

## **Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance**



**Suzan Ashraf Wahby<sup>1</sup>, Prof. Dr. Mona Abdel Ghany<sup>2</sup>, Dr. Hazem Rasheed<sup>3</sup>**

<sup>1</sup>Arab Academy for Science, Technology and Maritime Transport.

<sup>2</sup>Associate Professor, College of Management and Technology Arab Academy for Science, Technology and Maritime Transport.

<sup>3</sup>Associate Professor in Marketing, College of Management and Technology Arab Academy for Science, Technology and Maritime Transport.

**ABSTRACT:** The aim of this research is to investigate the effect of organizational justice on work performance and job satisfaction. The purpose of this study is to examine the nature, strength and significance of the links between organizational justice, job satisfaction and work performance. Previous researchers have conducted on Organization justice, job satisfaction and work performance as separate concepts, few of them have attempted to examine the links between them. To date, there is a lack of evidence regarding the nature, significance and strength of relationships between these three variables. The literature review shows that employees' perceptions of fairness in all organizational processes and practices are assumed to influence their behavior and work outcomes.

In order to achieve the aim of the research, the Quantitative method has been used through conducting questionnaires among employees. 400 employees were the participants, with the following results. First, the results showed that distributive justice, Procedural justice and Interactional justice are insignificantly affecting Job Satisfaction. Secondly, the results showed that distributive justice, Procedural justice and Interactional justice are insignificantly affecting work performance. These results suggest that managers should pay workers what they deserve, follow open and fair procedures, offer workers a voice, meet regularly, conduct employee surveys and keep an on-open door policy. Managers must work to distribute the functions, tasks and duties equally, fair have fairness of outcome, in addition to developing appropriate rules and regulations in order to have fairness of decision making, lastly managers should care about their employees and build manager-employee communication. Therefore, Employee performance and satisfaction are influenced by organizational fairness (fairness of distribution, fairness of method, and fairness of interaction). Employee's demographic and career backgrounds are designed as moderators.

**KEYWORDS:** Organizational Justice, Distributive Justice, Procedural Justice, Interactional Justice, Work Performance, Job Satisfaction and Employee's demographic and career backgrounds.

### **1. INTRODUCTION**

#### **1.1 Introduction**

Chapter one provides an overview of the research study, it provides a summary of the topic and contains the following: research background, research problem, research purpose and importance, research contribution, research aims and objectives, research questions and hypotheses, research assumptions and limitations, research methodology, finally structure of the thesis.

#### **1.2 Research Background**

Organizations are social systems in which the most essential factors affecting effectiveness and efficiency are resources. In today's business environment, it's common knowledge that companies that treat their people fairly are more productive. Organizational justice is concerned with the fairness of these changes, as well as the organization's behavior toward its employees and the employees' reactions to their perceptions (Chou et al., 2013). There is no justice in organizations; instead, it is the consequence of a success of management actions and behaviors.

Organizational justice is quickly becoming one of the most influential motivational theories, and it's a big focus in the domains of organizational behavior, industrial psychology, and human resource research (Cojuharenco and Patient, 2013).

Employees are worried about workplace fairness (Folger, 1998). Furthermore, organizational justice is one of the most important internal guiding elements that determines performance, human resource mood, and behavior (Wang et al., 2010; Crawshaw et al., 2013; Suliman and Kathairi, 2013; Strom et al., 2014; Zhang et al., 2014; Scott et al., 2015). The notion of

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

organizational justice focuses on how employees judge the organization's behavior and how that behavior connects to employee attitudes and behavior toward the enterprise (Greenberg, 1987). Distributive, procedural, and interactional justice are the three dimensions of organizational justice (Moorman, 1991; Niehoff and Moorman, 1993; Cohen-Charash and Spector, 2001; Wang et al., 2010).

If an employee puts more effort and commitment to work than others, but does not receive a proportionately higher benefit, he considers this imbalance to be unfair. A return to balance will be achieved by this employee most likely by reducing his or her involvement in work (Juchnowicz & Kinowska, 2018).

Organizational fairness is measured by employee happiness and commitment to the organization (Price and Muller, 1986). According to Spector (1997), the attitude that reveals the amount of individual emotion associated with their employment is referred to as job satisfaction. Organizational justice, on the other hand, is concerned with the evaluation of employees in terms of fairness, equal treatment, and equal treatment at work. The application of justice in the workplace by management results in the achievement of organizational goals and success. Abekah -G. Nkrumah and R. A. Atinga (2013). Create and provide a justice climate in organizations will positively reflect on employee's motivation and performance (Hao, Y., Hao, J., & Wang, X 2016). when treat employees fairly in an organization they will do their duty in a good way, however, when they feel, treat unfairly will lead to low job satisfaction in workplace.

Individual, team, and organizational work performance, including task and context performance, have all been connected to organizational justice. According to theory, organizational justice (distributive justice, procedural justice, and interactional justice) affects employee performance and satisfaction. On the other hand, certain socio-demographic factors may be able to indicate the link between organizational justice and employee happiness and performance. Organizational fairness, work satisfaction, and performance are all affected by age, education, and professional background.

Organizational justice is investigated as a factor impacting job satisfaction and performance in this study. The organization's decision-making norms, regulations, and procedures are employed to determine justice (Tjahjono et al., 2019). The purpose of this research is to determine the strength, direction, and significance of the links between organizational justice, job satisfaction, and job performance. Job satisfaction relates to how satisfied or unhappy employees are with their occupations, whereas job performance refers to how well people fulfill their tasks.

According to Homans, employees' primary concern is resource distribution, which is why organizational justice is regarded as distributive justice. Organizational justice is defined as employee happiness and dedication to the company (Price and Muller, 1986).

According to Joy and Will (1992), an unfair result is acceptable if the process employed to attain it is viewed as fair. Finally, distributive and procedural justices are the main concerns of organizational justice (Greenberg, 2002). While some studies suggest that a person's treatment is distributive justice, others show that it is not (Joy and Witt, 1990). The fairness of policies, methods, and procedures is the second part of organizational justice, which is defined as the fairness of policies, techniques, and procedures. Procedural justice identifies and measures elements such as pay, attitudes, and performance reviews (Dogan 2002; Jahangir et al. 2006). Job satisfaction is the sum of good and negative perceptions at work, and it is attitude-related.

Last but not least in the current business environment, an ethics and compliance culture cannot exist without organizational justice (Ledimo, 2015). In turn, when managers and employees in organizations discover that the internal justice system is not working properly, the company cannot build critical values such as trust and integrity. This in turn can lead to a stale culture, distrust and an increase in fear among employees and ultimately lead to even more wrongdoing. In addition, an effective system of organizational justice can prove to be an important asset for companies. It can help organizations maintain productivity, profits, and employee morale (Latan & Ramli, 2014).

### 1.3 Research Problem

Because there is a dearth of research on the nature, relevance, and strength of links between the nature of justice, satisfaction, and performance, this study is particularly important.

Employees will compare their output (wages or status) to their coworkers' input (effort, time) to determine if they are treated properly at work (Adams, 1965). There have been a number of studies on how organizational justice affects job satisfaction and performance; as a result, this investigation is being conducted to focus on crucial topics about organizational justice in Egypt. Examining the usual impacts of distributive and procedural fairness on work satisfaction might be beneficial. The relationship between organizational justice, job satisfaction, and performance is investigated in this study.

Due to lack of research in this topic in Egypt, this study is considered a leading one in this stream of studies and opens the door for future research to tackle this topic and build on it to enhance our understanding of the effect of organizational justice on work performance on Job satisfaction.

There are few investigations that examine the influence of organizational justice on worker attitudes, job satisfaction, layoff tendencies, and work commitments when it is used to enhance workers' welfare and rights in the workplace (Bakhsi, Kumar & Rani, 2009). Psychologists and sociologists have argued about this notion, and CEOs have viewed it as a tool for boosting

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

organizational performance (Jankington and Rurkkhum, 2012). Employees should be treated fairly in the workplace (Bahrami, Montazeralfaraj, Gazar, Tafti, 2014; Randeree, 2014).

Employees' attitudes are influenced by their perception of procedures as generally stable components of the firm, providing them with a sense of procedural security. As a result, unequal distributional effects are not explored. Employees perceive internal relations as "businesslike" when there is a lack of (or low level of) procedural justice, which raises their expectations in terms of distribution effects (Cohn et al., 2000).

### 1.4 Research GAP

In terms of establishing which organizational justice modules have an impact on employee performance, the study provided significant results. According to managers and decision makers, employee perceptions of distributive justice can improve or deteriorate a company's performance.

For a company's success, a fair allocation of organizational results across employees is critical. Employees' sense of justice grows, they feel more safe, and their performance improves when they are treated fairly, according to Greenberg (1990) and Moorman (1991). There are six basic norms in businesses, according to Leventhal (1980), that have a direct impact on employees' perceptions of fairness. The following rules apply: (1) the internal consistency of decisions made about the distribution of organizational results (the consistency rule); (2) bias suppression during the distribution of business results (the bias suppression rule); (3) the accuracy of data used to determine organizational outcomes and disseminate it to employees (the accuracy rule); and (4) the precision with which data is used to determine organizational outcomes and disseminate it among workers (the accuracy rule). (5) the establishment of internal mechanisms that allow employees to object to allocation decisions and ensure that decisions are changed (the correct skill rule); the right of employees to have chosen representatives participate in decision-making processes (the representativeness rule); and (6) the appropriateness of decisions that link distributional and procedural processes to employees' ethical values (the appropriateness rule) (the Ethics Rule). Cropanzano et al. (2007) state that organizational distributive justice should be governed according to the concepts of justice, equality, and need. Employees can use organizational outcomes in accordance with their contributions to business aims if they have equity. Equality enables employees (in the same position) in the organization to benefit equally from the company's results. Need takes into consideration the personal requirements of the employees when distributing the company results.

### 1.5 Research Purpose and Importance

According to a number of studies, organizational fairness is a major contributor to a variety of factors influencing employee attitudes (e.g., employee attitudes).

Employees require money in order to maintain their standard of living, which is linked to financial worries. Employees' willingness to stay at a company is frequently influenced by the salary they are offered. Employees who believe they are underpaid are more likely to quit and look elsewhere. As a result, employee loyalty to their firm, i.e. whether they will resign or stay, will be influenced by a fair salary distribution. Employees like a fair organization because it helps them to make accurate predictions about what they may expect. People feel appreciated when they are treated with dignity, civility, and respect (Lim & Loosemore, 2017). They also have a better sense of control over the outcomes they expect from their company (Cropanzano et al., 2007). They don't have to be concerned about the security of their income and benefits. Employees or groups of employees are not singled out, discriminated against, or mistreated when a fair remuneration policy is in effect. This means that all employees are treated equally, with pay based on performance, abilities, and contributions. As a result, employees seek fairness since it preserves their rights and ensures future rewards, just as justice does.

Employees want to be valued by those in positions of power in the company in order to be socially conscious. The fact that employees are treated decently suggests that management is not exploiting them. This means that not just their supervisors, but also their peers, employees, and subordinates recognize and value them. It's also less probable that they'll be abused.

Fairness is needed to instill trust in the company among employees, which helps to build harmonious relationships between employers and employees and reduce wage disputes. When businesses fail to treat their employees well (for example, by having an unfair or inequitable reward structure), they are systematically weakening workers' trust and loyalty.

To avoid misinterpreting the assignment of incentives to employees, open communication between employees and employers is required for manager-level decisions (milkovich & newman, 2005).

Employees have a moral obligation to adequately reward their colleagues. According to the Employment Act of 1955, an employer has an implied obligation to provide an employee with a remuneration package that meets his or her job requirements (e.g., salary, allowances, and benefits) (Ganapathy, 2002; Mumtaj & Harlida, 2003). It is the employer's responsibility to properly reward the services and contributions of the employee. As a result, employees pay special attention to fair compensation, believing that management choices must be fair and that employees should be paid properly. When employees witness something they believe is unethical, they should report it (e.g., the supervisor has manipulated the result of the performance evaluation). They're supposed to believe they've plan revenge. Employees' concerns will spread to the rest of their team if they hear that their performance has

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

been erroneously appraised. If the organizations do not respond to the accusations, they may face legal action for their unethical and improper conduct.

### 1.6 Research Contribution

Trust is defined by Mishra and Mishra (1994) as the desire of one party to be vulnerable to another, assuming that it is competent, open, concerned, and trustworthy. In other words, the ability to believe in what trust is. Previous studies show that procedural, distributive, and interactive equity all predict employee trust (Colquitt 2001). Employees will feel fairly compensated and exhibit positive behavior if the technique and decision to allocate resources are fair (for example, each employee is compensated depending on the quantity and quality of their work) (e.g. loyalty). When employee trust is high, there is an open and participatory environment that corroborates employee loyalty. Employees' trust in management is eroded when they believe they have been treated unfairly (for example, the supervisor manipulated the results of a performance evaluation to limit opportunities for advancement). They develop a negative attitude toward management, gossip, avoid taking responsibility, and fail to support business objectives. All of this will bring in a decline in employee loyalty and an increment in grievances, ultimately leading to an antagonistic connection between employers and employees.

Organized citizenship behavior is described as employees' voluntary engagement that is unaffected by the organization's compensation system but promotes the organization's operations (1988). Organizational employees are those who are willing to take on additional obligations that are not related to their professional responsibilities, such as employee troubles, personal support for coworkers in need, and who work beyond their usual working hours without complaining.

Employees who are treated well by their boss are more likely to follow workplace rules and regulations and are more devoted to their job and firm, according to several studies (e.g., Erturk,2007; Mohammad Hadi et al,2011; Oren et al,2013). Employees will only return citizenship if they are treated fairly and equally by their superiors.

In other words, people will work hard to repay procedural, distributive and interactive justice. This type of link has been objectively demonstrated by researchers like Mohammed Hadi et al (2011).

It has the potential to increase workplace productivity. Work performance refers to how successfully a manager meets the quality standards that are required of him. Performance is influenced by employee motivation and motivation to work. Employee motivation is influenced by the employer's impression. According to Moazzezi et al (2014), organizational equity predicts employee work efficiency. When a company acts ethically and fairly to its employees, to their knowledge, it creates a positive relationship. People may be motivated to work harder and perform better at work as a result of this beneficial association. The "ingredient" that inspires employers and employees to collaborate productively is organizational justice. Employees may believe that their efforts are being mistreated if justice is not served because they are not recognized by the corporation. Employees will work hard only if they believe their efforts will be adequately rewarded.

According to Suliman(2007), employees who perceive they are being unfairly compensated may react with dissatisfaction, which can affect their willingness to work hard, As a result, ethical management decisions are crucial for employee productivity. Employees are not only denied adequate compensation for their work because of unfair management decisions, but they are also demotivated. Inequity in the remuneration structure might influence an employee's desire to go above and beyond to provide the company a competitive advantage.

### 1.7 Research Objective

- ❖ To assess the impact of distributive justice on Employee's Job Satisfaction
- ❖ To analyze the impact of procedural justice on Employee's Job Satisfaction
- ❖ To examine the influence of Interactional Justice on Employee's Job satisfaction
- ❖ To test and discover relationship between Distributive Justice and Employee's Performance
- ❖ To analyze the impact of procedural justice on employee's performance.
- ❖ To assess the impact of interactional justice on employee's performance.
- ❖ To determine whether "Employee's demographic and career backgrounds" moderates between justice, employee's satisfaction and performance.

### 1.8 Research Questions

RQ1: What is the effect of Distributive justice on Employee's job satisfaction?

RQ2: what is the relationship between procedural justice and employee's job satisfaction?

RQ3: what is the effect of Interactional justice on employees' job satisfaction?

RQ4: what is the impact of Distributive justice on employees' performance?

RQ5: Is there a positive relationship between procedural justice and employee's performance

RQ6: what is the impact of interactional justice on employee's performance?

RG7: Does Employee's demographic and career backgrounds influence the way they perceive justice, satisfaction and performance?

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

### 1.9 Research Hypothesis

H1. Distributive justice will significantly and positively Influence employees' job satisfaction

H2. Procedural justice will significantly influence employees' job satisfaction

H3. Interactional justice will significantly influence employees' job satisfaction

H4. Distributive justice will significantly influence employees' performance.

H5 .Procedural justice will significantly influence employees' performance.

H6. Interactional justice will significantly influence employees' performance.

H7. Employees' demographic (gender, marital status, education and age and nationality) and career backgrounds (organizational tenure, job tenure and job level) will influence the way they perceive justice, satisfaction and performance.

### 1.10 Research Methodology

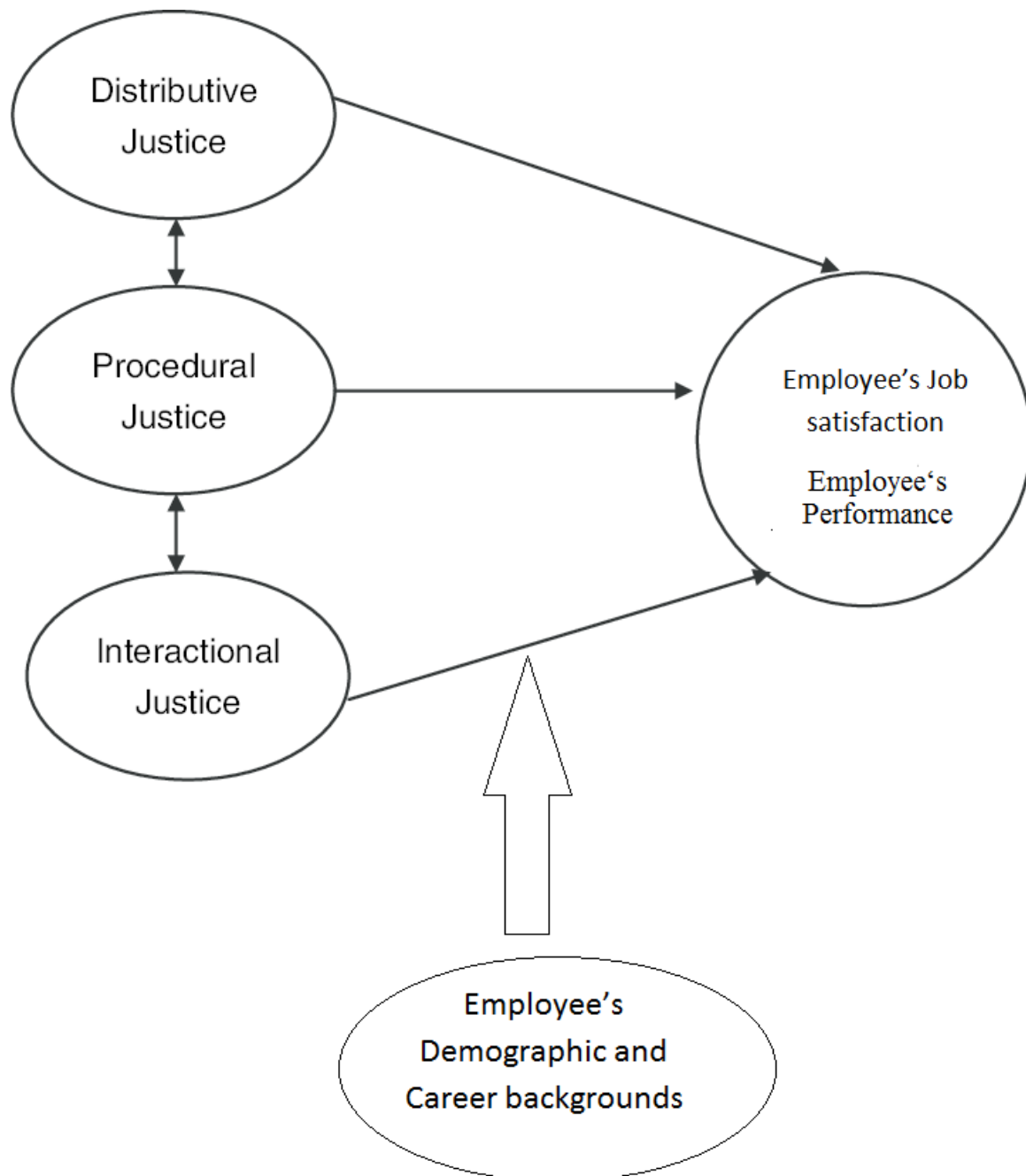


Figure 1.1: Research Design

The purpose of this paper is to clarify a quantitative method. According to the survey, quantitative research involves quantifying and evaluating variables to draw conclusions. The investigation is classified as fundamental research because the goal is to create a body of knowledge rather than to use it to solve any problems. The purpose of this study is the independent variables

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

of organizational fairness (procedural fairness, distribution fairness, interaction fairness) and their dependent variables (employee performance, employee job satisfaction). Is to find out the relationship. Without experimentation, research is minimal and focuses on naturally occurring events. Individuals are investigated and data is collected only once.

The conceptual Model of this research to explain that an organizational justice is determined by employee's performance and Employee's job satisfaction, demographic and career backgrounds are proposed as moderators.

### 1.11 Conceptual Definitions

	Variable	Conceptual Definition
MV	Employee's demographic and career backgrounds	such as Age, Education and Professional background
IV	Organizational justice	Employees' perception of how an organization treats them with fairness. (Campbell and Finch, 2004)
	Distributive justice	Employee perception of fairness of the outcome that they receive from the organization (Folger and Cropanzano, 1998).
	Procedural Justice	Employee perception Fairness of the procedure involved in making decisions (Folger and Greeberg, 1985)
	Interactional justice	The manner of treatment that employees receive from their managers. (Bies and Moag 1986)
DV	Job satisfaction	Is the satisfaction of employees with their jobs or the degree to which employees like their jobs. (Spector, 1997)
DV	Employee's Performance	Is the degree to which an individual executes his or her role with reference to certain specified standards set by the organization (Nayyar, 1994)

### 1.12 Structure of the thesis

- ❖ Chapter two: Review the literature and the research model.
- ❖ Chapter three: discuss the definition of the research problem, and the research design. It then provides the research questions and hypotheses which will be tested and followed by the research methodology and target population i.e. sample size, sampling technique, procedures, and bias and data analysis methods.
- ❖ Chapter four: explores the data collected from the survey, and provides a thorough analysis of the information gathered. Then it moves on to discuss the main findings of this research.
- ❖ Chapter five: discusses how the research questions have been answered. Moreover it will provide conclusions, contributions, recommendations and suggestions for future studies.

## 2. LITERATURE REVIEW

### 2.1 Introduction

The purpose of this chapter is to present an overview of existing research on the study issues and to investigate the impact of organizational Justice on work satisfaction and performance. Various authors have pushed the idea of organizational justice from multiple perspectives. It is a major theme in organizational life, according to most scholars (Cremer, 2005, p. 4). Employees' perceptions of fairness in all corporate processes and practices are thought to influence their behavior and work results. The majority of academics believe that this construct is complex, and they tend to identify three primary elements.

The literature review, according to Saunders et al. (2019), aids researchers in understanding new trends from relevant earlier research. The researcher searched databases for pertinent research studies while conducting the literature review. Egyptian Knowledge Bank, ProQuest, EBSCO, Google Scholar, Emerald Publishing, American Psychological Association, Oxford University Press, SAGE, Cambridge University Press, and ResearchGate were among the databases used.

Job satisfaction, employee attitudes, performance level, Middle East, organizational justice; Employee Performance; Emotional Intelligence; Distributive Justice; Procedural Justice, Organizational Justice; justice in the workplace; fairness perceptions, Employee performance . The search was limited to those phrases in the titles and abstracts of papers, journals, and dissertations. In order to find the most relevant research,

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

### 2.2 Organizational Justice

Organizational justice refers to employees' evaluations of useful resource distribution equity in a company (Greenberg, 1987). Fairness has been emphasized as the most important factor in all facets of an individual's life by practitioners (Cropanzano and Ambrose, 2001) and social scientists (Colquitt, 2001) for some years. "Justice" is a synonym for "fairness," and it is a major issue in organizations, referring to management's morally correct judgments and actions. Fairness of employee results or compensation (salary, promotion, etc.) (Rafael et al., 2017). The function of justice in the workplace is explained and explained by justice in the organization. In the 1990s, organizational justice research drew a lot of attention, and several key studies were published.

Over the last 40 years, research has emphasized the importance of the concept of justice for work behavior and motivation (Loi et al., 2006; Colquitt et al., 2001). Organizational justice affects not only individual attitudes and behaviors, but also performance and corporate goals (Cropanzano et al., 2007). Different authors of different backgrounds have expanded the concept of organizational justice in previous literature. It is a prevalent topic in organizational life, according to most scholars (Cremer, 2005, p. 4). The extent to which these findings may be applied to other countries, cultures, or working groups has yet to be determined. More and more evidence is accumulating showing employees from various sociocultural origins perform better in the workplace. The extent to which these findings may be applied to other countries and cultures, as well as working groups, has yet to be determined. There is mounting evidence that employees from various sociocultural origins, each with their own set of expectations and value systems, might perceive and react differently to their workplace.

Organizational justice has become a prominent framework for analyzing attitudes and behavior in the workplace (Ambrose et al., 2007; Cropanzano and Rupp, 2003). Organizational justice refers to employees' emotional, cognitive, and behavioral responses to their organization's fairness (Greenberg, 1990). (Adams, 1965; Clayton & Opatow, 2003; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Folger & Cropanzano, 1998; Greenberg, 1988; Pfeffer & Langton, 1993; Tyler & Blader, 2003; Tyler, Conlon, Wesson, Porter, & Ng, 2001; Folger & Cropanzano, 1998; Greenberg, 1988; Pfeffer).

Organizational justice is concerned with how employees evaluate whether they were treated fairly at work and how these assessments affect other job-related variables (Moorman, 1991). Despite the fact that these three types of justice are defined differently due to different management decisions, the organizational justice literature generally agrees on three dimensions: distributive justice (Adams, 1965; Homans, 1961), procedural justice (Leventhal et al., 1980; Thilbaut and Walker, 1975), and interactional justice (Leventhal et al., 1980; Thilbaut and Walker, 1975). (Bies and Moag, 1986). Each is interconnected and represents the entire organizational justice system (Ambrose & Arnaud, 2005; Ambrose & Schminke, 2007). It will be difficult to build effective organizational justice without one of these. To ensure that employee benefits are allocated equitably, for example, bonus allocation decisions should be made using fair techniques and accurate data. Researchers have developed various theoretical modes based solely on dimensions, the majority of which are empirically supported. Distributive justice, procedural justice, and interactional justice, according to the majority of academics, all have an impact on organizational behavior and attitudes. Justice may enhance both individual feelings and company prosperity. Injustice will have a negative impact on employees and businesses. Managers, employees, and other stakeholders in for-profit firms pay attention to justice because they believe in the worth of justice and consider it as the foundation for connecting disparate groups for their own benefit in order to establish a stable societal structure (Konovsky, 2000).

According to the majority of academics, distributive justice, procedural justice, and interactional justice all have an impact on organizational behavior and attitudes. Justice has the potential to improve both individual feelings and business success. Employees and businesses will suffer as a result of injustice. Managers, employees, and other stakeholders in for-profit businesses care about justice because they believe in its value and see it as the foundation for bringing divergent groups together for mutual gain in order to create a stable society framework (Konovsky, 2000). The perception of fairness inside a company is crucial. By boosting employee civic behavior, increasing teamwork, and reducing friction between employers and employees, employee conceptions of justice would have a substantial impact on the organization's performance and success.

Employees who see unfairness in the workplace, on the other hand, are more likely to have a negative attitude toward the company and, as a result, to act against it or even hurt it (Cohen-Charash and Spector, 2001).

In addition, Leventhal (1980) outlines six fundamental elements for a fair trial, including the consistency and objectivity of decision-makers. Employees' impressions of the organization's general fairness and equity influence their decisions about their relationships with the company.

Organizational justice ideas are straightforward to implement. However, a small percentage of the population engages in unethical and intentional behavior (e.g. immediate supervisor, department head, etc.). Interventions (for example, an equitable recruiting effort) may not be conducted successfully in other instances.

This article looks at the three essential elements of organizational justice: procedural, distributive, and interactive justice, as well as the importance of organizational justice and its impact on the workplace. Understanding the concept and impact of organizational justice can motivate future researchers to look into the most successful approaches. Five descriptive themes emerge

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

from the dataset's new perspectives on organizational justice. However, from those five descriptive themes of organizational justice above, they are categorized into four specific topics. Interactional justice is comparable to interpersonal justice in terms of description. The four descriptive subjects of organizational justice are distributive justice, procedural justice, interpersonal justice, and informational justice. A meta-analysis (Colquitt, 2001, 2008; Colquitt et al., 2013; Fassina et al., 2008; Karam et al., 2019) as well as a systematic review (Hadi, Tjahjono, El Qadri, et al., 2020) and Hadi, Tjahjono, & Palupi, 2020) were used to support these findings. (2020).

Boosting employee morale and fostering civic behavior, job engagement, and performance are just some of the ways that organizational justice may benefit a company. It also encourages a positive working relationship between the employer and the employee. Despite the fact that organizational justice is linked to management's ability to distribute resources evenly across all stakeholders in the organization, it is still reliant on department heads' managerial judgment. As a result, discovering effective methods to address and eliminate workplace injustice is an important field of research for the future.

### ❖ 2.2.1 Distributive Justice

Boosting employee morale and fostering civic behavior, job engagement, and performance are just some of the ways that organizational justice may benefit a company. It also encourages the employer and employee to have a good working relationship. Despite the fact that organizational justice is dependent on department heads' managerial judgment, it is tied to management's ability to distribute resources equitably across all stakeholders in the organization. As a result, discovering effective methods to address and eliminate workplace injustice is an important field of research for the future.

Equity Theory contains the origins of distributive justice (Homans, 1961). (Adams, 1965) Employees evaluate the amount of fairness by comparing their input-output fractions to those of others, according to a theory proposed by behavioral psychologist John S. Adams in the early 1960s (Greenberg, 1990). The 'inputs,' or what employees offer to an organization, may be broken down into a number of criteria, according to Adams, including time, loyalty, effort, tolerance, flexibility, excitement, personal sacrifice, skill, and confidence in superiors. Outcomes may include 'concrete' criteria like money, safety, and employee benefits, but can also include intangibles like pride, acclaim, and reputation (Adams, 1963). According to the equity theory (Adams, 1963; Austin and Walster, 1974), when employees believe they are treated equally, they are more likely to be motivated, which leads to positive work behavior and attitudes.

In practice, restricted access to objective data makes it difficult to appraise others' contributions and, more importantly, the advantages they have accomplished unequivocally. Furthermore, not only is it critical to examine the real effects of others, but it is also critical to assess one's own subjective expectation of benefit from one's own work (Bugdol, 2018).

Employees operate in a variety of positions, and their degree of performance varies as well (Cropanzano, 2007). Employees' outcomes and requirements may vary, as some may do exceptionally well while meeting a variety of needs, while others may perform moderately well while meeting a variety of needs. Distributive justice entails ensuring that all employees have earned their "just share" depending on their contributions. It also addresses the fair treatment of remuneration packages and the provision of benefits tailored to the specific needs of employees. Employees can assess whether their contributions (such as time, effort, and talent) are commensurate with their pay. HR managers should operate ethically and not allow their judgments to be swayed by their own feelings in order to equitably reward all employees. Human resource managers should make every effort to provide employees with the best available compensation that is fair and commensurate with their contributions. In other words, according to justice theory, the equality rule and demand-based allocation are two prevalent approaches to distributive justice (Adams, 1963; Deutsch, 1975; Lerner, 1977; Samspon, 1975). If workers emphasize these two approaches to resource allocation, the problem of unequal or unequal distribution of resources can be solved.

### 2.2.2 Interactional Justice

Procedural justice research was undertaken by Thibaut and Walker (1975), Leventhal (1980), and Leventhal et al. (1985). (1980). The procedural justice literature has been expanded by Leventhal et al., 1980) to include six process aspects. Later studies looked at how employees were treated during the procedure (interactional fairness), which is also important when assessing organizational fairness. The two types of interaction justice are typically distinguished: interpersonal and information justice.

Interactional justice refers to how authorities treat their subordinates and how those subordinates respond to those perceptions (Bies and Moag, 1986; Masterson et al., 2000; Cohen-Charash and Spector, 2001). It's also about how information is given and whether the person who is affected by a decision is courteous and respectful, as evidenced by the fact that it was handled with decency and respect (Bies and Moag, 1986). General, superiors' trust-building activities relate to views of interaction justice, such as perceived organizational justice competence, fairness, loyalty, openness, responsiveness, and overall trust (Deluga, 1994, p. 317).



## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

The extent to which people in positions of authority (e.g., supervisors or managers) and third parties (e.g., those supplying information about why certain procedures were employed or findings were distributed in a certain way) treat each other fairly (Bies and Moag, 1986; Colquitt, 2001; Tyler and Lind, 1992).

### ❖ 2.2.3 Procedural justice

The fairness of employees' perceptions of government decision-making procedures and personnel regulations and practices that affect their job results, as defined by z and Procedural justice is a term coined by Tyler (1988), Gilliland (1994), and Johnson (2007). The adequacy of the processes utilized to disperse these results is referred to as procedural justice (Alexander and Ruderman, 1987; Cropanzano and Schminke, 2001). In terms of employee effect, the means by which a goal is achieved may be just as essential as the goal itself (Alexander and Ruderman, 1987; Folger and Greenberg, 1985).

Interactional justice was developed by Bies and Moag (1986) as the third component of organizational justice that is directly tied to the work environment. Interactional justice is a form of sticky material that binds people in an organization together and allows them to function more efficiently (Colquitt, 2001).

People's reactions are more likely to be directed towards the organization as a whole, rather than their individual tasks or the precise conclusion at hand, when a procedure leading to a certain end is deemed unjust (Cohen-Charash and Spector, 2001). According to research, employees believe that procedural fairness exists when managers present reasonable justifications for their actions (Greenberg, 1994). Parties have a say in decisions, ethical standards are followed, and decisions are implemented consistently and uniformly (Stecher and Rosse, 2005). The impact of perceived organizational fairness on job satisfaction and performance is investigated in this study.

## 2.3 Job Satisfaction

Marketing, management, and performance psychology have all looked into the element of employment happiness. Job satisfaction, according to Robbins (2005), is a combination of feelings regarding one's job. According to Rad and Yarmohammadian, a variety of factors influence employee work pleasure (2006). The level of happiness a person has with his or her job is referred to as employment satisfaction (Parvin and Kabir, 2011). According to Spector (1997), work satisfaction relates to how people feel about their jobs and the many components of their jobs. Motivation, performance, leadership, attitude, and conflict are all linked to job satisfaction in the workplace (Parvin and Kabir, 2011).

When employees experience a deep link with their organization (Steers, 1977), quoted by (Imamoglu et al., 2019), they become intensely involved, indicating their intention to stay or leave the company.

Job satisfaction is defined as having a pleasant attitude or sentiment toward one's employment. It's important to keep in mind that different people have different viewpoints on certain aspects of the job. Job satisfaction is also influenced by a person's personality. Those who have a significant beneficial impact at work are more likely to be content. Jegan and Gnanadhas (2011) looked into the three most important components of job satisfaction: Job satisfaction is not a purely emotional reaction to one's employment. As a result, it can only draw conclusions. Job satisfaction is frequently measured by how well results meet or surpass expectations, and it reflects an employee's sentiments about five important aspects of their job: pay, self-employment, advancement, opportunities, and supervisory authority.

Because of its impact on work productivity, employee turnover, and retention, the idea of job happiness has been extensively researched in the literature (Javad and Davood, 2012). Employees are generally content with their employment and devoted to their firm when they are satisfied with the nature of their work, with their boss and coworkers, and when they believe their present wage policy and future career chances within their organization are adequate (Reed et al., 1994).

Previous empirical study has looked at a range of characteristics that influence job satisfaction. After completing a comprehensive literature search, Seo et al. (2003) discovered that most studies focused on the two sets of features and the variables of satisfaction. The first set of characteristics relates to organizational elements such as employment, job relationships, and remuneration. Individual characteristics of the employees, such as gender, age, and educational background, were related to the second set of traits. According to Duffy et al. (2006), contentment can be separated into two categories: working satisfaction and environmental satisfaction. Working satisfaction relates to how individuals feel about their jobs, whereas environmental satisfaction refers to how people feel about their employers, coworkers, and other aspects of their work environment.

Employees are generally content with their employment and devoted to their firm when they are satisfied with the nature of their work, with their boss and coworkers, and when they believe their present wage policy and future career chances within their organization are adequate (Reed et al., 1994). Job satisfaction, then, is a multidimensional concept encompassing satisfaction with aspects of the job ranging from salary to supervision to the nature of the labor itself.

According to Organ (1988) and Organ and Konovsky (1989), job satisfaction is divided into two parts: an emotive component and a non-affective (cognitive) component. Employees' emotional states are referred to as the affective component, whereas satisfaction with job performance evaluations is referred to as the non-affective (cognitive) component. According to Alotaibi

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

(2001), Parnell and Crandall (2003), and Lovett et al. (2004), job satisfaction is an important topic because it is the subject of research in most industrial/organizational psychology, organizational behavior, and social psychology literature. Job satisfaction is an important aspect in evaluating the work environment (Sharma and Singh, 2016), and it has a positive impact on employee performance (Al Jenaibi, 2010). Because it affects an employee's emotional tie to the employer, which she/he links with her/his work, many intrinsic and extrinsic incentive aspects influence job satisfaction.

Payment, for example, is an important determinant of job satisfaction since it allows employees to meet basic needs like food, shelter, clothing, and status symbols (Asadullah and Fernandez, 2008; Hur et al., 2015).

Bodur (2002) investigated job satisfaction in terms of gender, employee age, education level, work environment, location, coworker attitude, compensation, and working hours.

Before delving into the concept of job satisfaction, it's crucial to take note of a few related theories in order to learn more about the term's roots. Herzberg and colleagues (1959). Two-factor theory, Maslow's theory of hierarchy of requirements (Maslow et al., 1970), Alderfer's Theory of Existence, Kinship, and Growth (ERG) (1969), and McClelland's Theory of Learned Needs (1969) are the four major ideas that form our knowledge of job satisfaction (McClelland et al., 1970). (McClelland, 1987). The bulk of job satisfaction studies simply looked at these theories in part and used them as a foundation for their conceptual framework. Each of these philosophies offers an own viewpoint on human desires.

Job satisfaction is influenced by a number of factors. According to Herzberg's (1964, 1966) two-factor theory, job satisfaction factors can be divided into hygienes (supervision, working conditions, colleagues, pay, policies / procedures, and job security) that cause dissatisfaction and motivators (achievement, recognition, the work itself, responsibility, advancement, and growth) that cause satisfaction. Employees evaluate the fairness of exchange and base their satisfaction-related elements on a comparison of personal outcomes (pay, recognition, job satisfaction, opportunity and advancement) and personal inputs (time, effort, knowledge and skills) to the ratio of reference group outcomes and inputs, as proposed in equity theory (Adams, 1963; Vecchio, 1982), in which employees evaluate the fairness of exchange and base their satisfaction-related elements on a comparison of personal outcomes (pay, recognition, job satisfaction, opportunity and advancement) and (pay, recognition, job satisfaction).

Theories and hypotheses are being developed. The basic conceptual framework for judicial academics to understand how workers' conceptions of justice affect job performance is provided by social exchange theory (Blau, 1964). Other organizational outcomes, such as participation (e.g. Colquitt et al., 2012; Tekleab et al., 2005; Aryee et al., 2015). The most commonly utilized technique of explaining the relationship between an organization and its staff is Gouldner's (1960) and Blau's (1964) concept of social exchange perception (Cropanzano et al., 2003).

In other words, when a company extends goodwill to an employee, the employee owes it to the company to return the favor by performing a good deed (Gouldner, 1960; Aryee et al., 2002).

Job satisfaction has been linked to a number of factors, including organizational justice, and the two have a significant and positive association (Lotfi & Pour, 2013; Ozel & Cahit, 2017). To explain, employees are more likely to express higher job satisfaction when they sense fairness and fair treatment in all aspects of the firm (Colquitt, 2001). As a result, the individual's productivity would rise, his or her level of devotion would increase, team spirit would be reinforced, and the person's physical and mental health would be ensured. As a result, employees' capacities and competences to learn new job skills would swiftly develop.

### 2.3.1 Relation between Distributive Justice and Job satisfaction

In distributive justice, which can be defined as the even distribution of company results among employees, employees must perceive that they are receiving an equal share of the distributed organizational resources (Greenberg, 1990; Andersson-Straberg et al., 2007). To put it another way, distributive justice is concerned with the economic and social consequences of actions taken without taking into account the decision-making process that results in the distribution of organizational outcomes (Konovsky, 2000; Saunders et al., 2003). Adams' equity theory is the cornerstone of distributive justice, as is the notion that distributive justice might affect worker performance (1963, 1965).

According to this theory, employees develop a feeling of distributive fairness by comparing the organizational results they obtain via their work with the results they obtain from other caregivers (Greenberg, 1990; Cohen-Charash and Spector, 2001; Cropanzano et al., 2007; Lambert et al., 2007). Employees offer a variety of traits to work, including education, knowledge, skills, effort, time, cognitive resources, and performance. Organizational results include wages, promotions, social rights, awards, fines, vacation time, duties, responsibilities, physical resources, and development facilities.

Guo and Wang (2008) investigated fair payment in terms of distributive justice and procedural fairness, finding clear connections between these notions and wage satisfaction, which is linked to job satisfaction. According to Du et al. (2005), pay satisfaction and promotion satisfaction are linked to distributive fairness. According to Duffy and Richard (2006) and Card et al., distributive fairness influences people's employment preferences (2010). Several factors of organizational justice, according to Loi et al. (2009), can have a multi-level impact on job satisfaction. In addition to the studies listed above, McAuliffe et al. (2009), Kwaket et al. (2010), and Heponiemi et al. (2011) investigated the relationship between equality subcomponents and job satisfaction.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Pay and promotion choices (Folger and Greeberg, 1985; Folger and Konovsky, 1989), court verdicts (Thibaut and Walker, 1975), and public ratings of government officials, judges, and law enforcement officers are all examples of distributive justice, according to studies (Tyler and Caine, 1981; Tyler and Folger, 1980). Unfair results distribution can lead to major issues like disagreements, mistrust, contempt, and other social concerns between employees and their bosses. Unfair results distribution can lead to major issues like as disagreements, mistrust, contempt, and other social concerns between employees and their bosses. Unjust distribution of results can have serious consequences, including disputes, distrust, disrespect, and other social issues between employees and their managers. Distributive justice is often seen as important because unjust distribution of results can have serious consequences, including disputes, distrust, disrespect, and other social issues between employees and their managers (Suliman, 2007).

Furthermore, because the perceived input does not match the outcome obtained from the firm, unequal resource or opportunity allocation decreases work ethic. Managers may be inclined to make judgments that favor a specific demographic group of workers. When it comes to splitting company profits among employees in a confidential environment. Individual characteristics such as birthplace, social standing, and family influences, on the other hand, are a matter of chance, and should not be used to predict future life benefits, according to Rawls (1999). The goal of distributive justice, he maintained, is to lessen the impact of these characteristics so that resources can be dispersed equitably and to everyone's satisfaction.

H1. Distributive justice will significantly influence employees' job satisfaction

### 2.3.2 Relation between Procedural Justice and Job Satisfaction

We need to look at a second type of fairness in organizational concerns, procedural justice, to understand why people react in one way or another to unfair treatment. Individual responses to the procedure employed to determine the reward - in other words, the methods, not the goal - are the focus of procedural justice (Sweeney and McFarlin, 1993). the procedure for making wage-related choices and the extent to which compensation decisions are under your control. It has been proved by some authors to be in command of the process. As an example ,Allowing employees to choose their desired compensation, contribute to the development of a compensation system, express the results of compensation decisions, or receive accurate information can foster a strong sense of process justice and a more positive attitude toward the results.

Allowing employees to choose their desired compensation, contribute to the development of a compensation system, express the results of compensation decisions, or receive accurate information can foster a strong sense of process justice and a more positive attitude toward the results (Lind and Tyler. 1998).

Procedural justice, or the fairness of the decision-making process, is the perception of the reasons, methods, mechanisms, and processes utilized to obtain results (Folger & Cropanzano, 1998). (Folger and Greeberg, 1985). Procedural justice is widely acknowledged as a critical issue in every organization (Tang and Sarsfield-Baldwin, 1996; Mossholder et al., 1998).

Employees' perceptions of procedural justice, on the other hand, impact their attitudes and behavior toward managerial decisions, but it also serves a symbolic purpose, such as improving employee-manager relationships. As a result, procedural fairness can increase employee trust in management, the company, and organizational engagement, resulting in beneficial organizational results (Greenberg, 1990; Suliman and Kathairi, 2013). Early research indicated that procedural justice was positively connected with all sub-components of job satisfaction. However, some work satisfaction subcomponents had positive relationships with distributive and interactive, while others had negative relationships (Colquitt et al., 2001).

According to Brockner and Siegel, positive individual attitudes toward the procedures and methodologies for generating outcomes go hand in hand with a higher level of confidence in the firm and its executives (1996). Failure to follow procedural justice, on the other hand, has been shown in research to have negative implications. Tyler and Bies (1990) proposed a conceptual framework for comprehending procedural justice, identifying five factors that affect employees' perceptions of procedural justice: tolerance of employees' opinions, consistent decision-making, impartiality, effective feedback, and explanation of decisions made.

H2. Procedural justice will significantly influence employees' job satisfaction

### 2.3.3 Relation between Interactional Justice and Job Satisfaction

Employees want their bosses to treat them fairly. Interactional justice is built on peer-to-peer connections and refers to the level of attitudes and behavior to which employees are exposed as a result of managers' (distributive and procedural) activities (Greenberg, 1993; Liao and Tai, 2006). There are two types of interactional justice: interpersonal and informational justice (Cropanzano et al., 2007). The importance of kindness, respect, and gratitude in interpersonal relationships, particularly between employees and supervisors, is known as interpersonal justice. Information fairness, on the other hand, is concerned with properly educating employees about organizational decisions.

The good or bad influence of employee-administrative connections on job performance is based on interactional fairness, according to the theory of social exchange (Cohen-Charash and Spector, 2001; Settoon et al., 1996; Wayne et al., 1997; Cropanzano et al., 2002). Employees will quickly take on additional roles in addition to their formalized roles if they are satisfied with their interactions with the administration, according to this principle, enhancing their contextual performance.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Elovainio et al. (2001). refer to interactional justice as relational justice. Bies and Moag (1986) describe interactive justice as the way in which employees are handled by their bosses. Fairness of interaction is also described by the free flow of information throughout the organization. Executives and their staff must communicate in such a way that the former considers the worries of the latter, listens to their requirements, and shows empathy and understanding. It raises morale, bridges the gap between manager and subordinate, and leads to consistently higher performance when leaders display a high level of concern for their employees. Suliman (2007) defines interrelation justice as fairness, employee-employee relationships, and organization-employee relationships. According to Suliman, employees' opinion of how fair a decision or conclusion is have an impact on their behavior and performance.

Employees and their supervisors must communicate effectively in order for the employer-employee relationship to work. Tang and Sarsfield-Baldwin (1996) emphasized manager-employee communication, stating that fostering a transparent, honest, and employee-friendly workplace fosters a sense of ownership. Finally, communication offers crucial information to employees and managers that they need to make decisions.

In order to develop trust between managers and employees, it is vital to maintain justice in corporate management. Employees' trust in their bosses may contribute to increased workplace satisfaction and productivity (Suliman, 2007). According to studies, job satisfaction has a greater impact on employee productivity and behavior. Job satisfaction was characterized by Lum et al. (1998) as a combination of employment, income, work quality, and supervision.

H3. Interactional justice will significantly influence employees' job satisfaction.

Cedwyn and Awamleh (2006) looked into this topic in depth. They discovered that distributive and interactive justice had a significant impact on job satisfaction. However, no such nexus has been shown in the procedural jurisdiction. According to Tziner et al., there is a strong link between organizational justice and job satisfaction (2011). Chen et al. (2010) also agreed with this viewpoint. However, no such nexus has been shown in the procedural jurisdiction. According to Tziner et al., there is a strong link between organizational justice and job satisfaction (2011). Local employees at joint venture hotels in China were polled by Leung et al. (1999), who discovered that procedural and performance-based distributive justice are linked to job satisfaction. Furthermore, job satisfaction was associated with comparisons to other domestic workers, but not with international workers. Unfortunately, few researches has looked at the impacts of distributive, procedural, and interactive justice on job satisfaction. With this in mind, the researchers conducted a study that looked at the impact of three different types of organizational justice on job satisfaction at the same time.

### 2.4 Employee performance

Employee performance is described as an employee's ability to effectively and efficiently use resources in order to achieve (personal or organizational) objectives (Daft, 2001). Workers desire social justice in the distribution of incentives for their performance, according to Adams (1965).

In work and organizational psychology, the term "work performance" is often used but poorly defined. It is most typically used to determine whether a person is performing effectively at their job by assessing the following five factors: enthusiasm for work, desire to innovate, work performance (quality and quantity of work), understanding of work tasks, and work skills. In fact, they are linked to their organization's goals, values, and tasks (Malhotra et al., 2020). Despite the ambiguity about how it should be defined, performance is a critical factor for determining an organization's results and success. Organizational fairness and job performance have a worse association.

Nonetheless, one of the most difficult difficulties for businesses in today's diverse and ever-changing work environment is attracting and retaining high-performing employees. Rather than being viewed as a single variable, performance is usually viewed as a multi-dimensional construct (e.g. Angle and Lawson, 1994; Kalleberg and Marsden, 1995; Somers and Birnbaum, 1998). The quantity and kind of these components, on the other hand, remain a source of debate among scientists. The current study looks at work enthusiasm, willingness to innovate, job performance (quality and quantity), comprehension of work responsibilities, and work skills.

Employees who are underpaid reduce their level of performance in order to reduce input, whereas those who are overpaid improve their level of performance in order to increase input (Masterson et al., 2000; Cropanzano and Prehar, 1999). (Greenberg, 1982; Adams and Freedman, 1976). In a meta-analysis comparing organizational justice and work performance, Cohen-Charash and Spectro (2001) discovered that procedural justice is the strongest predictor of performance when compared to distributive justice.

Justice's Effect on Workplace Performance The conceptual contributions of dimensional and total justice to work performance are discussed in the following sections. Distributional, procedural, and interactional fairness are the three categories of fairness identified by Colquitt (2001). These elements have been linked to work performance in several research (Li and Cropanzano, 2009; Shao et al., 2013).

## **Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance**

### **2.4.1 Relation between Distributive justice and Employee Performance**

The equal distribution of a company's profits among its employees is referred to as distributive justice. Employees must believe that they are receiving an equal share of the resources distributed by the company (Greenberg, 1990; Andersson-Straberg et al., 2007). The goal of distributive justice is to reach fair decisions for all parties concerned (reward). According to Cropanzano et al. (2007), this component of equality is linked to resource sharing inside organizations. The perception of fairness in this scenario is based on a comparison of contributions made and benefits received.

Employees feel obligated to create positive behavior in return when they believe the organization and its authorities are treating them fairly (Ghosh et al., 2017) According to some academics, fairness of results is more essential to employees than procedural fairness (Lerner and Whitehead, 1980). When people care more about the outcomes than the methods that drive them, this assertion may be true.

To put it another way, distributive justice is concerned with the economic and social consequences of actions taken without taking into account the decision-making process that results in the distribution of organizational outcomes (Konovsky, 2000; Saunders et al., 2003). Adams' equity theory is the cornerstone of distributive justice, as is the notion that distributive justice might affect worker performance (1963, 1965). Employees develop a sense of distributive fairness, according to this theory, by comparing the organizational results they get via their work with the results they achieve from other caregivers (Greenberg, 1990; Cohen-Charash and Spector, 2001; Cropanzano et al., 2007; Lambert et al., 2007).

Skarlicki and Folger (1991) and Moorman (1991) both emphasized the role of distributive fairness in determining workplace attitudes and behavior (1997). You've identified a correlation between distributive justice and job performance. According to Cohen-Charash and Spector (2001), there is a link between distributive justice and workplace outcomes, particularly in terms of organizational engagement. According to Konovsky & Cropanzano (1991) and Meyer et al., organizational justice correlates more significantly with affective engagement than other measures of organizational involvement (2002). On the other hand, Noblet et al. (2012) found a relationship between distributive justice and employee performance.

H4. Distributive justice will significantly influence employees' performance.

### **2.4.2 Relation between Procedural justice and Employee Performance**

Suifan et al. (2017) define procedural justice as "the fairness of the decision-making process through which results are allocated." Because the perception of justice is based on the methods, mechanisms, and processes that are used to achieve these results - procedural elements within a social system that regulate resource allocation - researchers such as Thibaut and Walker (1975, 1978) and Leventhal (1980) focused on these methods, mechanisms, and processes. Employees' impressions of the quality of their connection with the company are influenced by process fairness, which is considered the foundation of social exchange in the workplace (Masterson et al., 2000).

According to Cohen-Charash and Spector (2001), employees who believe the organization's outputs are unfairly distributed question the processes that led to those outcomes and pursue the conclusion that the techniques are not fair by adjusting their performance to restore justice to the company. Procedural justice, like distributive justice, has an impact on an organization's employees' emotions, attitudes, and behavior (Cohen-Charash and Spector, 2001; Ambrose et al., 2002). On the one hand, employees' perceptions of procedural fairness impact their attitudes and behavior toward management decisions, while on the other hand, it serves a symbolic purpose, such as strengthening employee-manager relationships.

As a result, procedural fairness can boost employee confidence in management, the organization, and organizational participation, leading to positive organizational outcomes (Greenberg, 1990; Suliman and Kathairi, 2013). Certain studies (e.g., Masterson et al., 2000; Cropanzano et al., 2002; Rupp and Cropanzano, 2002) use the concept of social exchange to explain the impact of procedural justice on employee performance (Blau, 1964). In terms of employee interactions with both the organization and management, social exchange theory explains employee performance (Settoon et al., 1996; Wayne et al., 1997). Procedural justice, according to these researchers, is an aspect of employee performance that is influenced by the employee-organization relationship.) Social exchange connections, on the other hand, are primarily defined by concepts such as shared employee identification, loyalty, emotional attachment, continuity, and mutual support (Organ, 1990; Walumbwa et al., 2009).

Employees display more effective job behavior when social exchanges occur in this example, when compared to commercial transactions (Organ, 1990; Settoon et al., 1996; Walumbwa et al., 2009).

According to Sweeney and McFarlin, procedural fairness has a greater impact on organizational engagement than distributive justice (1993). An employee's view of the fairness of procedures, according to Sweeney and McFarlin (1993), motivates him or her to perform in the future, even if the current incentive appears to be unjust. According to Lam et al. (2002), procedural justice has a favorable impact on employee work performance.

H5 .Procedural justice will significantly influence employees' performance.

### **2.4.3 Relation between Interactional justice and Employee Performance**

Interactional fairness refers to the perceived quality relationship within the organizational hierarchy (Minibas-Poussard et al., 2017). Honesty, civility, respect, and a quick answer, according to Bies, are four differentiating needs for equitable treatment (1987).

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Employees' perceptions of justice are influenced by the interpersonal treatment they receive and the information supplied to them during and after resource allocation in the case of interactional justice (Greenberg, 1988). Interactional justice, according to recent studies, has a good impact on work performance (e.g. Ambrose and Schminke, 2009; Suliman and Al Kathairi, 2013).

Interactional fairness can lead to better interpersonal connections and communication over time (Lerner, 2003; Cropanzano et al., 2007). Employees are more inclined to consider communication and common links within the company when considering workplace equity, according to Cojuharenco and Patient (2013). Employees are more prone to focus on job outcomes when considering unfairness. Employees respond with improved job performance when managers or management representatives communicate with them fairly (Settoon et al., 1996; Masterson et al., 2000; Cropanzano et al., 2007). The good or bad influence of employee-administrative connections on job performance is based on interactional fairness, according to the theory of social exchange (Cohen-Charash and Spector, 2001; Settoon et al., 1996; Wayne et al., 1997; Cropanzano et al., 2002).

This will help you perform better in a variety of scenarios. Some researchers argue that just rewarding employees with monetary incentives is wasteful and time-consuming, and that interactional fairness is a more effective strategy to boost employee productivity (Cropanzano et al., 2002; Rupp and Cropanzano, 2002; Cropanzano et al., 2007). Employees feel valued and recognized when managers and employees have a fair connection, as well as when employees have a fair relationship with themselves.

H6. Interactional justice will significantly influence employees' performance.

### 2.5 Employee's Demographic and Career backgrounds

Despite the fact that multiple studies have indicated that job happiness has a bigger impact on employee behavior and work results, most of them have looked at equity, satisfaction, and performance as independent concepts, with few attempting to investigate the linkages between them. There is currently a scarcity of information about the nature, relevance, and strength of the links between these three variables, particularly when considering the complexities of equity, satisfaction, and achievement. Employee performance and happiness are influenced by organizational fairness (fairness of distribution, fairness of method, and fairness of interaction) in theory. Certain socio-demographic characteristics, on the other hand, may be able to represent the link between organizational justice and employee satisfaction and performance. Age, education, and professional history all influence organizational justice and employee satisfaction and performance. Subordinates' age could easily have a role in obeying orders, perhaps extending injustice and inequity.

The purpose of this research is to see how organizational justice facts affect job satisfaction and performance, as well as whether demographic factors play a role in the relationship between organizational justice and job happiness and performance. Employees see the organization as fair not only when the division represents their dedication, but also when the division reflects their dedication, according to research. When workers believe that the decision-making process behind the distribution of commodities was fair and impartial, the chance of such an assessment increases dramatically.

As a result, the necessity to design fair and impartial procedures that apply to all employees, allow for the correction of potentially incorrect choices, and ensure that ethical norms are consistently applied was acknowledged (Juchnowicz & Kinowska, 2018). However, research in the field of organizational justice has found that employees are more likely to perceive an organization as fair if they believe the mechanisms in place are fair, even if they observe an unequal allocation of commodities inside the firm (Silva & Caetano, 2016).

H7. Employees' demographic (gender, marital status, education and age and nationality) and career backgrounds (organizational tenure, job tenure and job level) will influence the way they perceive justice, satisfaction and performance.

## 3. RESEARCH METHODOLOGY

### 3.1 Introduction

Research methodology can be defined as comprising defining and redefining problems, formulating hypotheses or suggested solutions, collecting, organizing and evaluating data, making deductions and reaching conclusions and at last careful testing the conclusions to determine whether they fit the formulated hypothesis." Clifford Woody. According to Sarantakos (1998) research methodology is —the theory of methods is the way in which one makes sense of the object of inquiry. According to Polit and Beck (2004) methodology refers to ways of obtaining, systematizing and analyzing data. Bowling (2002) explains that methodology is the complete structure of the research study; the size and sample methods, the practices and techniques utilized to collect data and the process to analyze data.

In Chapter 1, the research problem statement and objectives were stated. The applicable literature pertaining to the brief overview was discussed in Chapter 2. The main objective of Chapter 3 is to describe the research methodology used in this research study, followed by the research strategy, research design, research method, geographical area where the research was conducted and the population and sample. Once the population and sample was clarified, the empirical instrument used to collect the data will be described, which includes methods implemented to maintain validity and reliability of the instrument. An explanation of how the data was collected and captured will be illustrated in a figure. As stated by Cooper and Schindler (2013) that management research

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

may cover studies that are reporting, explanatory, descriptive or predictive. Saunders et al. (2019) define research as a process by which individuals attempt to learn things in a systematic way in order to increase their knowledge.

Also, Chapter 3 discusses the statistical techniques which were used in the research to analyze and test the collected data.

### 3.2 Research Variables, Framework and hypothesis

The present chapter consists of the study conceptual framework based on the literature review in the previous chapter. The following section covers the framework including independent, mediating and dependent variables and their relationships. In addition, each hypothesis is presented based on the rationale behind it.

- **Independent variable:** Organizational justice (Distributive justice , procedural justice , Interactional Justice)
- **Dependent Variable:** Job Satisfaction, Employee's Performance
- **Moderator Variable:** Employee's Demographic and career backgrounds.

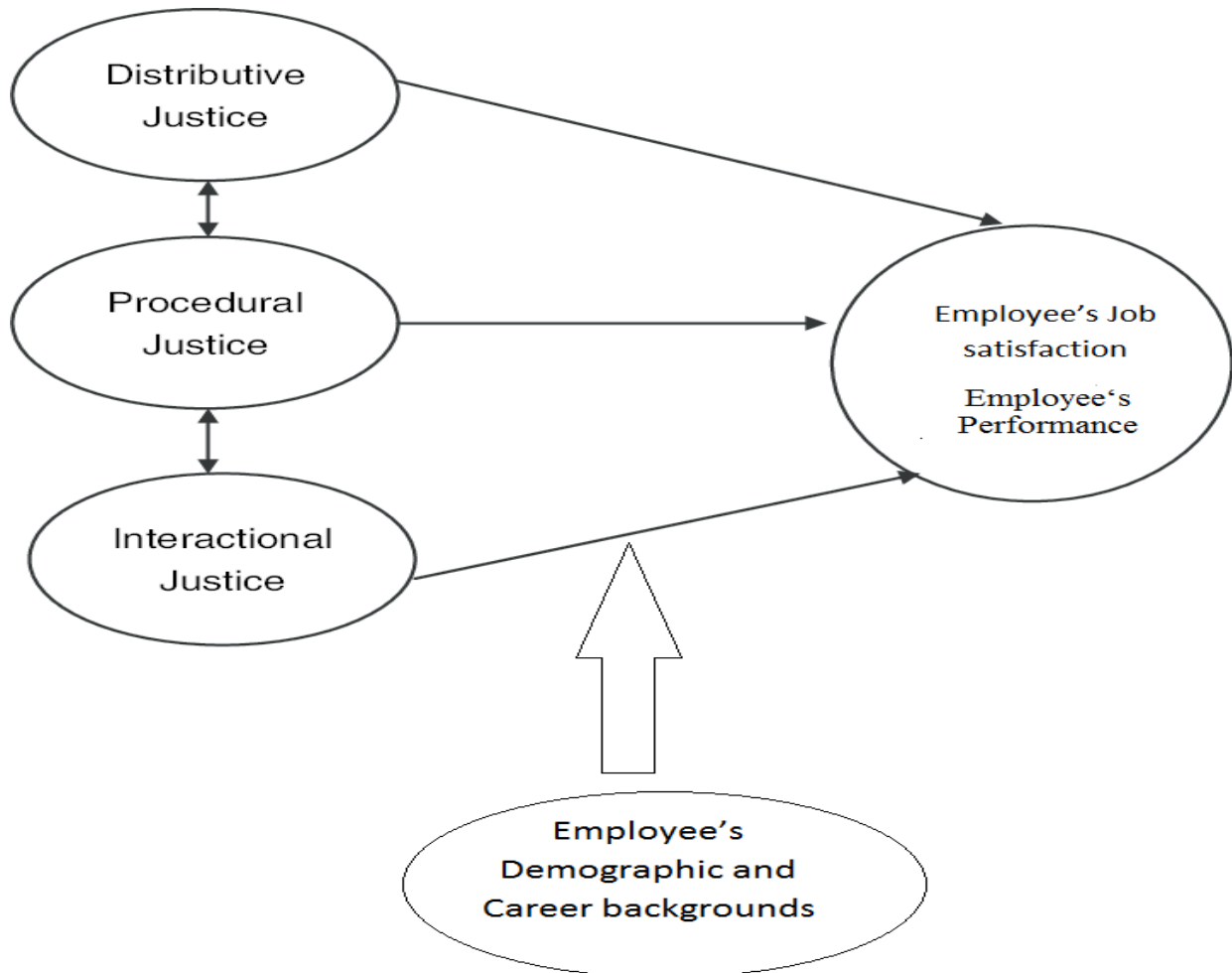


Figure 3.1: framework of the research

According to the above framework , research hypothesis could be developed as following:

- H1. Distributive justice will significantly influence employees' job satisfaction
- H2. Procedural justice will significantly influence employees' job satisfaction
- H3. Interactional justice will significantly influence employees' job satisfaction
- H4. Distributive justice will significantly influence employees' performance.
- H5 .Procedural justice will significantly influence employees' performance.
- H6. Interactional justice will significantly influence employees' performance.
- H7. Employees' demographic (gender, marital status, education and age and nationality) and career backgrounds (organizational tenure, job tenure and job level) will influence the way they perceive justice, satisfaction and performance.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

### 3.3 Conceptual and operational definitions of research variables

Table: 3.1 Conceptual and operational definitions of research variables

	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
MV	Employee's demographic and career backgrounds	such as Age, Education and Professional background	were measured using five different scales ranged between two points (e.g. gender, Marital status) to six points (nationality, level of education and age) Likewise, career variables- job level; organizational tenure and job tenure- were also measured using two different scales ranged between three points and five points.	- Gender - Marital status - Nationality – Level of education - Age - Job level - Organizational tenure - Job tenure

	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
	Organizational justice	Employees' perception of how an organization treats them with fairness. (Campbell and Finch, 2004).		
IV 1	Distributive justice	Employee perception of fairness of the outcome that they receive from the organization (Folger and Cropanzano, 1998).	Perceptions of distributive justice were measured with a 7-item scale developed by Price and Mueller (1986) and Neihoff and Moorman (1993). Respondents indicated the extent of their agreement or disagreement with each item on a scale from 1 (strongly disagree) to 5 (strongly agree).	-I think that I am fairly rewarded -My work schedule is fair -I think my level of pay is fair -I consider my workload to be quite fair -The evaluation of my performance provides an appropriate assessment of the work I have completed. -I intend to develop my entire professional career in this organization. -I feel that my job responsibilities are fair
	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
	Procedural Justice	Employee perception Fairness of the procedure	Perceptions of procedural justice were measured with a 6-item	-I am able to express my views at this company.



## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

IV 2		involved in making decisions (Folger and Greeberg, 1985)	scale developed by Neihoff and Moorman (1993). Respondents indicated the extent of their agreement or disagreement with each item on a scale from 1 (strongly disagree) to 5 (strongly agree).	<ul style="list-style-type: none"> <li>-The procedures used in my organization have been applied consistently.</li> <li>-The procedures used in my organization are free of bias.</li> <li>-The procedures used in my organization are based on accurate information.</li> <li>- Opportunities exist to appeal certain decisions.</li> <li>-The procedures used in my organization uphold ethical and moral standards.</li> </ul>
---------	--	----------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
IV 3	Interactional justice	The manner of treatment that employees receive from their managers. (Bies and Moag 1986)	Perceptions of Interactional justice were measured with 7-items measuring the degree to which employees felt their needs were considered. All items used a five-point format.	<ul style="list-style-type: none"> <li>-My supervisor treats me in a polite manner.</li> <li>-My supervisor treats me with respect and dignity.</li> <li>-My supervisor treats me with kindness and consideration.</li> <li>-My supervisor refrains from improper remarks or comments.</li> <li>-My supervisor treats with me with a truthful manner.</li> <li>-My supervisor explains very clearly any decision made about my job.</li> <li>-When decisions are made my supervisor shows concerns for my rights as an employee.</li> </ul>

	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
DV 1	Employee's Performance	Is the degree to which an individual executes his or her role with reference to certain specified standards set by the organization (Nayyar, 1994).	The self performance rating (SPR), as a subjective measure is widely used in the most recent management literature (e.g. Farh et al., 1991; Furnham and Stringfield, 1998; Somers and Birnbaum, 1991; Yu and Murphy, 1993). - I work on keeping my work skills up to date	<ul style="list-style-type: none"> <li>- I manage to plan my work so that I finish on time.</li> <li>- I am able to separate main issues from side issues at work.</li> <li>-I am able to complete quality work on time</li> <li>-I try to come up with creative solutions to new problems.</li> </ul>

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

	Variable	Conceptual Definition	Operational Definition	Operational Definition Statements
DV 2	Job satisfaction	Is the satisfaction of employees with their jobs or the degree to which employees like their jobs. (Spector, 1997)	A standard job satisfaction questionnaire (Fernand and Awamleh, 2006), was used to assess the level of job satisfaction among employees. This questionnaire has 7-items. It was decided to use fivepoint Likert scale to measure the responses to each item (from strongly disagree 1 to strongly agree 5). -	-I feel I receive a fair salary for my job. -I feel satisfied with my chances for salary increases. -I am satisfied with my chances for promotion. -There is good relationship between employees. -I take part in making the decisions that affect my job.

### 3.4 Research Methods

This section represents the methods utilized in this study, where it represents the research philosophy, research approach and the design of the research.

#### ❖ 3.4.1 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. Two main research philosophies are positivist (sometimes called scientific) and interpretivist (also known as antipositivist) (Galliers, 1991).

-Positivists

Positivism relies on hypotheses that are often stated quantitatively; where functional relationships can be derived between causal and explanatory factors (independent variables) and outcomes (dependent variables). Positivists Believe that reality is stable and can be observed and described from an objective viewpoint (Levin, 1988).

Research strategy is approached on the basis of data collection and hypothesis development. These hypotheses will be tested and confirmed which can be used for further research. Another feature of this philosophy is that the positivist researcher follows highly structured methodology in order to facilitate the hypothesis. Furthermore, positivism works on quantifiable observations and accordingly statistical analysis is obtained. Positivist methodology relies heavily on experimentation. Hypotheses are put forward in propositional or question form about the causal relation between phenomena.

The quantitative data that positivist researchers use to answer research questions and formulate theories can be collected through true experiments or less rigorous quasi experiments, standardized tests and large or small scale surveys using closed ended questionnaires.

Empirical evidence is gathered; the mass of empirical evidence is then analyzed and formulated in the form of a theory that explains the effect of the independent variable on the dependent variable. The approach to analyzing data is deductive; first, a hypothesis is proposed, then it is either confirmed or rejected depending on the results of statistical analysis. The purpose is to measure, control, predict, construct laws and ascribe causality (Cohen et al., 2007).

-Interpretivism

Interpretivism focuses on people's subjective experiences, on how people “construct” the social world by sharing meanings, and how they interact with or relate to each other.

Interpretivism is a branch of epistemology which is focused on the assessment of the differences between humans as social actors. The goal of interpretive research is not to discover universal, context and value free knowledge and truth but to try to understand the interpretations of individuals about the social phenomena they interact with. As Blaikie (2000) states: Rehman & Alharthi Social researchers can only collect data from some point of view, by making ‘observations’ through spectacles with lenses that are shaped and colored by the researcher’s language, culture, discipline-based knowledge, past experiences (professional and lay), and experiences that follow from these.

Overall we believe that an interpretivist philosophy is required for this purpose of understanding how groups adopt and adapt to the use of Information Systems, specifically Group Support Systems.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Interpretivists collect mostly qualitative data from participants over an extended period of time, as in ethnography and case studies. Data is mostly verbal instead of statistical and it is usually audio/video recorded to “preserve the events in a fairly authentic manner for subsequent data analysis” (Gall et al., 2003, p. 21). Interpretive researchers employ methods that generate qualitative data, and although numerical data could be involved, they are not relied upon. Examples of data collection methods that yield qualitative data include: open ended interviews with varying degrees of structure (standardized open-ended interviews, semi-standardized open ended interviews, and informal conversational interview), observations, field notes, personal notes, and documents.

For example, a sociologist might ask people why they scratch their face or twirl their hair when they talk, and the sociologist would analyze those responses to come up with a conclusion; this is an example of interpretivism. Traditionally, quantitative researchers remain detached from what they are studying.

It has often been observed (e.g. Benbasat et al., 1987) very accurately that no single research methodology is better than any other methodology, many authors calling for a combination of research methods in order to improve the quality of research (e.g. Kaplan and Duchon, 1988). Equally, some institutions have tended to adopt a certain "house style" methodology (Galliers, 1991); this seems to be almost in defiance of the fact that, given the richness and complexity of the real world, a methodology best suited to the problem under consideration, as well as the objectives of the researcher, should be chosen (Benbasat, 1984; Pervan, 1994b).

The key difference between positivism and interpretivism is that positivism recommends using scientific methods to analyze human behavior and society whereas interpretivism recommends using non-scientific, qualitative methods to analyze human behavior.

This research paper is using the positivism philosophy in order to achieve its aim. Positivism often involves the use of existing theory to develop hypotheses to be tested during the research process.

### ❖ 3.4.2 Research Approach

Cresswell (2007) asserted the importance of illustrating the research approach as an effective strategy to increase the validity of social research.

#### ❖ Qualitative Research

Qualitative research is an approach that concentrates mainly on words and observations to express reality and tries to describe people and research phenomena in natural situations (Amaratunga, 2002; P: 19). They are committed to the naturalistic perspective and to the interpretive understanding of human experience. (Lincoln and Denzin, 2002; P 1047). The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data.

#### ❖ Quantitative Research

Quantitative research is one of the most used approaches to conduct social research. It relies mainly on a hypothesis which is derived from theory deductively; the objective is to test the theory by way of observation and data collection, the findings of which following analysis, would either confirm or reject the theory (Morvaridi 2005; P: 2). It is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The final written report has a set structure consisting of introduction, literature and theory, methods, results, and discussion.

According to Bryman (1989), quantitative approach is claimed to be infused with positivism which is an approach to the study of people which commends the application of the scientific method. According to Kothari (2004) qualitative approach is a function of a researcher's perception and impressions whereby he gives his subjective assessment of attitude, opinions and behaviors while quantitative approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. According to Morvaridi (2005). Deductive approach is aimed at test theory while an inductive approach is concerned with the generation of new theory emerging from the data. Inductive approaches are associated with qualitative research, while deductive approaches are more commonly associated with quantitative research.

In this research, it is applicable to use the deductive methodology because the theory is already formulated and the hypotheses are proposed. The Methodology adopted for the current research is a quantitative approach in order to reach its aim which is examining the impact of organizational equity on work satisfaction and performance, demographic and career backgrounds are proposed as moderators.

### ❖ 3.4.3 Design of the Research

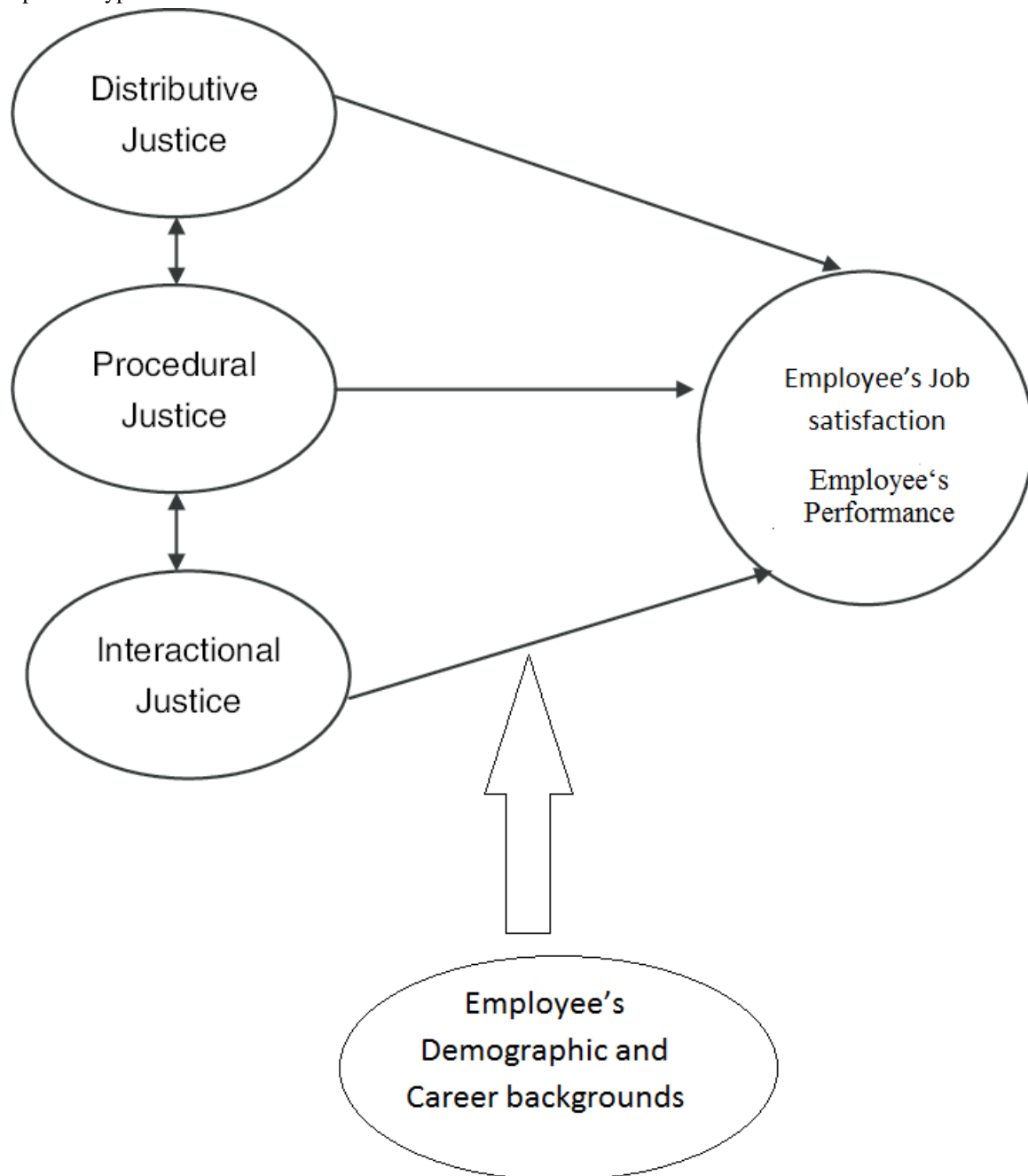
“Research design is a master plan specifying the methods and procedures for collection and analyzing the needed information.” William Zikmund. It is simply the framework or plan for a study that is used as a guide in collecting and analyzing the data. Research design is the blue print for collection measurement and analysis of data. Actually it is a map that is usually developed to guide the research. Research design is the conceptual structure within which research is conducted and includes the collection and analysis of data which are relevant to the research (Kothari, 2004).

According to Cormack (1996), the research design represents the major methodological thrust of the study, The research questions, the aim and the objectives of the study thus influence the selection of the research design (Brink, 1999). The purpose of the research

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

design, as stated by Burns and Grove (2001), is to achieve greater control of the study and to improve the validity of the study by examining the research problem. In deciding which research design to use, the researcher has to consider a number of factors.

This study will use Descriptive research. It is one of three basic types of research design. It is a quantitative research method and is used to test specific hypotheses and describe characteristics or functions.



**Figure 3.2: Research Design**

### 3.5 Research Data collection

A researcher requires a lot of data – gathering tools or techniques. Tests are the tools of measurement and it guides the researcher in data collection and also in evaluation. Tools may vary in complexity, interpretation, design and administration. Each tool is suitable for the collection of certain types of information. Each researcher has to select from the available tools those which will provide data he seeks for testing hypotheses. Different tools used for data collection may be Questionnaires, Interviews, Schedules, Observation Techniques and Rating Scales.

In the quantitative research process, data collection is a very important step. Quality data collection methods improve the accuracy or validity of study outcomes or findings. Researchers must choose appropriate data collection methods and approaches. An ideal data collection procedure captures a construct that is accurate, truthful, and sensitive (Polit & Beck, 2017). Quantitative data are collected in a more structured manner as compared to the qualitative data which are unstructured or semi-structured.

## **Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance**

This study therefore uses a Questionnaire tool for data collection “A questionnaire is a systematic compilation of questions that are submitted to a sampling of the population from which information is desired.” Barr, Davis & Johnson.

Distributive, procedural and interactional justice was measured by using the scales developed by Nichoff and Moorman (1993). The modified questionnaire comprised 20 items using a five- point Likert-type scale ranging from 1= strongly disagree to 5= strongly agree. Distributive justice scale consisted of 7 items, Procedural justice scale consisted of 6 items and interactional scale consisted 7 items.

Job Satisfaction: A standard job satisfaction questionnaire (Fernand and Awamleh, 2006), was used to assess the level of job satisfaction among employees. This questionnaire has 9-items using a five- point Likert-type scale ranging from 1= strongly disagree to 5= strongly agree. According to Ivancevich and Matteson (2005) job satisfaction has five dimensions, namely pay, Job (nature of work), promotion opportunities, supervisors and co-workers. The entire set of these scales was included in one questionnaire.

Demographic and career variables. Gender, marital status, age, nationality and education were measured using five different scales ranging between two points (e.g. gender) to six points (nationality). Likewise, career variables- job level, organizational tenure and job tenure- were also measured using two different scales ranging between three points and five points. Both career and demographic variables' scales were developed by the researcher.

Work performance The self performance rating (SPR), as a subjective measure is widely used in the most recent management literature (e.g. Farh et al., 1991; Furnham and Stringfield, 1998; Somers and Birnbaum, 1991; Yu and Murphy, 1993).

### **3.6 Population and Sample**

Swanson and Holton (2005) stated that “as it is almost impossible to collect data from the entire population owing to many limitations, so researchers usually select samples from the overall population”. According to Lind et al. (2006) a sample is a portion of the respondents drawn from the population of interest, and in many cases, sampling is more feasible than studying the entire population. Although no sample can be guaranteed to be fully representative, it serves the purpose of obtaining a result that is representative of the whole population being sampled without going to the trouble of asking everyone (Fisher et al., 2010).

This study is conducted on employees in Egypt to check the effects of organizational justice on job satisfaction. Sample using a self-administered questionnaire (see Appendix), 400 employees were non representative selected and surveyed in order to examine the hypotheses. The participants were selected from Egypt representing top, middle and bottom levels of management.

### **3.7 Time Horizon**

Saunders et al (2009) articulates that time taken to research the phenomena is independent of which research methodology you have chosen or choice of research technique/method, there are two possible options: longitudinal study and cross-sectional study. A cross-sectional study is a study that aims to provide an overview of the situation in general where the variables in this study are assessed only once to obtain the relationship between variables. Study describes a group of subjects at one particular point in time (Campbell, Machin & Walters, 2007). In a longitudinal study, researchers repeatedly examine the same individuals to detect any changes that might occur over a period of time.

This study therefore used cross- sectional study to collect data from many different individuals at a single point in time using questionnaires.

### **3.8 Data Analysis Techniques**

Data analysis embraces a whole range of activities of both the qualitative and quantitative type. It is usual tendency in behavioral research that much use of quantitative analysis is made and statistical methods and techniques are employed. The statistical methods and techniques are employed. Kaul defines data analysis as, “ Studying the organized material in order to discover inherent facts. The data are studied from as many angles as possible to explore the new facts.”

This study uses Quantitative data analysis data that can easily convert into numbers , using 2 types of statistics. Descriptive statistics describe characteristics of a data while Inferential Statistics studies samples of the same data using Statistical Package for the Social Sciences (SPSS) statistical Program.

### **3.9 Summary**

To sum up this chapter, it aims to identify the methodology used in the research in order to achieve its aim. Section 3.2 introduces the research assumptions. Section 3.3 presents the conceptual and operational definitions of the research variables. Section 3.4 shows the research methods, where this research utilizes positivism philosophy which is suitable to the research topic, also the deductive approach is adopted. In addition, quantitative design is used, which is suitable with the positivism philosophy and deductive approach. Section 3.5 shows the research settings, where primary data was collected through a questionnaire that targeted a sample of. Section 3.6 shows the population and sample design and size. Section 3.7 introduces the research time horizon, which depends on cross-sectional data. Finally, section 3.8 shows the data analysis techniques, where the research depends on several techniques of data analysis, which are: correctional analysis, regression analysis and structural equation modeling.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Table 3-2: Summary of Research Methodology

Items	Description
Research Philosophy	Positivism
Research Approach	Deductive
Design of the Research	Quantitative
Data Collection	Questionnaire
Population of the study	Employees working in Egypt representing top, middle and bottom levels of management.
Research Sample	400
Time Horizon	Cross-Sectional
Data Analysis	Regression , correlation and Structural equation Modeling

### 4. DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

The objective of this chapter is to analyze and present the outcomes and results tested throughout the analysis conducted on the data collected. A reliability test of the model's variables will be initially presented and followed by a representation of the sample investigated. Several analyses will then be illustrated to include variables Frequency and descriptive analysis, correlation, regression, moderation analysis as well as t-test and ANOVA test. At the end of the analysis, a discussion of the findings in contrast to previous empirical analysis will be provided.

#### 4.2 Descriptive Statistics

##### ❖ 4.2.1 Descriptive Statistics (Pie Chart) for General Information Survey Question

In this section, gender, marital status, Highest completed level of education, age, nationality; Organizational tenure; Job Tenure and Job level of the research population is discussed using Pie Chart.

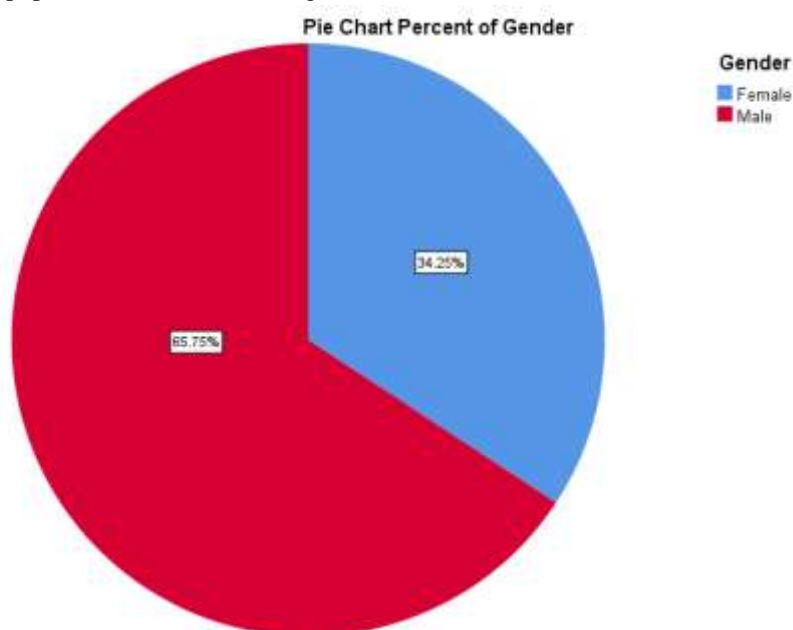


Figure 4.1 Pie Chart Percent of Gender

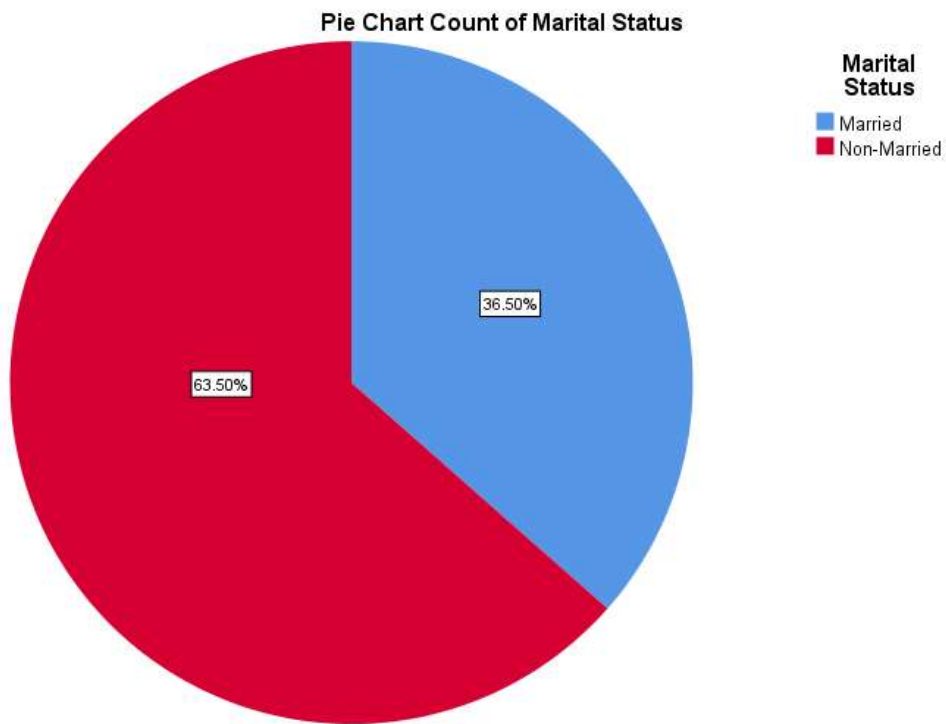


Figure 4.2 Pie Chart of Marital Status

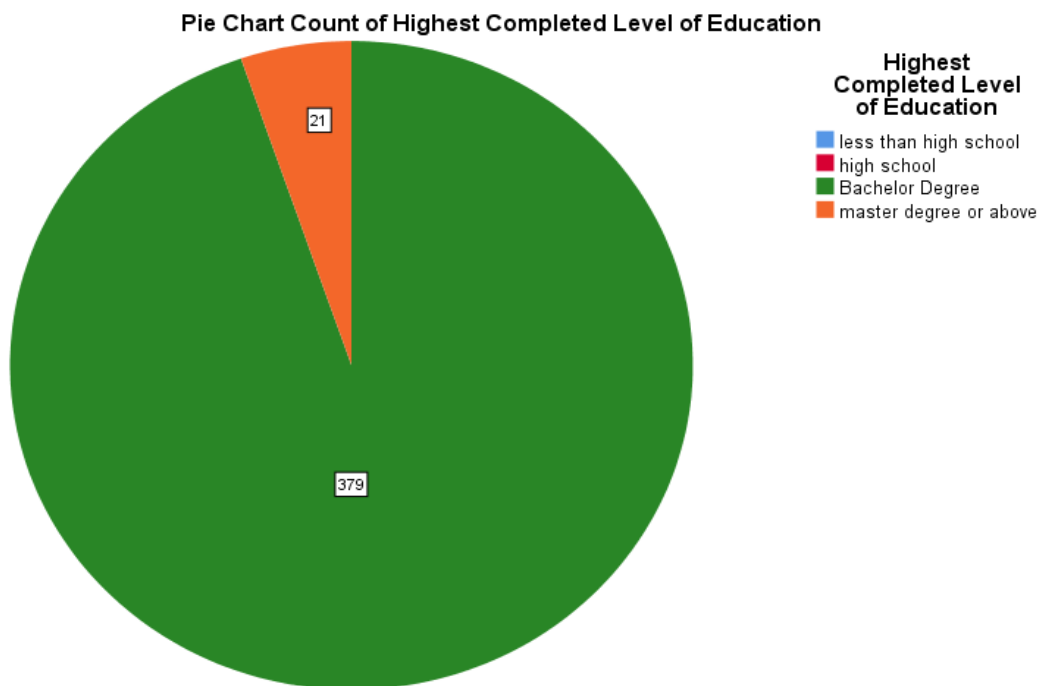


Figure 4.3 Pie Chart of Highest Completed level of Education

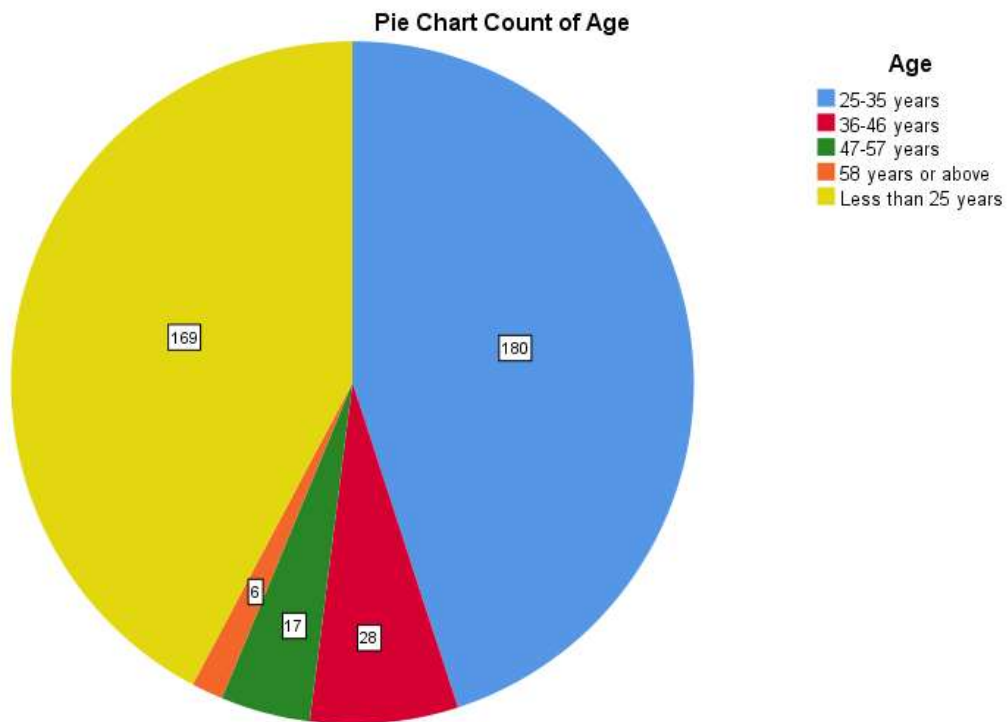


Figure 4.4 Pie Chart of Age

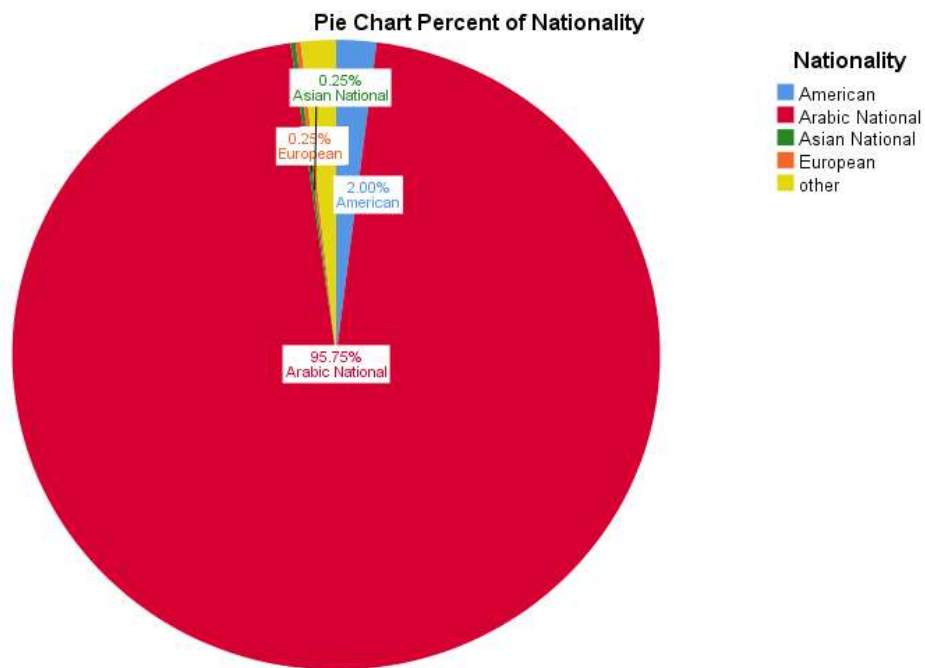


Figure 4.5 Pie Chart of Nationality



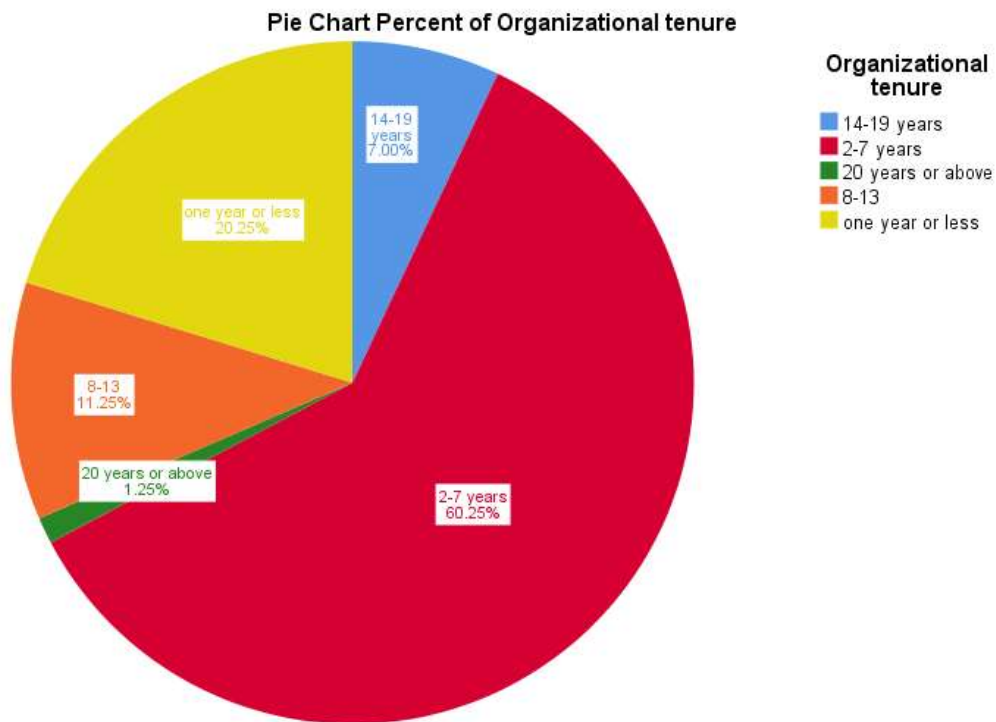


Figure 4.6 Pie Chart of Organizational Tenure

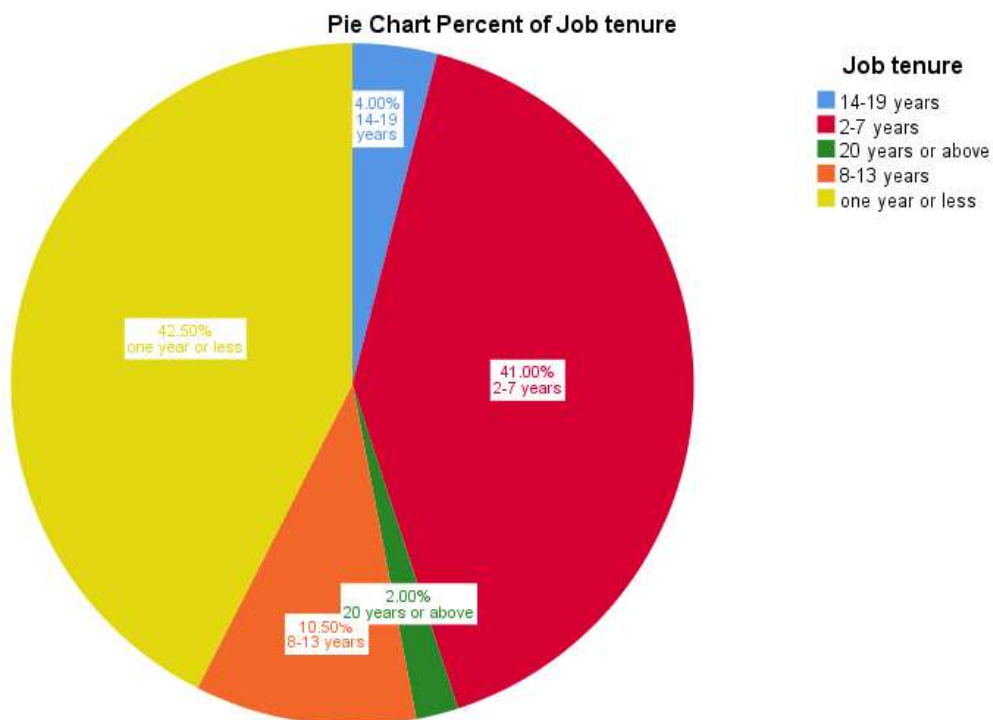


Figure 4.7 Pie Chart of Job Tenure

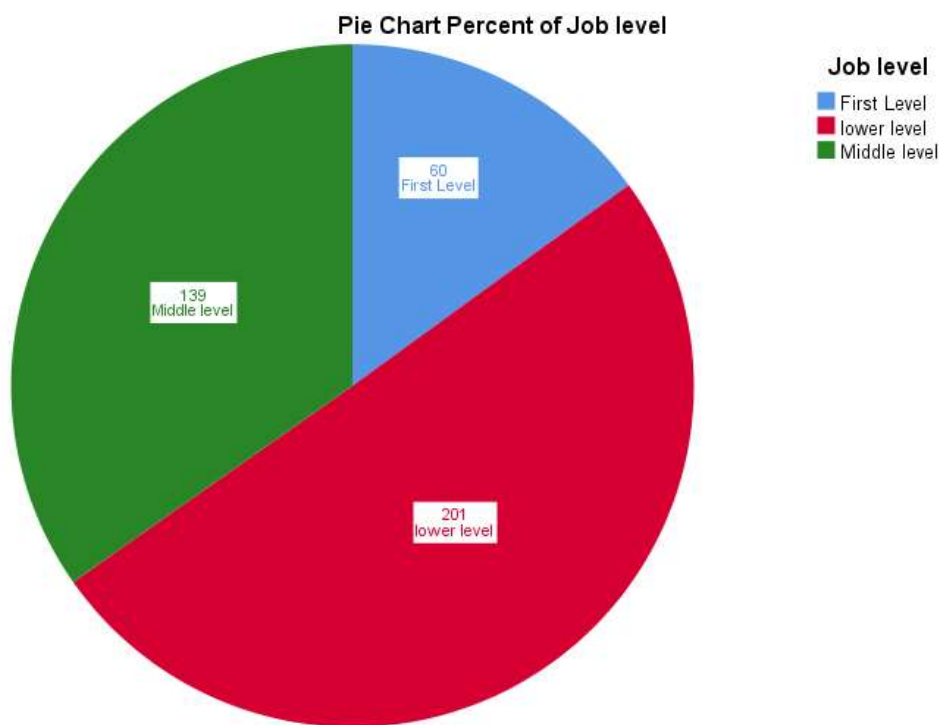


Figure 4.8 Pie Chart of Job Level

4.2.2 Descriptive analysis of the research variables

Table 4.1: Descriptive Analysis of the Research Variables

Variable Name	N	Mean	Std. Deviation	Frequency				
				1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Distributive Justice	400	2.90	.582	6	63	303	20	8
Procedural Justice	400	2.98	.695	6	56	303	9	26
Interactional Justice	400	2.91	.588	12	45	316	20	7
Employee’s Job Satisfaction	400	2.95	.480	2	44	331	17	6
Employees Performance	400	3.45	.830	8	58	87	241	6

Table 4.1 demonstrates the standard deviation and the mean of the variables of the research variables, as well as the frequencies of the research variables.

4.3 Data Validity and Reliability

Validity and reliability have been used in data processing to examine if the data collected is enough to test the research hypotheses. Sekaran and Bougie (2016) defined validity as the degree to which the survey statement assigned to a particular construct may correctly assess the construct. The factor analysis approach (FL) is the tool which is used to calculate the factor loading, and determine validity of the average variance extracted (AVE). The average variance of each latent component is calculated using the AVE method. It is asserted that it should be larger than 50% to imply appropriate validity (Hair et al,2012). Additionally, FL denotes the magnitude of items’ loadings on their associated variable, which is said to be at least 0.40 to indicate validity that is adequate (sekaran and Bougie,2016).

The term reliability relates to the statement’s internal consistency employed in this research to measure a specific component in the Questionnaire. Cronbach’s Alpha should give you a number from 0 to 1 it generally tends to underestimate the internal consistency reliability, the closer cronbach’s alpha coefficient is closer to 1 the greater internal consistency of the items in the scale. George and

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Mallery (2003) provide the following rules of thumb >.9 excellent dependability, >.8 good , >.7 Acceptable , >.6 Questionable , >.5 Poor , <.5 unacceptable.

Since the KMO value for all Statements is greater than 0.5 which is .881 this means we can process the data for factor analysis, furthermore the significance level is less than 0.05 which is 0.00 we reject Ho , therefore the correlation matrix is adequate to perform the factor analysis. Based on Eigen value 38 statements can be replaced by 6 factors.

Taking a look at the rotated component matrix some statements had cross loading so we will make another run extracting the statements by 5 factors.

Resulting in the rotated component matrix we will check validity and reliability.

Table 4.2 demonstrates the research variable's validity and reliability tests; Distributive Justice, Procedural Justice, Interactional Justice, Job Satisfaction and Employee Performance. Moreover, the data showed a KMO greater than 0.5, which is considered to be excellent, except employee Satisfaction. The AVE was found to be above 50%. All cronbach's alpha values are greater than 0.7, except employee satisfaction.

**Table 4.2: Validity and Reliability test**

Variable	KMO	AVE	Cronbach's Alpha	Item	Factor Loading
<b>Distributive Justice</b>	.764	55.7%	.718	DJ1	.719
				DJ2	.684
				DJ3	.635
				DJ4	.588
				DJ5	.515
				DJ6	.397
				DJ7	.365
<b>Procedural Justice</b>	.894	71.8%	.870	PJ1	.829
				PJ2	.705
				PJ3	.771
				PJ4	.817
				PJ5	.799
				PJ6	.611
				PJ7	.499
<b>Interactional Justice</b>	.849	61.1%	.846	IJ1	.518
				IJ2	.797
				IJ3	.727
				IJ4	.673
				IJ5	.757
				IJ6	.587
				IJ7	.482
				IJ8	Deleted
				IJ9	.351
				IJ10	.607

Variable	KMO	AVE	Cronbach's Alpha	Item	Factor Loading
<b>Employee Satisfaction</b>	.479	59.1%	.504	ES1	.662
				ES2	.582
				ES3	.464
				ES4	.656
<b>Work Performance</b>				WP1	.861
				WP2	.852
				WP3	.844
				WP4	.800
				WP5	.799
				WP6	.792

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

	.940	81.2%	.940	WP7	.790
				WP8	.757
				WP9	Deleted
				WP10	.819

### 4.4 Testing for Normality of Research Variables

Another one of the presuppositions that should be taken into account on the basis of verification in order to assess the normality of a data collection. If the data is spread in a regular manner, the researcher may use parametric analysis techniques such as Spearman Correlation. As a consequence, one may argue that establishing the normalcy of data should be a pre-inferential phase since it establishes whether the researcher can reply to the Research hypotheses using parametric or non-parametric tests. The Kolmogorov-Smirnov test of normality is a frequently used technique for determining the normality of a data collection. It verifies the normality assumption for samples larger than 50 observations. If the P-value was larger than 0.05, it is assumed that the data are regularly distributed. It is referred to as the formal normality test. This subsection verifies the normality assumption for the research variables. In order to check the normality for the data, Table 4-9 demonstrates the formal testing of the normality assumption for the Research variables using the Kolmogorov-Smirnov test of normality. As the associated P-values are all less than 0.05, it is obvious that the Research variables are not normally distributed.

**Table 4.3 Formal Testing of Normality**

Research Variables	Kolmogorov - Smirnov		
	Statistic	Df	P-Value
Distributive Justice	.315	400	.000
Procedural Justice	.257	400	.000
Interactional Justice	.298	400	.000
Employee's Job Satisfaction	.274	400	.000
Employee's Performance	.357	400	.000
Employee's Demographic and Career Background	.167	400	.000

Whether a formal test reveals that the Research variables are not entirely normal, an informal test may be used to evaluate if the variables are close to normal. The values for skewness and kurtosis between -2 and +2 are considered acceptable in order to prove normal distribution (George & Mallery, 2010). Hair et al. (2010) and Bryne (2010) argued that data is considered to be normal if skewness is between -2 and +2 and kurtosis is between -7 and +7. Table 4-10 demonstrates the test of normality, that the data of the Research under investigation means not normal.

**Table 4.4 Informal Testing of Normality**

Research Variables	Skewness		Kurtosis	
	Statistics	Std.Error	Statistics	Std. Error
Distributive Justice	1.925	.122	7.534	.243
Procedural Justice	2.041	.122	3.772	.243
Interactional Justice	1.762	.122	4.086	.243
Employee's Job Satisfaction	-.322	1.22	1.092	.243
Employee's Performance	-.777	.122	-.948	.243
Employee's Demographic and Career Backgrounds	.175	.122	-1.160	.243

### 4.5 Inferential Statistics

#### ❖ 4.5.1 Correlation Analysis

To assess the existence of a relation and the strength of this relation between variables, researchers use correlation analysis (Saunders et al., 2019). The Pearson correlation analysis is one kind of such analysis and is used in this research. Pallant (2010) indicated the direction of the relations specified by this analysis could have a negative sign (opposite relation) or a positive sign (similar direction relation). Cooper and Schindler (2013) stated that management questions frequently involve relationships between two or more variables. Correlation analysis may be applied to study such relationships. A correct correlation hypothesis states that the variables occur together in some specified manner without implying that one causes the other. The researchers also stated that

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

values 104 indicating the strength would have a range between (0 and 1,-1) in both directions. These values would postulate the strength of relations were weak correlation would be close to 0 while strong correlation would be close to 1, -1 depend on the relation whether it's a positive or negative; to sum up the ranges when (r=0) no relationship, (r=1) perfect relationship, (0 < r < 0.25) weak relationship, (0.25 ≤ r < 0.75) moderate relationship, (0.75 ≤ r < 1) strong relationship.

**Table 4.5 Correlation Analysis**

			Correlations				EmployeesDemographicBackgrounds
			EmployeesPerformance	ProceduralJustice	InteractionalJustice	DistributiveJustice	EmployeeJobSatisfaction
Spearman's rho	EmployeesPerformance	Correlation Coefficient	1.000				
		Sig. (2-tailed)					
		N	400				
	ProceduralJustice	Correlation Coefficient	<b>-0.349**</b>	1.000			
		Sig. (2-tailed)	.000				
		N	400	400			
	InteractionalJustice	Correlation Coefficient	<b>-0.207**</b>	.130**	1.000		
		Sig. (2-tailed)	.000	.000			
		N	400	400	400		
	DistributiveJustice	Correlation Coefficient	.000	.249**	.160**	1.000	
		Sig. (2-tailed)	.998	.000	.001		
		N	400	400	400	400	
	EmployeeJobSatisfaction	Correlation Coefficient	.816**	<b>-0.317**</b>	<b>-0.226**</b>	<b>0.229**</b>	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000
		N	400	400	400	400	400
	EmployeesDemographicandCareerBackgrounds	Correlation Coefficient	<b>-0.309**</b>	<b>-0.209**</b>	<b>-0.402**</b>	<b>-0.039</b>	<b>0.340**</b>
		Sig. (2-tailed)	.000	.000	.000	.440	.000
		N	400	400	400	400	400

\*\* Correlation is significant at the 0.01 level (2-tailed).

As displayed above in Table 4.11, It appears that there is an Indirect relationship between Procedural Justice on Employees Job satisfaction, as a result of the fact that the identical P-value was smaller than 0.05. Where noted that (P-value = 0.000), additionally, it appears that there is a negative, weak significant effect of Procedural Justice on Employees Job satisfaction, as the identical coefficient is -0.317\*\*.

It appears that there is an Indirect Relationship between Interactional Justice on Employee Job satisfaction, as a result of the fact that the identical p-Value was smaller than 0.05, where noted that (p-Value= 0.000), additionally, it appears that there is a negative , weak significant effect of Interactional Justice on Employee Job satisfaction , as the identical coefficient is -0.226\*\*.

It appears that there is an Direct Relationship between Distributive Justice on Employee Job satisfaction, as a result of the fact that the identical p-Value was smaller than 0.05, where noted that (p-Value= 0.000), additionally, it appears that there is a positive , weak significant effect of Distributive Justice on Employee Job satisfaction , as the identical coefficient is 0.229\*\*.

It appears that there is No Relationship between Distributive Justice on Employees Performance, as a result of the fact that the identical p-Value was smaller than 0.05, where noted that (p-Value= 0.998), as the identical coefficient is 0.000.

It appears that there is an Indirect Relationship between Procedural Justice on Employees Performance, as a result of the fact that the identical p-Value was smaller than 0.05, where noted that (p-Value= 0.000), additionally, it appears that there is a Negative , weak significant effect of Procedural Justice on Employees Performance , as the identical coefficient is -0.349\*\*.

It appears that there is an Indirect Relationship between Interactional Justice on Employees Performance, as a result of the fact that the identical p-Value was smaller than 0.05, where noted that (p-Value= 0.000), additionally, it appears that there is a Negative , weak significant effect of Interactional Justice on Employees Performance , as the identical coefficient is -0.207\*\*.

Therefore, it can be concluded from table 4.11, that the Procedural Justice has a negative relationship with Employee's Job satisfaction and Employees performance and Interactional justice has a negative Relationship with Employee's Job Satisfaction and Employee's performance. Distributive Justice has a positive relationship with Employee's Job Satisfaction and No relationship with Employees Performance.

### ❖ 4.5.2 Regression Analysis

Regression analysis is a predicting tool (Pallant, 2010). After stating the hypotheses of this study, regression analyses will be deployed to test for the significance and contribution of one (or more) independent variable to the change in the dependent. Cooper

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

and Schindler (2013) explained that Regression analysis is used to further our insight into the relationship of Y with X. When we take the observed values of X to estimate or predict corresponding Y values, the process is called simple prediction. When more than one X variable is used, the outcome is a function of multiple predictors. Simple and multiple predictions are made with regression analysis. Lastly it will be clarified in the following hypothesis.

**Table 4.6 Simple Linear Regression**

Model Summary						
Model		R	R Square	Adjusted R square	Std. error of the estimate	
1		.333 <sup>A</sup>	.111	.109	2.48582	
A. Predictors : (Constant), Distributive Justice						
ANOVA						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	306.542	1	306.542	49.608	.000 <sup>b</sup>
	Residual	2459.355	398	6.179		
	Total	2765.897	399			
A. Dependent Variable: Employee Job Satisfaction						
B. Predictors : (constant), Distributive Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	7.726	.560		13.797	.000
	Distributive Justice	.233	.033	.333	7.043	.000
Dependent Variable : Employee Job Satisfaction						

H1: Distributive justice is significantly & positively influencing employees' job satisfaction (H1:Accepted)

As presented in table 4.12 the regression analysis results indicated that there is a positive and weak relationship (R=0.333) and R<sup>2</sup> shows that the independent variables can predict the change in the dependent variable by (11.1%) and the adjusted R<sup>2</sup> is (10.9%) and adjusted R square = (.109) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be statistically significant at (p-value =0.000), which is less than (0.05) so we reject null hypothesis H<sub>0</sub> and accept the H<sub>1</sub> and this indicating that this regression result is statistically significant in this study, but we need to check the coefficients table of which variable had a significant prediction of change in the dependent variable.

As presented in the above table, (DJ) had a significant impact on (EJS) as its (p-value was equal to 0.000) which is less than (0.05) with a (beta= 0.333). So based on such analysis, hypothesis 1 is accepted.

**Table 4.7 Simple Linear Regression**

Model Summary					
Model		R	R Square	Adjusted R square	Std. error of the estimate
1		.089 <sup>A</sup>	.008	.005	2.62578
Predictors : (Constant), Procedural Justice					
ANOVA					

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	21.803	1	21.803	3.162	.076 <sup>b</sup>
	Residual	2744.094	398	6.895		
	Total	2765.897	399			
A. Dependent Variable: Employee Job Satisfaction						
B. Predictors : (constant), Procedural Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	12.238	.396		30.875	.000
	Procedural Justice	-.043	.024	-.089	-1.778	.076
Dependent Variable : Employee Job Satisfaction						

H2: There is InSignificant Relationship between Procedural Justice and Employee Job Satisfaction. (H2=Not Accepted)

As presented in table 4.13 the regression analysis results indicated that there is a Positive and Strong relationship ( $R=0.089$ ) and  $R^2$  shows that the independent variables can predict the change in the dependent variable by (8%) and the adjusted  $R^2$  is (5%) and adjusted  $R$  square = (.005) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be Insignificant at ( $p$ -value =0.76), but we need to check the coefficient table of which variable had a significant prediction of change in the dependent variable. So based on such analysis, the hypothesis 1 is Not Accepted

**Table 4.8 Simple Linear Regression**

Model Summary						
Model		R	R Square	Adjusted R square	Std. error of the estimate	
1		.060 <sup>A</sup>	.004	.001	2.63137	
A. Predictors :(Constant), Interactional Justice						
ANOVA						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	10.101	1	10.101	1.459	.228 <sup>b</sup>
	Residual	2755.797	398	6.924		
	Total	2765.897	399			
A. Dependent Variable: Employee Job Satisfaction						
B. Predictors : (constant), Interactional Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	12.133	.482		25.150	.000
	Interactional Justice	-.029	.024	-.060	-1.208	.228
Dependent Variable : Employee Job Satisfaction						

### Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

H3: There is no Significant Relationship between Interactional justice and employees' job satisfaction (H3: not Accepted)

As presented in table 4.14 the regression analysis results indicated that there is a positive and Strong relationship ( $R=0.60$ ) and  $R^2$  shows that the independent variables can predict the change in the dependent variable by (4%) and the adjusted  $R^2$  is (1%) and adjusted  $R^2$  square = (.001) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be statistically significant at ( $p\text{-value}=0.228$ ), this indicating that this regression result is Insignificant in this study.

So based on such analysis, hypothesis 3 is not accepted.

**Table 4.9 Simple Linear Regression**

Model Summary						
Model		R	R Square	Adjusted R square	Std. error of the estimate	
1		.071 <sup>A</sup>	.005	.003	8.17980	
A. Predictors : (Constant), Distributive Justice						
ANOVA						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	136.125	1	1036.125	2.034	.155 <sup>b</sup>
	Residual	26629.813	398	66.909		
	Total	26765.937	399			
A. Dependent Variable: Employees Performance						
B. Predictors : (constant), Distributive Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	24.325	1.843		13.200	.000
	Distributive Justice	.155	.109	.071	1.426	0.155
Dependent Variable : Employees Performance						

### H4: There is no Significant Relationship between Distributive Justice and employees' Performance (H4: not Accepted)

As presented in table 4.15 the regression analysis results indicated that there is a positive and weak relationship ( $R=0.071$ ) and  $R^2$  shows that the independent variables can predict the change in the dependent variable by (5%) and the adjusted  $R^2$  is (3%) and adjusted  $R^2$  square = (.003) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be statistically significant at ( $p\text{-value}=0.155$ ), thus indicating that this regression result is Insignificant in this study.

So based on such analysis, hypothesis 4 is not accepted.

**Table 4.10 Simple Linear Regression**

Model Summary					
Model		R	R Square	Adjusted R square	Std. error of the estimate
1		.066 <sup>A</sup>	.004	.002	8.18296
A. Predictors : (Constant), Procedural Justice					



## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

ANOVA						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	115.498	1	115.498	1.725	.190 <sup>b</sup>
	Residual	26650.440	398	66.961		
	Total	26765.937	399			
A. Dependent Variable: Employees Performance						
B. Predictors : (constant), Procedural Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	28.418	1.235		23.007	.000
	Procedural Justice	-.100	.076	-.066	-1.313	.190
Dependent Variable : Employees Performance						

### H5: There is no Significant Relationship between Procedural Justice and employees' Performance (H5: not Accepted)

As presented in table 4.16 the regression analysis results indicated that there is a positive and weak relationship ( $R=0.066$ ) and  $R^2$  shows that the independent variables can predict the change in the dependent variable by (4%) and the adjusted  $R^2$  is (2%) and adjusted  $R$  square = (.002) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be statistically significant at ( $p$ -value =0.190), thus indicating that this regression result is Insignificant in this study.

So based on such analysis, hypothesis 5 is not accepted.

**Table 4.11 Simple Linear Regression**

Model Summary						
Model		R	R Square	Adjusted R square	Std. error of the estimate	
1		.102 <sup>A</sup>	.010	.008	8.15772	
A. Predictors :(Constant), Interactional Justice						
ANOVA						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	279.653	1	279.653	4.202	.041 <sup>b</sup>
	Residual	26486.284	398	66.548		
	Total	26765.937	399			
A. Dependent Variable: Employees Performance						
B. Predictors : (constant), Interactional Justice						
Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

1	Constant	29.837	1.496		19.950	.000
	Distributive Justice	-.153	.075	-.102	-2.050	.041
Dependent Variable : Employees Performance						

H6: There is no Significant Relationship between Interactional Justice and employees' Performance (H6: not Accepted)

As presented in table 4.17 the regression analysis results indicated that there is a positive and weak relationship ( $R=0.102$ ) and  $R^2$  shows that the independent variables can predict the change in the dependent variable by (10%) and the adjusted  $R^2$  is (8%) and adjusted  $R^2$  square = (.008) which means that the dependent variables is suitable with the sample size of the study.

This result from the Anova table was also presented to be statistically significant at ( $p$ -value =0.41), thus indicating that this regression result is Insignificant in this study.

So based on such analysis, hypothesis 6 is not accepted.

### ❖ 4.5.3 Moderation Analysis

Cooper and Schindler (2013) defined a moderating variable as a second independent variable, believed to have a significant contributory or contingent effect on the originally stated independent and dependent variables relationship. According to Pallant (2010), a moderator is an external variable that influences the impact of an independent on a dependent variable. In this section hypothesis 7 will be examined using the moderation analysis. This will be through adding an interaction between the independent and the moderator to the multiple regression model (Aguinis, 2004).

**Table 4.12 Moderation Analysis**

Model Summary				
Model	R	R Square	Adjusted R square	Std. error of the estimate
1	.359 <sup>A</sup>	.129	.127	3.46942
2	.376 <sup>B</sup>	.141	.137	3.44872
3	.433 <sup>C</sup>	.188	.181	3.35925
4	.498 <sup>D</sup>	.248	.240	3.23613
5	.524 <sup>E</sup>	.275	.266	3.18150
Predictors :(Constant), Employees Demographic and Career Backgrounds				
Predictors (Constant) Employee Performance, Employee Job Satisfaction				
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice				
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice, Procedural Justice				
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice, Procedural Justice, Interactional Justice				

ANOVA						
Model		Sum of squares	Df	Mean Square	F	Sig.
1	Regression	709.259	1	709.259	58.924	.000 <sup>b</sup>
	Residual	4790.678	398	12.037		
	Total	5499.938	399			
2	Regression	778.161	2	389.081	32.713	.000 <sup>c</sup>
	Residual	4721.776	397	11.894		
	Total	5499.938	399			
3	Regression	1031.238	3	343.746	30.462	.000 <sup>d</sup>
	Residual	4468.699	396	11.285		
	Total	5499.938	399			
4	Regression	1363.288	4	340.822	32.544	.000 <sup>e</sup>
	Residual	4136.650	395	10.473		
	Total	5499.938	399			
5	Regression	1511.890	5	302.378	29.873	.000 <sup>f</sup>
	Residual	3988.048	394	10.122		

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Total	5499.938	399			
Dependent Variable : Employees Demographic and Career Backgrounds					
Predictors (Constant) Employee Performance					
Predictors (Constant) Employee Performance , Employee Job Satisfaction					
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice					
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice, Procedural Justice					
Predictors (Constant) Employee Performance , Employee Job Satisfaction, Distributive Justice, Procedural Justice, Interactional Justice					

Coefficients						
Model		Unstandaralized coefficient		Standaralized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	15.336	.596		25.731	.000
	Employee Performance	.163	.021	.359	7.676	.000
2	Constant	14.022	.806		17.405	.000
	Employee Performance	.133	.025	.293	5.409	.000
	Employee Job Satisfaction	.184	.076	.130	2.407	.017
3	Constant	16.628	.959		17.348	.000
	Employee Performance	.119	.024	.262	4.934	.000
	Employee Job Satisfaction	.313	.079	.222	3.956	.000
	Distributive Justice	-.226	.048	-.229	-4.736	.000
4	Constant	18.644	.990		18.826	.000
	Employee Performance	.122	.023	.269	5.256	.000
	Employee Job Satisfaction	.225	.078	.160	2.888	.004
	Distributive Justice	-.121	.050	-.123	-2.438	.015
	Procedural Justice	-.184	.033	-.266	-5.631	.000
5	Constant	19.874	1.025		19.386	.000
	Employee Performance	.118	.023	.260	5.154	.000
	Employee Job Satisfaction	.197	.077	.140	2.565	.011
	Distributive Justice	-.063	.051	-.064	-1.228	.220
	Procedural Justice	-.125	.035	-.182	-3.530	.000
	Interactional Justice	-.137	.036	-.203	-3.832	.000
Dependent Variable : Employees Demographic and Career Backgrounds						

H7: Employees' demographic and career background has a Moderating role between Distributive justice, Procedural Justice, Interactional Justice, Employee Job satisfaction and Work performance. (H7=Accepted)

As shown in table 4.18 there are (5 models in this analysis). (Model 1) is the relationship between (Employee performance and Employees Demographic Background), the model (R= 0.359) which is positive relationship, the independent variables can predict

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

the change in the dependent variable by around ( $R^2=12.9\%$ ) and the model is significant at (p-value equal to 0.000) which is less than (0.05).

(Model 2) is testing Moderating effect of Employees Demographic Background on relationship between Employee Job Satisfaction and Employee Performance, the model ( $R= 0.376$ ) which is positive relationship, the independent variables can predict the change in the dependent variable by around ( $R^2=14.1\%$ ) and the model is significant at (p-value equal to 0.000) which is less than (0.05).

(Model 3) is testing Moderating effect of Employees Demographic Background on relationship between Employee Job Satisfaction, Employee Performance and Distributive Justice), the model ( $R= 0.433$ ) which is positive relationship, the independent variables can predict the change in the dependent variable by around ( $R^2=18.8\%$ ) and the model is significant at (p-value equal to 0.000) which is less than (0.05).

(Model 4) is testing Moderating effect of Employees Demographic Background on relationship between Employee Job Satisfaction, Employee Performance, Distributive Justice and procedural Justice, the model ( $R= 0.498$ ) which is positive relationship, the independent variables can predict the change in the dependent variable by around ( $R^2=24.8\%$ ) and the model is significant at (p-value equal to 0.000) which is less than (0.05).

(Model 5) is testing Moderating effect of Employees Demographic Background on relationship between Employee Job Satisfaction, Employee Performance, Distributive Justice, procedural Justice and Interactional Justice, the model ( $R= 0.524$ ) which is positive relationship, the independent variables can predict the change in the dependent variable by around ( $R^2=27.5\%$ ) and the model is significant at (p-value equal to 0.000) which is less than (0.05).

The result of the Coefficients table is that all models are significant. For that reason, hypothesis 7 is accepted.

## 5. CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

### 5.1 Introduction

This Research is designed to investigate the effect of organizational justice on job satisfaction and work performance.

Data was analyzed through utilizing data testing, descriptive analysis and correlations. Therefore, the current chapter presents the discussion, conclusion and recommendation of the research investigation.

The following section shows the discussion of the hypothesis according to the research objectives and research hypothesis. The third section presents the research contribution while the fourth section introduces the research implications in two subtitles as academic implications and practical implications. The fifth section presents the recommendations for the current research. The sixth section presents the research limitations and suggestions for future research.

### 5.2 Research Conclusion

The Research aims to investigate the effect of organizational justice on job satisfaction and work performance in Egypt.

Consequently, this research is structured into 8 hypotheses, where the first hypothesis claims that a positive correlation exists between Distributive Justice and employee's job satisfaction, the 2<sup>nd</sup> hypothesis claims a positive relation between procedural justice and employee job satisfaction, the 3<sup>rd</sup> hypothesis claims a positive relationship between Interactional justice and employee job satisfaction, the 4<sup>th</sup> hypothesis claims a positive relationship between distributive justice and employee performance, the 5<sup>th</sup> hypothesis claims a positive relationship between procedural justice and employee performance, the 6<sup>th</sup> hypothesis claims a positive relationship between interactional justice and employee performance, until the 7<sup>th</sup> hypothesis claims that Employees' demographic and career background mediates relationship between Distributive justice, Procedural Justice, Interactional Justice Employee Job satisfaction and Work performance.

Regarding the first hypothesis testing the relationship between distributive justice and employee's job satisfaction. On the basis of the previous examination, the first hypothesis. H1: Distributive justice is significantly & positively influencing employees' job satisfaction (H1:Accepted)

The result achieved is considered consistent with the results of the previous studies. Distributive justice has a positive influence on job satisfaction (Lee, 2000). There other studies have shown correlations between distributive justice and job satisfaction (e.g., Awamleh & Fernandes, 2006)

Regarding the 2<sup>nd</sup> hypothesis testing the relationship between Procedural Justice and employee's job satisfaction. On the basis of the previous examination, the 2<sup>nd</sup> hypothesis. H2: There is InSignificant Relationship between Procedural Justice and Employee Job Satisfaction. (H2=Not Accepted)

However, other studies have shown high correlations between procedural justice and job satisfaction (e.g., Mossholder, Bennett, & Martin, 1998; Wesolowski & Mossholder, 1997; Awamleh & Fernandes, 2006).

Regarding the 3<sup>rd</sup> hypothesis testing the relationship between Interactional justice and employee's job satisfaction. On the Basis of the previous examination, the 3<sup>rd</sup> hypothesis. H3: There is Insignificant Relationship between Interactional justice and employees' job satisfaction (H3: Not Accepted).

However, other studies have shown positive correlation between interactional justice and employee's job satisfaction.(Boateng & Hsieh, 2019)

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Regarding the 4<sup>th</sup> hypothesis testing the relationship between Distributive justice and employee's performance. On the basis of the previous examination, the 3<sup>rd</sup> hypothesis. H4: There is InSignificant Relationship between Distributive Justice and employees' Performance (H4: not accepted).

However, other studies Suliman (2007) and Suliman and Kathari (2013) show that distributive justice has a positive impact on job performance. Noblet et al. (2012) found a relationship between distributive justice and employee performance.

Regarding the 5<sup>th</sup> hypothesis testing the relationship between Procedural Justice and employee's performance. H5: There is InSignificant Relationship between Procedural Justice and employees' Performance (H5: not Accepted)

However, According to Lam et al. (2002), procedural justice has a favorable impact on employee work performance.

Regarding the 6<sup>th</sup> hypothesis testing the relationship between Interactional justice and employee's performance. H6: H6: There is InSignificant Relationship between Interactional Justice and employees' Performance (H6: not Accepted)

However, According to (Cropanzano et al., 2002; Rupp and Cropanzano, 2002;) interactional justice has a positive impact on employee's performance.

Regarding the 7<sup>th</sup> hypothesis Employees' demographic and career background mediates relationships between Distributive justices, Procedural Justice, Interactional Justice. Employee Job satisfaction and Work performance. H7: Employees' demographic and career background has a Moderating role between Distributive justice, Procedural Justice, Interactional Justice, Employee Job satisfaction and Work performance. (H7=Accepted).

### 5.3 Research Contribution

This Research aims to investigate the effect of organizational justice on job satisfaction and work performance.

As a result of this study, hypotheses have been developed indicating a positive link exists between Distributive justice and employees' job satisfaction. Insignificant relationship between Procedural Justice and Employee Job Satisfaction. It appears there is an Insignificant Relationship between Interactional justice and employees' job satisfaction. It appears there is an Insignificant Relationship between Distributive Justice and employees' Performance. It appears there is an Insignificant Relationship between Procedural Justice and employees' Performance. It appears there is an Insignificant Relationship between Interactional Justice and employees' Performance.

Primary data was collected through a questionnaire, which targeted a population that is represented in employees to investigate the effect of organizational justice on job satisfaction and work performance in Egypt. The research correlation for the hypothesis of the current research was tested by using SPSS.

Therefore, the conclusion of this research is represented in the following:

- This research aims to investigate the relationship between (Distributive Justice, Procedural Justice, Interactional Justice, Employee's Job satisfaction and Employee's Performance).
- The Research investigates the mediator role of Employees' demographic and career background between Distributive justice, Procedural Justice, Interactional Justice Employee Job satisfaction and Work performance.

### 5.4 Research Implications

This research aims to investigate the relationship between (Distributive Justice, Procedural Justice, Interactional Justice, Employee's Job satisfaction and Employee's Performance). This Section introduces the implications of the research, where there are both academic and practical implications.

The Academic implications: In such Methods, the research investigated the link between Distributive Justice, Procedural Justice, Interactional Justice, Employee's Job satisfaction and Employee's Performance.

The current Research is one of the few studies to examine the effect of organizational justice on job satisfaction and work performance in Egypt.

Due to lack of research in this topic in Egypt, this study is considered a leading one in this stream of studies and opens the door for future research to tackle this topic and build on it to enhance our understanding of the effect of organizational justice on work performance on Job satisfaction.

There are few investigations that examine the influence of organizational justice on worker attitudes, job satisfaction, layoff tendencies, and work commitments when it is used to enhance workers' welfare and rights in the workplace (Bakhsi, Kumar & Rani, 2009). Psychologists and sociologists have argued about this notion, and CEOs have viewed it as a tool for boosting organizational performance (Jankingthon and Rurkkhum, 2012). Employees should be treated fairly in the workplace (Bahrami, Montazeralfaraj, Gazar, Tafti, 2014; Randeree, 2014).

The results of this study suggest further investigations in this field in different parts of the region in order to reach more general conclusions about the nature, significance and levels of justice-work outcomes links. This will also help in making cross-cultural comparisons, especially because perception of justice is likely to be affected by culture.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

The practical Implications: In addition to the academic implications of the research that were presented in the previous section, the current section offers Employees should be treated fairly in the workplace.

Organizational members who tend to show positive feelings towards distributive, procedural and interactional justice are likely to report higher levels of job satisfaction. Indicating that managers should give great attention to the methods they use to distribute workloads, responsibilities, rewards and a like among employees. This indicates that managers need to continuously assess and develop the way they manage their relationships with employees. This may include the way they act and interact with subordinates, the level of respect and trust, handling disputes, conflict and/or misunderstandings.

Given the findings reported in this study it can be argued that organizations and managers in the Middle East need to understand the significant role that justice plays in influencing employees' behavior and work outcomes. They need to continuously ask and answer the following question: was the outcome of a decision fair? Especially if the organization is undergoing changes, downsizing and/or restructuring. Moreover, making sure that all procedures used to set goals, tasks or to investigate a problem fair is also essential, as well as monitoring the behavior of superiors and how they carry out policies and procedures and treat those who are subject to their authority, decisions, and actions. Managers need to examine organizational justice from employees' point of view and not to rely only on their own assessment and observations.

Furthermore, keeping employees satisfied with their jobs over years is not an easy job, but it is critical for organizational success. Managers need to understand that the perception of the employee for his/her job, pay, supervisory style, co-workers' relations and promotion chances is likely to affect their work outcomes. The outcome of these perceptions (thoughts, feelings and/or actions) is affected by factors outside the employee's control, but they are under the organizational control.

Superiors must talk to their subordinates to find out how they evaluate and perceive their jobs and what managers can do to improve employees' satisfaction. On the other hand, researchers in non-Middle Eastern contexts seem to focus these days on the issues of justice, trust and fairness in the workplace.

The results of this study suggest further investigations in this field in different parts of the region in order to reach more general conclusions about the nature, significance and levels of justice-work outcomes links. This will also help in making cross-cultural comparisons, especially because perception of justice is likely to be affected by culture. In addition, researchers may investigate the reasons behind the partial mediation of satisfaction in justice- performance link.

### 5.5 Research Recommendations

Considering the findings of this study, several recommendations can be suggested for investigating the effect of organizational justice on job satisfaction and Employee performance.

The concept of justice in time can be applied in organizations when establishing work hour schedules of employees, and giving tasks, projects and deadlines, so that workers feel relaxed, unstressed and become more productive during official office hours. Besides this, organizations should allocate budget equally or according to the staff requirement of resources across different branches or offices so that employees do not have a sense of discrimination or biasness towards their organization.

#### Hypothesis 1

The Research Suggests that when employees trust the distribution of resources and rewards, they will do more in organization and participate more in work values, which are aspects of job Satisfaction therefore. It is recommended that:

- Managers consider more accurate planning to motivate staff through fair allocation of rewards and pay.
- Training Time management and evaluation or staff time and considering their considered time and satisfying employees on organizational receivables and understanding fair of organization.
- Responsibilities and job consequences are consistent with the required job. In this way. They have more understanding of distributive justice to be interested in and job satisfaction.

#### Hypothesis 2

Shows that when employees understand organizational processes fairly, they will spend less time for their complains about minor issues, don't consider working problem as large, have a positive image on their organization and help their colleagues , therefore, it is recommended that:

- Managers are obliged to respond and provide clarification for staff and avoid command and communicated procedures inexplicably to increase their desire and passion to do a job and enthusiastic staff to respond to their career demands that will result in more job commitment.
- Employees should have voice empowerment in decision making, , decisions are made at the upper level and move downward as an order but procedural justice plays a major role in the perception of employees for job satisfaction. If a higher degree of procedural justice exists in the organization, employees are more motivated and satisfied from their job. Use of procedural justice in organization creates a positive influence on employee performance, behavior and perception which creates job

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

satisfaction .otherwise in the situation of un satisfaction chances of negative response would increase like leaving the organization.

- Managers should show their concern about job choices of employees and discuss with them to make decisions and employees accept the taken decisions as which managers explanations can be revisable in staff thought default and convince them.

### Hypothesis 3

A manager should create a positive and caring work environment. This requires interacting in an honest, fair, and respectful way with employees. Manager should develop employee to employee communication and manager to employee communication. When managers effectively exercise interactional justice, they are open, consistent, and fair to their employees.

### Hypothesis 4

Distributed justice affects performance when efficiency and productivity are involved.

Employees acquire a sense of distributive justice by comparing the organizational outcomes they gain from their job inputs with the outcomes gained by referent others (Greenberg, 1990; Cohen-Charash and Spector, 2001; Cropanzano et al., 2007; Lambert et al., 2007). Managers should follow Adam's Equity theory. Employees' job inputs consist of such factors as education, knowledge, skills, effort, time, cognitive resources and performance. Organizational outcomes include wages.

### Hypothesis 5

Procedural justice affects performance as a result of its impact on employee attitudes.

Managers should treat all employees the same, Have Lack of Bias, Decisions should be based on accurate information, appropriate stakeholders should have input in a decision and Have Ethics.

When employees increase their trust in their manager, organization and organizational commitment, they seek to improve their performance in order to restore organizational justice.

### Hypothesis 6

Interactional justice is the relationship satisfaction.

Managers should treat employees with dignity and respect and share relevant information with employees.

According to social exchange theory, the positive or negative effect of employee-administration relationships on job performance stems from interactional justice (Cohen-Charash and Spector, 2001; Settoon et al., 1996; Wayne et al., 1997; Cropanzano et al., 2002). According to this theory, if employees are satisfied with their relationships with the administration, apart from their formalized roles, they will volunteer to acquire additional roles, which will increase their contextual performance.

The study recommends that there is a necessity for increasing employees' perceptions towards organizational justice through management attention to distribute tasks fairly between employees to receive outcome satisfaction, employees' participation in decision making to receive system satisfaction, objective performance evaluation without bias, fair salaries and rewards' distribution, truth between employees and management for employees to receive relationship satisfaction.

In order to improve the performance of the employees, Managers should build trust, commitment, support and relationships in the organization. Moreover fair actions, impartial feedback (information) and equal distribution of assets towards employees by the supervisors can influence their performance.

In order to improve the satisfaction of the employees Managers should have fairness of outcome, fairness of decision making and caring.

## 5.6 Research Limitations and Suggestions for the Future Research

In a work environment where nothing is certain anymore, building Organization justice is one of the most challenging issues that face work organizations. This study aimed at examining the effect of organizational justice on job satisfaction and Employee performance. Overall, the result from this study indicates that there was no significant relationship between procedural, interactional justice and work performance. However, past researchers have led us to believe that there is an influential relationship between organizational justices in performance.

The implications of these results for managers and work organization as well as some suggestions for managing organization justice, employee satisfaction and work performance were also discussed.

As with any research, our study has several limitations that should be acknowledged. First, this study was limited in its scope by concentration on the influence of organizational justice on only job satisfaction and work performance. Second, the common variance problem cannot be ruled out since data on both independent and dependent variables were collected at the same time and using the same questionnaire. Third, the impact of cultural dimensions was not controlled in this study and may have influenced justice perception.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

Future studies should go beyond this to assess the possible cause and effect of the relationship between organizational justice, work performance and job satisfaction, this study also suggests more research is needed to examine the relationship between organizational justice and other variables.

A limitation of this research is that there is no (empirical) evidence for the influence of organizational justice on the relationship between work performance and job satisfaction. It is an interesting area to research, so it is recommended to study this area. It could be a contribution to the current literature base. Another limitation of this research is the discrepancy between some suggested relationships, such as distributive justice and job satisfaction. It is recommended to search for additional information to get a clear, unanimous answer to these questions.

### REFERENCES

- 1) Abekah-Nkrumah, G., & Atinga, R. A. (2013). Exploring the link between organizational justice and job satisfaction and performance in Ghanaian hospitals: Do demographic factors play a mediating role? *International Journal of Workplace Health Management*, 6(3), pp. 189-204. <https://doi.org/10.1108/IJWHM-04-2011-0011>.
- 2) Adams, J. S. (1963). Towards an understanding of inequity. *J. Abnorm. Soc. Psychol.* 67:422. doi: 10.1037/h0040968.
- 3) Adams, J.S. (1965), "Inequity in social exchange", *Advances in Experimental Social Psychology*, Vol. 2 No. 1, pp. 267-299.
- 4) Adams, J.S. and Freedman, S. (1976), "Equity theory revisited: comments and annotated bibliography", *Advances in Experimental Social Psychology*, Vol. 9, pp. 43-90.
- 5) Al Jenaibi, B. (2010), "Job satisfaction: comparisons among diverse public organizations in the UAE", *Management Science and Engineering*, Vol. 4 No. 3, pp. 60-79.
- 6) Alotaibi, A.G. (2001), "Antecedents of organizational citizenship behavior: a study of public personnel in Kuwait", *Public Personnel Management*, Vol. 30 No. 3, pp. 363-376.
- 7) Alexander, S., and Ruderman, M. (1987). The role of procedural and distributive justice in organizational behavior. *Soc. Justice Res.* 1, 177–198. doi: 10.1007/BF01048015.
- 8) Alder, S., & Tompkins, P. (1997). Electronic performance monitoring: An organizational justice and concertive control perspective. *Management Communication Quarterly*, 10, 259– 288.
- 9) Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: Application of 'mixed' research approach. *Work Study*, 51(1), 17-31. <https://doi.org/10.1108/00438020210415488>
- 10) Ambrose, M. L., and Schminke, M. (2009). The role of overall justice judgments in organizational justice research: a test of mediation. *J. Appl. Psychol.* 94 2, 491–500. doi: 10.1037/a0013203.
- 11) Ambrose, M. L., Seabright, M. A., and Schminke, M. (2002). Sabotage in the workplace: the role of organizational injustice. *Organ. Behav. Hum. Decis. Process.* 89, 947–965. doi: 10.1016/S0749-5978(02)00037-7.
- 12) Ambrose, M., Hess, R. and Ganesan, S. (2007), "The relationship between justice and attitudes: an examination of justice effects on event and system-related attitudes", *Organizational Behavior and Human Decision Processes*, Vol. 103 No. 1, pp. 21-36.
- 13) Ambrose, M. L., & Arnaud, A. (2005). Are procedural justice and distributive justice conceptually distinct? In J. A. Colquitt & J. Greenberg (Eds.), *Handbook of organizational justice* (pp. 85–112). Mahwah, NJ: Lawrence Erlbaum Associates.
- 14) Ambrose, M. L., & Schminke, M. (2007). Examining justice climate: Issues of fit, simplicity, and content. In F. Dansereau & F. J. Yammarino (Eds.), *Research in multilevel issues* (Vol. 6, pp. 397– 413). Oxford, England: Elsevier.
- 15) Andersson-Straberg, T., Sverke, M., & Hellgren, J. (2007). Perceptions of Justice in connection with individualized pay setting. *Economic and Industrial Democracy*, 28(3), 431-464.
- 16) Angle, H.L. and Lawson, M.B. (1994), "Organisational commitment and employees performance ratings: both types of commitment and performance count", *Psychological Reports*, Vol. 75, pp. 1539-51.
- 17) Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model.
- 18) Aryee, S., Walumbwa, F.O., Mondejar, R. and Chu, W.L. (2015), "Accounting for the influence of overall justice on job performance: integrating self-determination and social exchange theories", *Journal of Management Studies*, Vol. 52 No. 2, pp. 231-252.
- 19) Asadullah, M.N. and Fernandez, R.M. (2008), "Work-life balance practices and the gender gap in job satisfaction in the UK: evidence from matched employer-employee data", Discussion Paper No. 3582, IZA, Bonn, July.
- 20) Awamleh & Cedwyn. (2006). Impact of organisational justice in an expatriate work environment. *Management Research News*. 29. 701-712. 10.1108/01409170610716016.
- 21) Austin, W. and Walster, E. (1974), "Participants' reactions to equity with the world", *Journal of Experimental Social Psychology*, Vol. 10, pp. 528-48.



## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 22) Bahrami, M., A, Montazeralfaraj, R., Gazar, S.,H, & Tafti, A.,D. (2014) Relationship between organizational perceived justice and organizational citizenship behavior among an Iranian hospital's employees, 2013. *Electron Physician* 6: 838-844.
- 23) Benbasat, I.1984 An Analysis of Research Method-ologies, in *The Information Systems Re-search Challenge*, F.W, McFarlan (ed.). Har-var-d Business School Press, Boston, MA,1984, pp. 47-85
- 24) Benbasat I, Goldstein D and Mead M (1987) „The Case Research Strategy in Studies of Information Systems“ *MIS Quarterly* Vol. 11, pp. 369-386.
- 25) Bies and Moag (1986) “Interactional justice: communication criteria of fairness”, *Research on Negotiations*, Vol. 1 No. 2, pp. 53-55.
- 26) Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. *Research in Organizational Behavior*, 9, 289-319.
- 27) Blau, P. M. (1964). *Exchange and Power in Social Life*. New Brunswick: Transaction Publishers.
- 28) Borrill, C.S., Carletta, J., Carter, A.J., Dawson, J.F., Garrod, S. and Rees, A. et al. (2001), *The Effectiveness of Healthcare Teams in the National Health Services*, Aston Centre for Health Service Organizations Research, Birmingham.
- 29) Bowling, A., (2002). *Research methods in health*. Buckingham, UK and Philadelphia, PA: Open University Press.
- 30) Brik,P.I (1994). Editorial:Transcultural versus cross-cultural. *Western Journal of Nursing Research*, 16(4), 344-346.
- 31) Brockner, J. and Siegel, P.A. (1996), “Understanding the interaction between procedural and distributive justice”, in Kramer, R.M. and Tyler, T.R. (Eds), *Trust in Organizations: Frontiers of Theory and Research*, Sage Publications, Thousand Oaks, CA, pp. 390-413.
- 32) Bugdol, Marek. (2018). A Different Approach to Work Discipline. *A Different Approach to Work Discipline: Models, Manifestations and Methods of Behaviour Modification*. 10.1007/978-3-319-74008-9.
- 33) Burns, N. and Grove, S.K. (2001) *The Practice of Nursing Research, Conduct, Critique, and Utilization*. 4th Edition, W.B. Saunders Company, Philadelphia.
- 34) Blaikie, N. (2000). *Designing social research*. Cambridge: Polity Press.
- 35) Boateng, F. D., & Hsieh, M.-L. (2019). Explaining Job Satisfaction and Commitment Among Prison Officers: The Role of Organizational Justice. *The Prison Journal*, 99(2), 172–193.
- 36) Bodur (2002) Bodur, S. (2002), “Job satisfaction of health care staff employed at health centers in Turkey”, *Occupational Medicine*, Vol. 52 No. 6, pp. 353-355.
- 37) Campbell and Finch, (2004) “Customer satisfaction and organisational justice”, *Facilities*, Vol. 22 Nos 7/8, pp. 178-189.
- 38) Card, D., Mas, A., Moretti, E. and Saez, E. (2010), *Inequality At Work: The Effect of Peer Salaries on Job Satisfaction* (No. w16396), National Bureau of Economic Research, pp. 1-54.
- 39) Chen S, Zhang YE, Long M. New genes in Drosophila quickly become essential. *Science* (New York, N.Y.). 330: 1682-5. PMID 21164016 DOI: 10.1126/Science.1196380.
- 40) Chou, (2013). The organizational citizenship behavior of IS personnel: Does organizational justice matter? *Information & Management*, 50, 105–111.
- 41) Clayton, S., & Opatow, S. (2003). Justice and identity: Changing perspectives on what is fair. *Personality and Social Psychology Review*, 7, 298–310.
- 42) Cormack, B.P., Valdivia, R.H. and Falkow, S. (1996) *FACS-Optimized Mutants of the Green Fluorescent Protein (GFP)*. *Gene*, 173, 33-38. [http://dx.doi.org/10.1016/0378-1119\(95\)00685-0](http://dx.doi.org/10.1016/0378-1119(95)00685-0).
- 43) Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- 44) Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational behavior and human decision processes*, 86(2), 278-321.
- 45) Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). London and New York, NY: Routledge Falmer.
- 46) Cohn, E. S., White, S. O., & Sanders, J. (2000). Distributive and procedural justice in seven nations. *Law and human behavior*, 24(5), 553–579. <https://doi.org/10.1023/A:1005571012599>.
- 47) Coiera, E. (2000), “When conversation is better than computation”, *Journal of the American Medical Informatics Association*, Vol. 7 No. 3, pp. 277-287.
- 48) Cojuharenco, I., & Patient, D. (2013). Workplace fairness versus unfairness: Examining the differential salience of facets of organizational justice. *Journal of Occupational and Organizational Psychology*, 86, 371–393.
- 49) Colquitt, J.A., Lepine, J.A., Piccolo, R.F., Zapata, C.P. and Rich, B.L. (2012), “Explaining the justice – performance relationship: trust as exchange deepener or trust as uncertainty reducer?”, *Journal of Applied Psychology*, Vol. 97 No. 1, pp. 1-15.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 50) Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology*, 98(2), 199–236. <https://doi.org/10.1037/a0031757>.
- 51) Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400.
- 52) Cooper, D.R. and Schindler, P.S. (2006), *Business Research Methods*, 9th ed., McGraw-Hill, New York, NY.
- 53) Cooper, D. R., and Schindler, P. S. (2013). *Business research methods* (12th ed.)
- 54) Crawshaw, (2013). Organizational justice: New insights from behavioural ethics. *Human Relations*, 66(7), 885–904.
- 55) Cremer, D. (2005), “Procedural and distributive justice effects moderated by organisational identification”, *Journal of Managerial Psychology*, Vol. 20 No. 1, pp. 4-13.
- 56) Cropanzano, R. and Rupp, D.E. (2003), “An overview of organizational justice: implication for work motivation”, in Porter, L.W., Bigley, G.A. and Steers, R.M. (Eds), *Motivation and Work Behavior*, McGraw-Hill Irwin, Burr Ridge, IL, pp. 82-95.
- 57) Cropanzano, R. and Ambrose, M.L. (2001), “Procedural and distributive justice are more similar than you think: a monistic perspective and a research agenda”, in Greenberg, J. and Cropanzano, R. (Eds), *Advances in Organizational Justice*, New Lexington Press, Lexington, MA, pp. 119-151.
- 58) Cropanzano, R. and Schminke, M. (2001), “Using social justice to build effective work group”, in Turner, M.E. (Ed.), *Groups at Work: Theory and Research*, Lawrence Erlbaum Associates Inc., Mahwah, NJ, pp. 143-57.
- 59) Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58(2), 164-209.
- 60) Cropanzano, R., Prehar, C. A., and Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group Organ. Manage.* 27, 324–351. doi: 10.1177/1059601102027003002.
- 61) Cropanzano, R., Rupp, D.E. and Byrne, Z.E. (2003), “The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviours”, *Journal of Applied Psychology*, Vol. 88 No. 1, pp. 160.
- 62) Cropanzano, R., Bowen, D.E. and Gilliland, S.W. (2007), “The management of organizational justice”, *Academy of Management Perspectives*, Vol. 21 No. 4, pp. 34-48.
- 63) Cropanzano, R., Li, A., & James, K. (2007). Intraunit justice and interunit justice and the people who experience them. In F. Dansereau & F. J. Yammarino (Eds.), *Research in Multi-Level Issues* (Vol. 6, pp. 415–437). Oxford, UK: Elsevier.
- 64) Cropanzano, R. and Prehar, C.A. (1999), “Using social exchange theory to distinguish procedural from interactional justice”, paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Atlanta, GA.
- 65) Daft, R. L. (2001). *Essentials of organization theory and design*: South Western Educational Publishing.
- 66) Deluga, R.J. (1994), “Supervisor trust building, leader-member exchange and organizational citizenship behavior”, *Journal of Occupational and Organizational Psychology*, Vol. 67 No. 4, pp. 315-26.
- 67) 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. <https://doi.org/10.1111/j.1540-4560.1975.tb01000>.
- 68) Doğan, H. (2002). The Role of Intra-Organizational Communication and Procedural Information in Employees' Perceptions of Justice.
- 69) Du, J., Liao, J.Q. and Wang, F.S. (2005), “The study of justice perception in performance management and the degree of satisfaction”, *Science & Technology Progress and Policy*, Vol. 7 No. 3, pp. 191-192.
- 70) Duffy, R.D. and Richard, G.V. (2006), “Physician job satisfaction across six major specialties”, *Journal of Vocational Behavior*, Vol. 68 No. 3, pp. 548-559.
- 71) Duffy, J.A.M., Miller, J.M. and Bexley, J.B. (2006), “Banking customers’ varied reactions to service recovery strategies”, *International Journal of Bank Marketing*, Vol. 24 No. 3, pp. 112-132.
- 72) Elovainio, M., Kivimäki, M. and Helkama, K. (2001), “Organisational justice evaluations, job control, and occupational strain”, *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 418-424.
- 73) Erturk, A (2007). Increasing organizational citizenship behavior of Turkish academicians: Mediating role of trust in supervisor on the relationship between organizational justice and citizenship behaviors. *Journal of managerial psychology*, 22(3), 257-270.
- 74) Farh, J.L., Cannella, A.A. and Bedeian, A.G. (1991), “Peer ratings, the impact of purpose on rating quality and user acceptance”, *Group and Organizational Studies*, Vol. 16, pp. 367-86.
- 75) Fassina, N. E., Jones, D. A., & Uggerslev, K. L. (2008). Meta-analytic tests of relationships between organizational justice and citizenship behavior: Testing agent-system and shared-variance models. *Journal of Organizational Behavior*, 29(6), 805–828. <https://doi.org/10.1002/job.494>.
- 76) Fernandes, C. and Awamleh, R. (2006), “Impact of organizational justice in an expatriate work environment”, *Management Research News*, Vol. 29 No. 11, pp. 701-12.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 77) Folger and Greeberg, (1985) "Procedural justice: an interpretative analysis of personnel systems", *Research in Personnel and Human Resource Management*, Vol. 3, pp. 141-183.
- 78) Folger, R. and Konovsky, M.A. (1989), "Effects of procedural and distributive justice on reaction to pay raise decisions", *Academy of Management Journal*, Vol. 32 No. 1, pp. 115-30.
- 79) Folger and Cropanzano, (1998) *Organizational Justice and Human Resource Management*, Sage, Beverly Hills, CA.
- 80) Folger, R. (1998), Fairness as moral virtue. In M. Schminke (ed), *Managerial ethics: Moral management of people and processes*, (pp. 13-34). Mahwah, NJ: Lawrence Erlbaum.
- 81) Furnham, A., & Stringfield, P. (1998). Congruence in job-performance ratings: A study of 360" feedback examining self, manager, peers, and consultant ratings.
- 82) Galliers, R.D. (1991). Choosing Appropriate Information Systems Research Approaches: A Revised Taxonomy. In: H.-E., Nissen, H.K. Klein, & R. Hirschheim, (Eds), *Information Systems Research: Contemporary Approaches and Emergent Traditions*, pp. 327–345. Elsevier Science Publishers, North Holland.
- 83) Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction (7th ed.)*. Boston, MA: Pearson.
- 84) Ganapathy, R. (2002) *Discipline at work: a guide for managers*. Kuala Lumpur: Business Bytes Network.
- 85) George, D. and Mallery, P. (2003), *SPSS for Windows Step by Step: A Simple Guide and Reference*, 4th ed., Allyn and Bacon, Boston, MA.
- 86) Ghosh, D., Sekiguchi, T., and Gurunathan, L. (2017). Organizational embeddedness as a mediator between justice and in-role performance. *J. Bus. Res.* 75, 130–137. doi: 10.1016/j.jbusres.2017.02.013.
- 87) Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. *Journal of Applied Psychology*, 79, 691–701.
- 88) Gouldner, A.W. (1960), "The norm of reciprocity: a preliminary statement", *American Sociological Review*, Vol. 25 No. 2, pp. 161-178.
- 89) Greenberg, (1987). A Taxonomy of Organizational Justice Theories. *Academy of Management Review*. <https://doi.org/10.5465/amr.1987.4306437>.
- 90) Greenberg (1990b) Organizational justice: yesterday, today, tomorrow, *Journal of Management*, 16,399-432.
- 91) Greenberg, L. S. (2002). Integrating an emotion-focused approach to treatment into psychotherapy integration. *Journal of Psychotherapy Integration*, 12(2), 154–189.
- 92) Greenberg, J. (1982), "Approaching equity and avoiding inequity in group and organizations", in Greenberg, J. and Cohen, R.L. (Eds), *Equity and Justice in Social Behavior*, Academic Press, New York, NY, pp. 389-435.
- 93) Greenberg, J. (1988), "Cultivating an image of justice: looking fair on the job", *The Academy of Management Executive*, Vol. 8 No. 2, pp. 155-158.
- 94) Greenberg, J. (1990), "Organizational justice: yesterday, today, and tomorrow", *Journal of Management*, Vol. 16 No. 2, pp. 399-432.
- 95) Greenberg, J. (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. In R. Cropanzano (Ed.), *Justice in the workplace: Approaching fairness in human resource management* (pp.79-103). Hillsdale, NJ: Erlbaum.
- 96) Guo, Q.H. and Wang, D.F. (2008), "The empirical study about pay fairness and employee satisfaction", *Statistics and Decision*, Vol. 13 No. 3, pp. 91-93
- 97) Hadi, S., Tjahjono, H. K., El Qadri, Z. M., & Prajogo, W. (2020). The Influence of Organizational Justice, and Positive Organizational Behavior: Systematic Review and Call for Future Research. *The Journal of Social Sciences Research*, 61, 67–84. <https://doi.org/10.32861/jssr.61.67.84>.
- 98) Hadi, S., Tjahjono, H. K., & Palupi, M. (2020). Study of Organizational Justice in SMEs, and Positive Consequences: Systematic Review. *International Journal of Advanced Science and Technology*, 29(03), 14.
- 99) Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 41, p. 414
- 100) Hao, Y., Hao, J., & Wang, X. (2016). The relationship between organizational justice and job satisfaction: Evidence from China. *Journal of Chinese Human Resource Management*, 7(2), pp. 115- 128. <https://doi.org/10.1108/JCHRM-07-2016-0012>.
- 101) Heponiemi, T., Elovainio, M., Kouvonen, A., Kuusio, H., Noro, A., Finne-Soveri, H. and Sinervo, T. (2011), "The effects of ownership, staffing level and organisational justice on nurse commitment, involvement, and satisfaction: a questionnaire study", *International Journal of Nursing Studies*, Vol. 48 No. 12, pp. 1551-1561.
- 102) Herzberg, F., Mausner, B. and Snyderman, B. (1959), *The Motivation to Work*, John Wiley & Sons, New York, NY.
- 103) Homans, G. C. (1961). *Human behavior: Its elementary forms*.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 104) Hur, W.-M., Han, S.-J., Yoo, J.-J. and Moon, T.W. (2015), "The moderating role of perceived organizational support on the relationship between emotional labor and job-related outcomes", *Management Decision*, Vol. 53 No. 3, pp. 605-624.
- 105) Imamoglu, S. Z., Ince, H., Turkcan, H., & Atakay, B. (2019). The Effect of Organizational Justice and Organizational Commitment on Knowledge Sharing and Firm Performance. *Procedia Computer Science*, 158(January), 899–906.
- 106) Jahangir (2006). The role of social power, procedural justice, organizational commitment, and job satisfaction to engender organizational citizenship behavior. *ABAC Journal*, 26(3).
- 107) Jankingthong, K. and Rurkkhum, S. (2012) Factors Affecting Job Performance: A Review of Literature. *Silpakorn University Journal of Social Sciences, Humanities, and Arts*, 12, 115-127.
- 108) Javad, E. and Davood, G. (2012), "Organizational commitment and job satisfaction", *ARNP Journal of Science and Technology*, Vol. 2 No. 2, pp. 85-90.
- 109) Jegan. P. and Gnanadhas. M. E. (2011). Job satisfaction of batik employees working v ith E-Channels. *Asian Journal of Business and Economics*. 1(1.1). 1-9. Retrieved From [http: "ionlineresearchjournals.com/ajbe/art/S I](http://ionlineresearchjournals.com/ajbe/art/S I).
- 110) Johnson, J.S. (2007), "Organizational justice, moral ideology, and moral evaluation as antecedents of moral intent", unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- 111) Joy, V. L., & Witt, L. A. (1992). Delay of gratification as a moderator of the procedural justice distributive justice relationship. *Group & Organization Management*, 17(3), 297-308.
- 112) Juchnowicz, M., & Kinowska, H. (2018). Sprawiedliwość i zaangażowanie a poziom wynagradzania. *Zarządzanie i Finanse*, 16(1, cz. 2), 107–116.
- 113) Kaplan, B. and Duchon D. 1988 "A Qualitative and Quantitative Investigation of a Computer System's Impact on Work in Clinical Laboratories," Department of Quantitative Analysis and Information Systems, University of Cincinnati, Cincinnati, OH, December 1988.
- 114) Karam, E. P., Hu, J., Davison, R. B., Juravich, M., Nahrgang, J. D., Humphrey, S. E., & Scott DeRue, D. (2019). Illuminating the 'Face' of Justice: A Meta-Analytic Examination of Leadership and Organizational Justice. *Journal of Management Studies*, 56(1), 134–171. <https://doi.org/10.1111/joms.12402>.
- 115) Kalleberg, A. and Marsden, P. (1995), "Organisational commitment and job performance in the US labour force", *Research in the Sociology of Work*, Vol. 5, pp. 235-57.
- 116) Kohn, L., Corrigan, J. and Donaldson, M. (Eds) (1999), *To Err is Human: Building a Safer Health System*, Institute of Medicine, Cational Academic Press, Washington, DC.
- 117) Konovsky, M. and Cropanzano, R. (1991), "Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance", *Journal of Applied Psychology*, Vol. 76 No. 5, pp. 698-707.
- 118) Konovsky, M. A. (2000). Understanding procedural justice and its impact on business organizations. *Journal of Management*, 26(3), 489-511.
- 119) Kothari, C.R. (2004) *Research Methodology: Methods and Techniques*. 2nd Edition, New Age International Publishers, New Delhi.
- 120) Kwak, C. and Chung, B.Y. and Xu, Y. and Eun-Jun Cho. (2010), "Relationship of job satisfaction with perceived organizational support and quality of care among South Korean nurses: a questionnaire survey", *International Journal of Nursing Studies*, Vol. 47 No. 10, pp. 1292-1298.
- 121) Latan, H., & Ramli, N. A. (2014). The Role of Organizational Justice, Trust and Commitment in a Management Control System (MCS)- Gain Sharing. *International Journal of Accounting and Financial Reporting*, 1(1), 186. <https://doi.org/10.5296/ijafr.v4i2.6238>.
- 122) Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction, and organizatioal commitment. *Journal of Criminal Justice*, 35, 644–656.
- 123) Lam, S.S.K., Schaubroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: A cross-national study. *Journal of Organizational Behavior*, 23, 1-18.
- 124) Ledimo, O. (2015). Development and validation of an organisational justice measurement instrument for the South African context. *Risk governance & control: financial markets & institutions*, 5 (1), 27-38.
- 125) Lee, H.,(2000). An empirical study of organizational justice as a mediator of the relationship among leadermember exchange and job satisfaction, organizational commitment and turnover intentions in the lodging industries.
- 126) Lerner, M. J. (1977). The justice motive: Some hypotheses as to its origins and forms. *Journal of Personality*, 45(1), 1-52. <https://doi.org/10.1111/j.1467-6494.1977.tb00591.x>
- 127) Lerner, M. J. (2003). The justice motive: Where social psychologists found it, how they lost it, and why they may not find it again. *Personality and Social Psychology Review*, 7, 388 –389.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 128) Leung, P.B. and Smith, P.B. and Wang, Z.M. and Sun, H. (1999), "Job satisfaction in joint venture hotels in China: a organizational justice analysis", *Journal of International Business Studies*, Vol. 27 No. 5, pp. 947-962.
- 129) Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum. doi:10.1007/978-1-4613-3087-5\_2
- 130) Levin, David. (2008). *The Opening of Vision: Nihilism and the Postmodern Situation*. 10.4324/9780203023143.
- 131) Li, A. and Cropanzano, R. (2009), "Do East Asians respond more/less strongly to organizational justice than North Americans? A meta-analysis", *Journal of Management Studies*, Vol. 46 No. 5, pp. 787-805.
- 132) Liao, W. C., & Tai, W. T. (2006). Organizational justice, motivation to learn, and training outcomes. *Social Behavior and Personality*, 34(5), 545-556.
- 133) Lim, B. T. H., & Loosemore, M. (2017). The effect of inter-organizational justice perceptions on organizational citizenship behaviors in construction projects. *International Journal of Project Management*, 35(2), 95–106. <https://doi.org/10.1016/j.ijproman.2016.10.016>.
- 134) Lind, E. A., and Tyler, T. R. (1988). *The Social Psychology of Procedural Justice*. Dordrecht: Springer Science & Business Media.
- 135) Lincoln, Y. & Denzin, N. (2000). The seventh moment: Out of the past. In N.K. Denzin and Y.S. Lincoln, (Eds.) *Handbook of Qualitative Research* (2nd Edition) (pp. 1047-1065). Thousand Oaks, CA: Sage Kothari, C.R. (2004) *Research Methodology: Methods and Techniques*. 2nd Edition, New Age International Publishers, New Delhi.
- 136) Loi, R., Hang-yue, N. and Foley, S. (2006), "Linking employees' justice perceptions to organizational commitment and intention to leave: the mediating role of perceived organizational support", *Journal of Occupational & Organizational Psychology*, Vol. 79, pp. 101-20.
- 137) Loi, R., Yang, J., & Diefendorff, J. M. (2009). Four-factor justice and daily job satisfaction: A multilevel investigation. *Journal of Applied Psychology*, 94(3), 770–781. <https://doi.org/10.1037/a0015714>.
- 138) Lovett, S., Coyle, T. and Adams, R. (2004), "Job satisfaction and technology in Mexico", *Journal of World Business*, Vol. 39 No. 3, pp. 217-232.
- 139) Lotfi, Mohammad & Pour, Mohammad. (2013). The Relationship between Organizational Justice and Job Satisfaction among the Employees of Tehran Payame Noor University. *Procedia - Social and Behavioral Sciences*. 93. 10.1016/j.sbspro.2013.10.168.
- 140) Lum, L., Kervin, J., Clark, K., Reid, F. and Sirola, W. (1998), "Explaining nursing turnover intent: job satisfaction, pay satisfaction or organizational commitment?", *Journal of Organizational Behaviour*, Vol. 19 No. 3, pp. 305-321.
- 141) Makiney, J.D. , & Levy, P.E. 1998. The influence of self-ratings versus peer ratings on supervisors' performance judgments. *Organizational Behavior and Human Decision Processes*, 74: 212-228.
- 142) Malhotra, N., Sahadev, S., & Sharom, N. Q. (2020). Organizational justice, organizational identification and job involvement: the mediating role of psychological need satisfaction and the moderating role of person-organization fit. *International Journal of Human Resource Management*, 0(0), 1–36.
- 143) Maslow, A.H., Frager, R., Fadiman, J., McReynolds, C. and Cox, R. (1970), *Motivation and Personality*, Harper & Row, New York, NY.
- 144) Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43(4), 738-748.
- 145) McAuliffe, E., Manafa, O., Maseko, F., Bowie, C. and White, E. (2009), "Understanding job satisfaction amongst mid-level cadres in Malawi: the contribution of organizational justice", *Reproductive Health Matters*, Vol. 17 No. 33, pp. 80-90.
- 146) McClelland, D.C. (1987), *Human Motivation*, CUP Archive.
- 147) McMillan-Capehart, A. and Richard, O. (2005), "Organizational justice and perceived fairness of hiring decisions related to race and gender: affirmative action reaction", *Equal Opportunities International*, Vol. 24 No. 1, pp. 44-57.
- 148) Michael J. Campbell, David Machin and Stephen J. Walters (2007): *Medical Statistics, a Textbook for the Health Sciences*, 4th edition. *Statistical Papers*. 50. 217-218. 10.1007/s00362-007-0109-9.
- 149) Milkovich, G. T. & Newman, J.M. (2005). *Compensation*. 8th Edition. Boston: McGraw Hill.
- 150) Mishra, A. K. (1992). *Organizational responses to crisis: The role of mutual trust and top management teams*. Unpublished dissertation. Ann Arbor, MI: University of Michigan.
- 151) Mello, Jeffrey. (2010). *Strategic Human Resource Management*. *Journal of Human Resources Education*. 22.
- 152) Meyer, J.P., Stanley, D.J., Herscovitch, L. and Topolnysky, L. (2002), "Affective, continuance and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences", *Journal of Vocational Behavior*, Vol. 61 No. 1, pp. 20-52.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 153) Minibas-Poussard, J., Le Roy, J., & Erkmen, T. (2017). The moderating role of individual variables in the relationship between organizational justice and organizational commitment. *Personnel Review*, 46(8), 1635– 1650. <https://doi.org/10.1108/PR-12-2015-0311>.
- 154) Moazzezi, M., Sattari, S., & Bablan, A. Z. (2014). Relationship between organizational justice and job performance of payamenoor university employees in Ardabil province. *Singaporean Journal of Business Economics, and Management Studies*, 2(6), 57-64.
- 155) Mohammed Hadi, (2011) The relationship between the organizational justice and organizational citizenship behavior of the employees. *Middle-east journal of scientific research* 10(2), 141-148.
- 156) Moorman, R.H. (1991). Relationship between organizational justice and organizational citizenship behavior: do fairness perceptions influence employee citizenship?. *Journal of Applied Psychology*, 76, 845-855.
- 157) Morvaridi, B. (2005). Contentious Development Issues and Transnational Networks. In: Harrison, G. (eds) *Global Encounters. International Political Economy Series. Palgrave Macmillan, London.* [https://doi.org/10.1057/9780230502819\\_8](https://doi.org/10.1057/9780230502819_8).
- 158) Mossholder, K.W., Bennett, N. and Martin, C.L. (1998), “A multilevel analysis of procedural justice context”, *Journal of Organizational Behavior*, Vol. 19 No. 2, pp. 131-141.
- 159) Nayyar, (1994) "Some Correlates of Work Performance Perceived by First Line Supervisor: A Study", *Management and Labour Studies*, 19, pp. 50-54.
- 160) Niehoff, B. P. - Moorman, R. H. (1993), “Justice as a Mediator of the Relationship Between Methods of Monitoring and Organizational Citizenship Behavior”, *Academy of Management Journal*, Vol. 36, No. 5, p. 527–556.
- 161) Noblet, A., Maharee-Lawlera, S. and Rodwell, J. (2012), “Using job strain and organizational justice models to predict multiple forms of employee performance behaviours among Australian policing personnel”, *The International Journal of Human Resource Management*, Vol. 23 No. 14, pp. 3009-3026.
- 162) Oren A . (2013). Life in magnesium- and calcium-rich hypersaline environments: salt stress by chaotropic ions. In: Seckbach J, Oren A, Stan-Lotter H, (eds) *Polyextremophiles: Life Under Multiple Forms of Stress. Cellular Origin, Life in Extreme Habitats and Astrobiology* 27 pp. 217–232. Springer: Dordrecht, The Netherlands.
- 163) Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome.* Lexington, MA: Lexington Books.
- 164) Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Res. Organ. Behav.* 12, 43–72.
- 165) Organ, D., and Konovsky, M. A. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *J. Appl. Psychol.* 74, 157–164. doi: 10.1037/0021-9010.74.1.157.
- 166) Ozel, A., & Cahit, A. B. (2017). Effect of Organizational Justice on Job Satisfaction. In A. López-Paredes & S. Valladolid (Eds.), *Industrial Engineering in the 4.0 Era* (Vol. 10, pp. 205–219). Springer.
- 167) Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using the SPSS program* (version 18). 4th ed, UK: Open University Press
- 168) Parnell, J.A. and Crandall, W. (2003), “Propensity for participative decision-making, job satisfaction, organizational commitment, organizational citizenship behavior, and intention to leave among Egyptian managers”, *Multinational Business Review*, Vol. 11 No. 1, pp. 45-65.
- 169) Parvin, M.M. and Kabir, M.M. (2011), “Factors affecting employee job satisfaction of pharmaceutical sector”, *Australian Journal of Business and Management Research*, Vol. 1 No. 9, pp. 113-123.
- 170) Pervan, G.P. (1994b) A Case for More Case Study Research in Group Support Systems, TC8 AUS IFIP Conference, Bond University, Gold Coast, Qld, May 8-11, 485-496.
- 171) Pfeffer, J., & Langton, N. (1993). The effect of wage dispersion on satisfaction, productivity, and working collaboratively: Evidence from college and university faculty. *Administrative Science Quarterly*, 38(3), 382–407.
- 172) Phillips, J., Douthitt, E. and Hyland, M. (2001), “The role of justice in team member satisfaction with the leader and attachment to the team”, *Journal of Applied Psychology*, Vol. 86 No. 2, pp. 316-25.
- 173) Polit, D.F. and Beck, C.T. (2004) *Nursing Research: Principles and Methods.* 7th Edition, Lippincott Williams & Wilkins, Philadelphia.
- 174) Polit, D. F., & Beck, C. T. (2017). *Nursing research: generating and assessing evidence for nursing practice.* Tenth edition. Philadelphia: Wolters Kluwer Health.
- 175) Price, K. L., & Mueller, C. W. (1986), *Absenteeism and turnover of hospital employee.* Greenwich, Conn.: JAI Press.
- 176) Rad, A.M.M. and Yarmohammadian, M.H. (2006), “A study of relationship between managers’ leadership style and employees’ job satisfaction”, *Leadership in Health Services*, Vol. 19 No. 2, pp. 11-28.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 177) Rafael, G., Gonçalves, G., Santos, J., Orgambídez-Ramos, A., & Sousa, C. (2017). Explanatory contribution of Social Responsibility and Organizational Justice on Organizational Commitment: An exploratory study in a Higher Public Education institution. *Polish Psychological Bulletin*, 48(4), 470–480. <https://doi.org/10.1515/ppb-2017-0054>.
- 178) Randeree, K. (2014). *Islamic Perspectives on Gender Justice in Humanitarian & Development Settings: The Policy of Islamic Relief*. Islamic Relief Worldwide: Birmingham, UK.
- 179) Rawls, J. (1999), *A Theory of Justice*, Revised ed., Belknap Press, Cambridge, MA.
- 180) Reed, S.A., Kratchman, S.H. and Strawser, R.H. (1994), “Job satisfaction, organizational commitment, and turnover intentions of United States accountants the impact of locus of control and gender”, *Accounting Auditing & Accountability Journal*, Vol. 7 No. 1, pp. 31-58.
- 181) Robbins, S.P. (2005), *Organizational Behavior*, 11th ed., Pearson Prentice-Hall, Englewood Cliffs, NJ.
- 182) Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, 89, 925–946.
- 183) Sweeney, P.D. and McFarlin, D.B. (1993) Workers’ Evaluations of the “Ends” and the “Means”: An Examination of Four Models of Distributive and Procedural Justice. *Organizational Behavior and Human Decision Processes*, 55, 23-40.
- 184) Sarantakos, S. (1998) *Social Research*. 2nd Edition, MacMillan Education Australia, South Melbourne.
- 185) Saunders, N., Mark, K., & Thornhill, A. (2003). Organizational justice, trust and the management of change an exploration. *Personel Review*, 32(3), 360–375.
- 186) Saunders, M. N. K., Lewis, P. & Thornhill, A. (2009). *Research Methods for Business Students* (5th Edition). London: Pearson Education.
- 187) Saunders, Mark & Lewis, Philip & Thornhill, Adrian & Bristow, Alex. (2019). "Research Methods for Business Students" Chapter 4: Understanding research philosophy and approaches to theory development.
- 188) Scott, (2015). The Effects of Stress on Cognitive Aging, Physiology, and Emotion (ESCAPE) Project. *BioMed Central Psychiatry*, 15, 146 –160. <http://dx.doi.org/10.1186/s12888-015-0497-7>.
- 189) Seo, Y. and Ko, J. and Price, J.L. (2003), “The determinants of job satisfaction among hospital nurses: a model estimation in Korea”, *International Journal of Nursing Studies*, Vol. 41 No. 4, pp. 437-446.
- 190) Sekaran, U. and Bougie, R. (2010), *Research Methods for Business: A Skill Building Approach*, Wiley, London
- 191) Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81, 219–227.
- 192) Sharma, N. and Singh, V.K. (2016), “Effects of workplace incivility on job satisfaction and turnover intentions in India”, *South Asian Journal of Business Research*, Vol. 5 No. 2, pp. 234-249.
- 193) Silva, M. R., & Caetano, A. (2016). Organizational justice across cultures: A systematic review of four decades of research and some directions for the future. *Social Justice Research*, 29(3), 257–287. <https://doi.org/10.1007/s11211-016-0263-0>.
- 194) Skarlicki, D.P. and Folger, R. (1997), “Retaliation in the workplace: the roles of distributive, procedural, and interactional justice”, *Journal of Applied Psychology*, Vol. 83 No. 5, pp. 434-443.
- 195) Somers, M. J., & Birnbaum, D. (1991). Assessing self-appraisal of job performance as an evaluation device: Are the poor results a function of method or methodology? *Human Relations*, 44(10), 1081–1091. <https://doi.org/10.1177/001872679104401004>.
- 196) Somers, M., & Birnbaum, D. (1998). Assessing self-appraisal of job performance as an evaluation device: Are the poor results a function of method or methodology? *Human Relations*, 44(10), 1081-91.
- 197) Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*, Sage.
- 198) Strom (2014). Work Engagement: The Roles of Organizational Justice and Leadership Style in Predicting Engagement Among Employees. *Journal of Leadership & Organizational Studies*, 21(1), 71-82. <http://dx.doi.org/10.1177/1548051813485437>.
- 199) Steers, R.M. (1977), “Antecedents and outcomes of organizational commitment”, *Administrative Science Quarterly*, Vol. 22, pp. 46-56.
- 200) Stecher, M.D. and Rosse, J.G. (2005), “The distributive side of interactional justice: the effects of interpersonal treatment on emotional arousal”, *Journal of Managerial Issues*, Vol. 17 No. 2, pp. 229-46.
- 201) Sweeney, P.D. and McFarlin, D.B. (1993), “Worker’s evaluations of the ‘ends’ and the ‘means’: an examination of four models of distributive and procedural justice”, *Organizational Behavior and Human Decision Processes*, Vol. 55 No. 1, pp. 23-40.
- 202) Suifan, T. S., Diab, H., & Abdallah, A. B. (2017). Does organizational justice affect turnover-intention in a developing country? The mediating role of job satisfaction and organizational commitment. *Journal of Management Development*, 36(9), 1137–1148. <https://doi.org/10.1108/JMD-02-2017-0048>.

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

- 203) Suliman, A. M. T. (2007). Links between justice, satisfaction and performance in the workplace: A survey in the UAE and Arabic context. *Journal of Management Development*, 26(4), 294-311.
- 204) Suliman, A., & Kathairi, M.A. (2013). Organizational justice, commitment and performance in developing countries: The case of the UAE. *Employee Relations*, 35(1), 98-115.
- 205) Swanson, R. A., & Holton III., E. F. (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco, CA: Berrett Koehler Publications.
- 206) Tang, L. and Sarsfield-Baldwin, L. (1996), "Distributive and procedural justice as related to satisfaction and commitment", *SAM Advanced Management Journal*, Vol. 61 No. 3, pp. 25-31.
- 207) Tekleab, A.G., Takeuchi, R. and Taylor, M.S. (2005), "Extending the chain of relationships among organizational justice, social exchange, and employee reactions: the role of contract violations", *Academy of Management Journal*, Vol. 48 No. 1, pp. 146-157.
- 208) Thibaut, J. & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- 209) Thibaut, J. & Walker, L. (1978). A theory of procedure. *California Law Review*, 66, 541-566.
- 210) Tjahjono, H. K., Fachrunnisa, O., & Palupi, M. (2019). Configuration of organizational justice and social capital: Their impact on satisfaction and commitment. *International Journal of Business Excellence*, 17(3), 336. <https://doi.org/10.1504/IJBEX.2019.097957>.
- 211) Trevino, L.K. and Weaver, G.R. (2001), "Organizational justice and ethics program 'follow-through' influences on employees' harmful and helpful behavior", *Business Ethics Quarterly*, Vol. 11 No. 4, pp. 651-71.
- 212) Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(4), 349- 361. [https://doi.org/10.1207/S15327957PSPR0704\\_07](https://doi.org/10.1207/S15327957PSPR0704_07).
- 213) Tyler, T.R. and Lind, E.A. (1992), "A relational model of authority in groups", in Zanna, M.P. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, San Diego, CA, Vol. 25, pp. 115-191.
- 214) Tyler, T. R., and Caine, A. (1981). The influence of outcomes and procedures on satisfaction with formal leaders. *J. Personal. Soc. Psychol.* 41, 642-655. doi: 10.1037/0022-3514.41.4.642.
- 215) Tyler, T.R. and Folger, R. (1980), "Distributive and procedural aspects of satisfaction with citizen-police encounters", *Basic and Applied Social Psychology*, Vol. 1 No. 4, pp. 281-292.
- 216) Tyler, T.R. and Bies, R.J. (1990), "Beyond formal procedures: the interpersonal context of procedural justice", in Carroll, J.S. (Ed.), *Applied Social Psychology in Business Settings*, Erlbaum, Hillsdale, NJ, pp. 77-98.
- 217) Tziner, A., Oren, L., Bar, Y. and Kadosh, G. (2011), "Corporate social responsibility, organizational justice and job satisfaction: how do they interrelate, if at all? Responsabilidad social corporativa, justicia organizacional y satisfacción laboral: ¿ Como se relacionan?", *Revista de Psicología del Trabajo y de las Organizaciones*, Vol. 27 No. 1, pp. 67-72.
- 218) Vecchio, R.P. (1982), "Predicting worker performance in inequitable settings", *Academy of Management Review*, Vol. 7 No. 1, pp. 103-10.
- 219) Walster, E., Walster, G.W. and Berscheid, E. (1978), *Equity: Theory and Research*, Allyn & Bacon, Boston, MA.
- 220) Walumbwa, F. O., Cropanzano, R., and Hartnell, C. A. (2009). Organizational justice, voluntary learning behavior, and job performance: a test of the mediating effects of identification and leader-member exchange. *J. Organ. Behav.* 30, 1103-1126. doi: 10.1002/job.611.
- 221) Wang, H., (2010). Rapid identification of heterozygous mutations in *Drosophila melanogaster* using genomic capture sequencing. *Genome Res.* 20(7): 981--988.
- 222) Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- 223) Wesolowski, M. A., & Mossholder, K. W. (1997). Relational demography in supervisor subordinate dyads: Impact on subordinate job satisfaction, burnout, and perceived procedural justice. *Journal of Organizational Behavior*, 18, 351-362.
- 224) Zhang, (2014). It's not fair or is it? The role of justice and leadership in explaining work stressor-job performance relationships. *Academy of Management Journal*. 57(3), 675-697.
- 225) Yu, J. and Murphy, K. (1993), "Modesty bias in self-rating of performance: a test of cultural relativity hypotheses", *Personnel Psychology*, Vol. 15, pp. 357-63.



# Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

## APPENDIX



The Arab Academy of Science and Technology and Maritime Transport

Dear Participants,

This questionnaire is designed to measure **effect of organizational justice on job satisfaction and work performance**. The information you provide will help the researcher better identify, explore and measure various variables associated in the study. Since you are the one who can give the correct information, the researcher requests that you respond to the questions frankly and honestly. Thank you very much for your time and cooperation. The researcher greatly appreciates your help.

The Researcher

<b>Question One:</b> The following statements measure employees' perception towards distributive justice. Please from a scale of 1 to 5 (1 meaning strongly disagree and 5 meaning strongly agree) state your opinion about the statements.					
	Strongly Disagree	disagree	Neutral	agree	Strongly Agree
I think that I am fairly rewarded	1	2	3	4	5
My work schedule is fair	1	2	3	4	5
I think my level of pay is fair	1	2	3	4	5
I consider my workload to be quite fair	1	2	3	4	5
I feel that my job responsibilities are fair	1	2	3	4	5
The evaluation of my performance provides an appropriate assessment of the work I have completed.	1	2	3	4	5
I intend to develop my entire professional career in this organization.	1	2	3	4	5

<b>Question Two:</b> The following statements measure employees' perception towards procedural justice. Please from a scale of 1 to 5 (1 meaning strongly disagree and 5 meaning strongly agree) state your opinion about the statements.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am able to express my views at this company	1	2	3	4	5

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

The procedures used in my organization have been applied consistently.	1	2	3	4	5
The procedures used in my organization are free of bias.	1	2	3	4	5
The procedures used in my organization are based on accurate information.	1	2	3	4	5
Opportunities exist to appeal certain decisions.	1	2	3	4	5
The procedures used in my organization uphold ethical and moral standards.	1	2	3	4	5

**Question Three:** The following statements measure employees' perception towards interactional justice. Please from a scale of 1 to 5 (1 meaning strongly disagree and 5 meaning strongly agree) state your opinion about the statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My supervisor treats me in a polite manner	1	2	3	4	5
My supervisor treats me with respect and dignity	1	2	3	4	5
My supervisor treats me with kindness and consideration	1	2	3	4	5
My supervisor refrains from improper remarks or comments.	1	2	3	4	5
My supervisor treats with me with a truthful manner	1	2	3	4	5
My supervisor explains very clearly any decision made about my job	1	2	3	4	5
When decisions are made my supervisor shows concerns for my rights as an employee.	1	2	3	4	5

**Question four:** The following statements measure the level of job satisfaction among employees'. Please from a scale of 1 to 5 (1 meaning strongly disagree and 5 meaning strongly agree) state your opinion about the statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel I receive a fair salary for my job	2	3	4	5	5
Raises are often and not far between	1	2	3	4	5
I am satisfied with the personal relationship between my boss and his/her employees	1	2	3	4	5
There is really good chance for promotion on my job	1	2	3	4	5

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

People get ahead as fast here as they do in other places	1	2	3	4	5
I am satisfied with the way my boss treat employees People	1	2	3	4	5
There is good relationship between employees	1	2	3	4	5
I take part in making the decisions that affect my job.	1	2	3	4	5
I am happy in my current job	1	2	3	4	5

**Question Five:** The following statements measure the performance of employees. Please from a scale of 1 to 5 (1 meaning strongly disagree and 5 meaning strongly agree) state your opinion about the statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have sufficient know-how to carry out my work proficiently	1	2	3	4	5
I work on challenging tasks when they are available	1	2	3	4	5
I manage to plan my work so that I finish on time.	1	2	3	4	5
I understand my job responsibilities.	1	2	3	4	5
I am able to separate main issues from side issues at work.	1	2	3	4	5
Work makes the best use of my abilities	1	2	3	4	5
Workplace training opportunities encourage me to work better	1	2	3	4	5
I try to question old ways of doing things in my work.	1	2	3	4	5
I try to come up with creative solutions to new problems.	1	2	3	4	5

<p><b>Q6. Gender:</b> Male Female</p> <p><b>Q7. Marital Status:</b> Married Non-Married</p> <p><b>Q8. Highest Completed Level of Education:</b> Less than High school High School Bachelor Degree Master degree or above</p> <p><b>Q9. Age:</b> Less than 25 years 25-35 years 36-46 years</p>	<p><b>Q10. Nationality:</b> Emirate national Arabic national Asian national European American Other:</p> <p><b>Q11. Organizational tenure:</b> One year or less 2-7 8-13 14-19 20 years or above</p> <p><b>Q12. Job tenure:</b> One year or less 2-7 8-13</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Explaining the effect of Organizational Justice on Job Satisfaction and Work Performance

47-57 years 58 years or above	14-19 20 years or above <b>Q13.Job level:</b> First level Middle level Lower level
----------------------------------	---------------------------------------------------------------------------------------------------

Thank you for your time and cooperation. I sincerely appreciate it. Please check to make sure that you have not skipped any questions accidentally.

Once again thank you ☺



There is an Open Access article, distributed under the term of the Creative Commons Attribution–Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.