in the organization. This is confirmed in Aboul-Ela’s (2014) research which reveals a positive link between interactional justice and leader evaluation.

Moreover, authentic leaders allow their subordinates to voice their opinions and ask for their feedback. Such leaders can also influence their surroundings. Thus, authentic leaders can affect employees at different levels such as emotional and mental. In other words, they can affect work engagement, as it is considered to be cognitive, affective and behavioral. Tinchindelean and Vinerean (2015), authors of *Achieving Employee Satisfaction by Pursuing Sustainable Practices*, support the above mentioned argument by stating that “by providing opportunities for engagement and involvement, employees will be more connected with their work and will feel that their actions make a difference” (p.37). Consequently, having an authentic leader is enough- at the emotional and communication level- for employees to engage. This relationship is partially explained by the presence of interactional justice.

It is worth mentioning that this study is conducted in a Lebanese context. Lebanon has a collectivist culture where individuals identify with others of the same religious group. Therefore, self-restraint, reservedness and sacrifice are only required within one’s religious group or family (Peus, Wesche, Streicher, Braun & Frey, 2012). In other words, a one’s respect and loyalty is only directed towards a group of people,
not the whole country. This is because for many Lebanese, identifying with a certain religious group ensures social and political advantages. For instance, the Lebanese public sector only hires based on religious affiliations and ensures that all groups are well represented (Aoun and Gibeily, 2006). The private sector, on the other hand, is slightly more developed because, when hiring, it takes qualifications into account. In a typical private organization in Lebanon, the management style is a traditional/hierarchal one, where employees only need to follow instructions and creativity or recommendations are not required. Any extra effort, on the employee's part, is usually dismissed as voluntary work. It goes unappreciated and rarely translates to monetary rewards. This might justify the results of this the study where authentic leadership partially mediated the relationship between distributive justice and engagement, and between procedural justice and engagement. Consequently, workers are more concerned with having fair reward systems and procedures rather than fair leaders. On the other hand, İnce & Gül (2011) consider that individuals put more emphasis on how they are treated and how procedures are explained to them, rather than the processes themselves. This might explain why the emphasis is on having an authentic leader when looking for clear communication and interactional justice.

6.1 Practical Implications

Moreover, this study addresses the call of several scholars to better understand how justice can impact workers’ attitudes (Judge et al. 2004, van Knippenberg, De Cremer, & van Knippenberg, 2007). It adds to the literature on organizational justice, leadership and engagement. Moreover, the findings pave the way for a new area of research, to study justice in terms of leadership.
Identifying authentic leadership as a mediator between two types of organizational justice and engagement is valuable. It helps practitioners understand the dynamics between all three variables. To illustrate, organizations' main goal is to make profit. Moreover, having engaged employees is critical to profit earning processes. Thus, organizations need to develop and maintain-if not improve- the level of engagement among their employees. To do so, fair procedures must be put in place. Companies also need to clearly explain their procedures, rules and regulations, particularly those pertaining to rewards. This can be established by having authentic leaders. Organizations need to train their managers/ leaders on authenticity and communication skills.

On the other hand, leaders need to be aware of their impact on their subordinates. They need to understand how their communication and actions with employees affect the organization's overall profit. If they are perceived as trustworthy and fair, their subordinates will trust them, will become more content with their job and will work harder.

6.2 Limitations

As with any study, it is not without fault. The data was collected from a convenience sample, and all reported information is completely opinion based. However, it is a well-known fact that employees have a hard time conveying the truth about their bosses and their organizations. They might have answered idealistically, i.e. what they thought should be the right answer, rather than what they truly think.

Another limitation was the length of the questionnaire. It contained 53 questions which might have been an inconvenience to some participants. Some declined to
participate due to this factor. Others, who did fill out the questionnaire, complained about the matter.

Also, most of our respondents were between the ages of 18 and 34, since older individuals were reluctant to participate. This is because the concept of research is relatively new to the environment where the study was conducted. As a result, older participants were skeptical of the anonymity of the study, although they were assured of it. Nonetheless, this can be viewed in a positive light as our study reflects the viewpoint of the current generation rather than the older one.

Finally, around 34 participants neglected to fill in the gender box. This might be due to the data being collected personally rather than online. Online might have put respondents more at ease, although everyone was assured and reminded that the answers will remain anonymous. However, this study provides an excellent insight on why previous studies reported conflicting results pertaining to the leadership-justice dynamic.

### 6.3 Future Research and Recommendations

Nevertheless, further studies are needed to better understand the relationship between authentic leadership, organizational justice and work engagement. Future researchers ought to analyze the effect of transformational leadership on the relationship between justice and engagement, as authentic leadership is considered to be a subset of transformational leadership.

Another recommendation is to study both models in terms of moderation rather than mediation. Moderation might have different results and provide a more in depth view of the dynamic between the three variables. They could study each model while controlling for gender. This might give a better understanding on how the moderating
effect is related to gender. They can also control for other demographic variables such as work industry and years of experience.

In addition, new studies can be undertaken in different business sectors as each requires different skills, basic job tasks and has various specifications. Consequently, this could affect how the three variables relate to one another. Finally, as this study was cross-sectional, a longitudinal study is worth looking into as the relationships might be reversed, increased or even decreased over time.
References


Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice?. Journal of Social issues, 31(3), 137-149.


George, J. (2014). A Quantitative Study of Organizational Justice and Millennial Turnover Intentions in Public Accounting Firms. NORTHCENTRAL UNIVERSITY.


Leventhal, G. S. (1980). What should be done with equity theory?. In Social exchange (pp. 27-55). Springer US.


Appendix A

Dear Participants,

This research project is conducted as part of an MBA graduate thesis research at the Lebanese American University (LAU). The aim of this research is to study the moderating effect of authentic leadership on the relationship between organizational justice and employees’ work engagement in firms. All data and measurements obtained from this research study will be stored confidentially. Only researcher will have access to view any data collected during this research.

The research intends to cause no physical or psychological harm or offense and to abide by all commonly acknowledged ethical codes. You voluntarily agree to participate in this research project by filling the following questionnaire. You have the right to ask the researchers any question regarding this project. You also have the right to reject participation. You may withdraw from this research any time you wish. This may take 10 minutes of your time.

If you have any questions, you may contact:

<table>
<thead>
<tr>
<th>Name (PI)</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Zeina Sidani</td>
<td><a href="mailto:Zeina.Sidani01@lau.edu">Zeina.Sidani01@lau.edu</a></td>
</tr>
</tbody>
</table>

If you have any questions about your rights as a participant in this study, or you want to talk to someone outside the research, please contact the:

IRB Office,
Lebanese American University
3rd Floor, Dorm A, Byblos Campus
Tel: 00 961 1 786456 ext. (2332)

Choose the best answer:

<table>
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<th>o Female</th>
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</tr>
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<tr>
<td>Education</td>
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<td>o Baccalaureate or Technical (BT-TS)</td>
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<td>o Doctorate Degree</td>
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</tr>
<tr>
<td>Years of work experience</td>
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<td>o 6-10 years</td>
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<td></td>
<td>o 11-15 years</td>
<td>o 16-20 years</td>
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<td></td>
<td>o More than 20 years</td>
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<td>o Business</td>
<td>o Engineering</td>
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<td>Work position:</td>
<td>Non-managerial position</td>
<td>Operational level manager</td>
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<tr>
<td>---------------</td>
<td>-------------------------</td>
<td>---------------------------</td>
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<tr>
<td>Company Size:</td>
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<td>10-50 employees</td>
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Please rate the following questions

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<th>Sometimes</th>
<th>Fairly Often</th>
<th>Frequently if not always</th>
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</thead>
<tbody>
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<td>1. My leader seeks feedback to improve interactions with others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. My leader accurately describes how others view his/her capabilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. My leader knows when it is time to reevaluate his/her positions on important issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. My leader shows that he/she understands how specific actions impact others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. My leaders says exactly</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>what he/she means</strong></td>
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<td>6. My leader is willing to admit his/her mistakes when they are made.</td>
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<td>7. My leader encourages everyone to speak their mind</td>
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<td>8. My leader tells the hard truth</td>
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<td>9. My leader displays emotions exactly in line with feelings</td>
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<td>10. My leader demonstrates beliefs that are consistent with actions</td>
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<td>11. My leader makes decisions based on his/her core beliefs.</td>
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<td>12. My leader asks others to take positions that support their core values.</td>
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<td>13. My leader makes difficult decisions based on high standards of ethical conduct</td>
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<td>14. My leader solicits views that challenge his/her deeply held positions</td>
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<tr>
<td>Statements</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<td>15. My leader analyzes relevant data before coming to a decision</td>
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<td>16. My leader listens carefully to different points of view before coming to conclusions</td>
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<td>2</td>
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<td>17. At my work, I feel bursting with energy</td>
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<td>18. At my job, I feel strong and vigorous</td>
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<tr>
<td>19. When I get up in the morning, I feel like going to work</td>
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<td>20. I can continue working for very long periods at a time</td>
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<td>21. At my job, I am very resilient, mentally</td>
<td>1</td>
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<td>22. At my work I always persevere, even when things do not go well</td>
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<td>23. I find the work that I do full of meaning and purpose</td>
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<td>Statements</td>
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<td>24. I am enthusiastic about my job</td>
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<td>25. My job inspires me</td>
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<tr>
<td>26. I am proud on the work that I do</td>
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<td>27. To me, my job is challenging</td>
<td>1</td>
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<td>28. Time flies when I'm working</td>
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<td>29. When I am working, I forget everything else around me</td>
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<td>30. I feel happy when I am working intensely</td>
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<td>31. I am immersed in my work</td>
<td>1</td>
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<td>32. I get carried away when I'm working</td>
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<td>33. It is difficult to detach myself from my job</td>
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<td>38. I feel that my job responsibilities are quite fair</td>
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<td>39. Job decisions are made by my manager in a biased manner</td>
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<td>40. My manager makes sure that all employee concerns are heard before job decisions are made</td>
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<td>41. To make job decisions, my manager collects accurate and complete information</td>
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<td>42. My manager clarifies decisions and provides additional information when requested by employees</td>
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<td>43. All job-related decisions are applied consistently to all affected employees</td>
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<td>44. Employees are allowed to challenge or appeal job decisions made by their managers</td>
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<td>45. When decisions are</td>
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<td>made about my job, the manager treats me with kindness and consideration</td>
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<td>46.</td>
<td>When decisions are made about my job, the manager treats me with respect and dignity</td>
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<td>47.</td>
<td>When decisions are made about my job, the manager is sensitive to my personal needs</td>
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<td>48.</td>
<td>When decisions are made about my job, the manager deals with me in a truthful manner</td>
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<td>49.</td>
<td>When decisions are made about my job, the manager shows concern for my rights as an employee</td>
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<td>50.</td>
<td>Concerning decisions made about my job, the manager discusses with me the implications of the decisions</td>
<td>1</td>
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<td>51.</td>
<td>The manager offers adequate</td>
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<td>justification for decisions made about my job</td>
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<td>52. When making decisions about my job, the manager offers explanations that make sense to me</td>
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<td>53. My manager explains very clearly any decisions made about my job</td>
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</tbody>
</table>

Thank You 😊
Appendix B

NOTICE OF IRB APPROVAL – EXEMPT STATUS

To: Ms. Zeina Sidani
    Advisor: Dr. Leila Messarra
    School of Business

Date: October 30, 2015
RE: IRB #: LAU.SOB.LM1.30/Oct/2015
    Protocol Title: The Moderating Effect of Authentic Leadership on the relationship between Organizational Justice and Employee Engagement
    APPROVAL ISSUED: 30 October 2015
    EXPIRATION DATE: NA
    REVIEW TYPE: EXEMPT

Your application for the above referenced research project has been approved by the Lebanese American University, Institutional Review Board (LAU IRB). This research project qualifies as exempt under the following categories:

B. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and

(ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

This approval is limited to the activities described in the Protocol Exempt Application and all submitted documents listed on page 2 of this letter. Enclosed with this letter are the stamped approved documents that must be used.
APPROVAL CONDITIONS FOR ALL LAU APPROVED HUMAN RESEARCH PROTOCOLS - EXEMPT

LAU RESEARCH POLICIES: All individuals engaged in the research project must adhere to the approved protocol and all applicable LAU IRB Research Policies. PARTICIPANTS must NOT be involved in any research related activity prior to IRB approval date or after the expiration date.

EXEMPT CATEGORIES: Activities that are exempt from IRB review are not exempt from IRB ethical review and the necessity for ethical conduct.

MODIFICATIONS AND AMENDMENTS: Certain changes may change the review criteria and disqualify the research from exemption status; therefore, any proposed changes to the previously approved exempt study must be reviewed and approved by the IRB before implementation.

NOTIFICATION OF PROJECT COMPLETION: A notification of research project closure and a summary of findings must be sent to the IRB office upon completion. Study files must be retained for a period of 3 years from the date of notification of project completion.

IN THE EVENT OF NON-COMPLIANCE WITH ABOVE CONDITIONS, THE PRINCIPAL INVESTIGATOR SHOULD MEET WITH THE IRB ADMINISTRATORS IN ORDER TO RESOLVE SUCH CONDITIONS. IRB APPROVAL CANNOT BE GRANTED UNTIL NON-COMPLIANT ISSUES HAVE BEEN RESOLVED.

If you have any questions concerning this information, please contact the IRB office by email at christine.chalhoub@lau.edu.lb

Dr. Costantine Daher
Chair, Institutional Review Board

Lebanese American University FWA00014723
IRB Registration # IRB00006954 LAUIRB#1

DOCUMENTS SUBMITTED:

<table>
<thead>
<tr>
<th>Document Description</th>
<th>Approved Date</th>
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<tbody>
<tr>
<td>IRB Exempt Protocol Application</td>
<td>Received 25 October 2015</td>
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<tr>
<td>Authentic Leader questionnaire</td>
<td>Received 23 October 2015</td>
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<tr>
<td>Authentic proposal</td>
<td>Received 23 October 2015</td>
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<tr>
<td>Clarification email from PI regarding targeted population and recruitment</td>
<td>Received 28 October 2015</td>
</tr>
<tr>
<td>NIH Training – Zeina Sidani</td>
<td>Certificate # 1465642 (dated 12 May 2014)</td>
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