

THE MEDIATION ROLE OF ORGANIZATIONAL JUSTICE IN THE EFFECT OF ORGANIZATIONAL VIRTUOUSNESS ON WORK PRODUCTIVITY

ÖRGÜTSEL ERDEMLİLİĞİN İŞTE ÜRETKENLİĞE ETKİSİNDE ÖRGÜTSEL ADALETİN ARACILIK ROLÜ

H. Tezcan UYSAL 

Abstract

The purpose of this research is to determine whether organizational virtuousness (OV) has a meaningful effect on work productivity (WP), to examine whether organizational justice (OJ) has an intermediate role on this effect and to determine the statistical difference of WP according to demographic factors. Accordingly, data has been obtained from 212 people working in the public and private sectors using a survey method. This data has been analyzed using the factor analysis, correlation, regression, Mann-Whitney U and Kruskal-Wallis H tests using SPSS and AMOS package programs. According to the findings obtained from the research; it has been determined that as a result of a multiple regression analysis on the mediating effect, OJ is a partial moderator variable on the effect of OV on the WP. As a result of the analysis to examine the differences, it has been found that WP did not show a significant difference according to monthly income levels and their durations of work experience. On the other hand, within this study, the WP has been higher than female employees, men working in the private sector, those working in the public sector, and those working in the 21-40 age group demographically, compared to those working in the 41-60 age group, and those who graduated from being undergraduates, compared to high school graduates.

Keywords: Organizational virtuousness, work productivity, organizational justice

JEL Classification: M1, M12, M19

Öz

Bu araştırmanın amacı; işte üretkenlik üzerinde örgütsel erdemliliğin anlamlı bir etkisi olup olmadığı saptamak, eğer işte üretkenlik üzerinde örgütsel erdemliliğin anlamlı bir etkisi var ise bu etki üzerinde örgütsel adalet algısının aracılık rolü olup olmadığını incelemek ve işte üretkenliğin demografik faktörlere göre istatistikî farklılığını tespit etmektir. Bu amaca yönelik olarak kamu ve özel sektörde çalışan 212 kişiden

* **Corresponding Author:** Assoc. Prof., Zonguldak Bülent Ecevit University, h.tezcanuysal@hotmail.com, ORCID: 0000-0002-8962-7824.

To cite this article: Uysal, H. T. (2021). The mediation role of organizational justice in the effect of organizational virtuousness on work productivity. *Journal of Research in Business*, 6(1), 26-53.

"There is no requirement of Ethics Committee Approval for this study."

Submitted: 08.02.2021

Last Revision: 27.03.2021

Accepted: 30.03.2021

Online Yayın: 15.06.2021

anket yöntemi kullanılarak veri elde edilmiştir. Bu veriler SPSS ve AMOS paket programları kullanılarak faktör analizi, korelasyon, regresyon, Mann-Whitney U ve Kruskal-Wallis H testleri ile analiz edilmiştir. Araştırmadan edilen bulgulara göre; aracılık rolüne yönelik çoklu regresyon analizi sonucunda örgütsel erdemliliğin işte üretkenliğe etkisi üzerinde örgütsel adaletin kısmi aracılık etkisinin bulunduğu tespit edilmiştir. Farklılıkları incelemeye yönelik analizler sonucunda işte üretkenliğin aylık gelir düzeyine ve iş deneyimi süresine göre ise anlamlı bir farklılık göstermediği saptanmıştır. Bununla birlikte işte üretkenliğin kadın çalışanlarda erkeklere göre, özel sektörde çalışanlarda kamu sektöründe çalışanlara göre, demografik olarak 21-40 yaş aralığındaki çalışanlarda 41-60 yaş aralığındaki çalışanlara göre, lisans mezunu çalışanlarda lise mezunu çalışanlara göre daha yüksek olduğu belirlenmiştir.

Anahtar Kelimeler: Örgütsel erdemlilik, işte üretkenlik, örgütsel adalet

JEL Sınıflaması: M1, M12, M19

1. Introduction

One of the most important parts of the modern business approach is the production. Although the production patterns have changed over time, production has always been important due to the competition brought by the market in the private sector and the need for an efficient use of resources in the public sector. So much so that the production is not sufficient alone; the production should be shaped to achieve a maximum output by using minimum resources within the framework of certain criteria. Therefore, WP comes to the forefront in all work areas. Accordingly, the found management literature focuses on various factors that can affect, increase, or decrease WP. Managerial factors such as the organization's working environment, leadership style, competition, external motivation, rewarding system, and career ladders are known to have a significant impact on productivity. Apart from these factors, individual factors such as virtue are also thought to affect it. It is claimed that WP exists in human beings, but this feature develops or becomes blunt with socialization. Therefore, this feature, which enables individuals to perform positive behaviors, is likely to be affected by many factors in their working lives, and as a result, it is likely that employees will increase or decrease their virtues. Considering this point of view, an increase in virtue is associated with concepts such as self-dedication, intrinsic motivation, and success, while a decrease in virtue is associated with destructive effects such as low productivity, increased undesired behaviors, and deterioration in corporate culture. Consequently, managerial virtue has an important role in an organization. Therefore, it is necessary to concentrate on factors, such as OJ, which can increase the virtue of employees employed by organizations. The sense of justice that has been inherently demanded since the existence of human beings becomes a more important criterion in the atmosphere of organizations. In the event of a possible perception of injustice, there are decreasing actions such as employee identification, intrinsic motivation, and perseverance, the achievement of the organizations' goals, productivity, and even the continuity of the organization in the long run. Therefore, the effect of OV on WP as well as the mediating effect of OJ on this effect has been investigated.

2. Literature Review

2.1. Work Productivity

As a natural result of consumption, it has become the business policy of modern organizations to use resources that are decreasing and not renewed more effectively, because this produces balanced and demand-oriented production. Therefore, the organizations want employees to adopt this policy and keep their productivity high with the pressure of increasing competition. Today, increasing productivity in the workplace has an important place in terms of economic, social, and cultural development in all countries (Matin et al., 2014). According to a dictionary definition, productivity is defined as “the state of producing output as a result of input” (Voordt, 2004). As a concept, productivity can be expressed as a summary of quantity and quality of work performance considering resource utilization, but since productivity can be measured at the levels of individuals, groups or organizations, it is also seen as a success within the organizational performance, effectiveness and efficiency criteria (Olusanya et al., 2012). Considered as the founder of modern management science, Frederick Taylor aimed to increase productivity by identifying tasks in organizations and optimizing business processes, therefore drawing attention to the importance of productivity (Palvalin, 2019). Increasing productivity has become a goal in the 1980s and 1990s, and this continued until the 21st century, but attempts to understand the employees’ views and suggestions have been insufficient in this action to increase productivity (Savery, 1996). However, in order to increase productivity, it is necessary to consider organizational factors as well as individual factors and demands. The reason why productivity is regarded as a success is because of its ability to be affected by many factors. WP is influenced by other factors such as workers’ education levels, talents, business disciplines, ethics, attitudes, management styles, in-house opportunities, motivations, technologies, and working environments, as well as the features of their work (Elqadri et al., 2015; Raviyanto, 1986). Taiwo (2010) has stated that productivity can be affected by the internal and external variables categorized below; 1. *General Factors*: the raw materials, climate, credit facilities, utilities, infrastructure, 2. *Organizational and Technical Factors*: the integration, capacity, organizational size, production stability, 3. *Human Factors*: the working climate, interpersonal communication dynamics, working conditions, management, rewards and incentives, physical fatigue, and union practices.

Business productivity is the rate of utilizing a physical product, equipment, and labor resources obtained at the end of the unit production effort, and it is the degree of an industrial management’s effectiveness in the use of the production factors (Akçay & Atilla, 2019). All factors have a single focus for ensuring productivity in organizations, and that is their workforces. Increasing productivity in organizations is possible only by supporting activities that will increase the productivity of each employee who plays a role in their workforces (Demir et al., 2017). A workforce is considered to be the most important capital of an organization, and if organizations want their workforces to strive to achieve the organizational goals and objectives with all of their energy, the needs of the workforces must also be considered (Matin et al., 2014). Employees who form the workforce of an organization also determine the performance of the organization. Therefore, organizations need reliable

and important employees who will increase profitability within the framework of competition. Consequently, individuals with personalities that are thought to have a positive effect on productivity in recruitment are preferred (Chandel & Shahi, 2017).

It is a central output for organizations and employees, especially when productivity is evaluated in terms of working time (Corbiere et al., 2019). Increasing WP is one of the most important goals for sustainable economic development. Therefore, there are an increasing amount of studies on the factors that determine WP and how this productivity can be increased (Okazaki et al., 2019). In the literature on productivity, it is regarded that the issue is approached especially in terms of organizational and employee health. There are various factors that positively affect the employees' productivity, such as motivation, the atmosphere of the work environment, project planning, management, and skills (Khanzadi et al., 2018). The organizations' working environments are very important for maintaining productivity and providing continuity (Palvalin, 2019). A particularly friendly and positive working environment plays an important role in increasing productivity and job satisfaction (Duru & Shimawua, 2017). In an organization, there is a general view that, in terms of work design, an open structure consisting of transparent partitioned walls promotes more communication and increases productivity by facilitating the exchange of knowledge and skills (Voordt, 2004). However, it has not been determined that flexible office applications that spread with the modern working world have provided an absolute increase in productivity and employee satisfaction (Been & Beijer, 2014). However, it has been stated that coordinated regulations, such as part-time work, have a negative relationship with productivity (Ierodiakonou & Stavrou, 2015).

In organizations, everyone works with the expectation of some rewards, such as their welfare (Hong et al., 1995). However, it is not possible to achieve welfare in every organization's environment. One of the factors that reduce employees' workforce welfare is work stress. The right level of stress at work can motivate individuals more and increase productivity (Bhagat et al., 2018). However, work stress above the optimal level affects productivity negatively. In addition, the main stress factors in employees' personal lives, such as difficulties and personality problems, are also important factors in productivity. This means that problems in one's personal life can also affect their working life (Chandraratne et al., 2018). It was stated that productivity depends on the ability to cope with positive and negative emotions, which have an impact on the individuals' psychologies (Vveinhardt et al., 2019). Emotional intelligence is another concept associated with WP. Employees with emotional intelligence develop empathy by focusing on emotional responses in themselves and other employees, which creates an important opportunity for increased WP (Bendaravičienė et al., 2019). In this sense, emotional intelligence is an important factor. In an organization, the most economical way to keep and motivate employees with this talent is to make them feel like they are part of the organization, and the employees' satisfaction is an effective factor for this (Esfandiari et al., 2017). In the literature on job satisfaction, there are reviews about work intensity or overworking. Okazaki et al. (2019) stated that overworking does not have a significant impact on WP, considering that it involves devotion to work.

To increase productivity, there is a need for not only employees to volunteer for this purpose, but also for organizations to coordinate for it (Bendaravičienė et al., 2019). Therefore, actions and behaviors that would adversely affect working psychology in the atmosphere of an organization should be avoided, because problems, such as burnout, develop in employees and significantly affect the working environment and productivity of interconnected groups in their organization (Bhagat et al., 2018). On the other hand, establishing effective communication with the personnel is regarded as an important factor for increasing the productivity and organizational performance of a workforce (Nebo et al., 2015).

A large amount of literature supports the relationship between work outcomes such as WP and psychiatric symptoms (Corbiere et al., 2019). Depressive disorders are more common in the workforce than other mental health problems, and these disorders are an important factor that affects the workers' productivity (Burton et al., 2008). Depression is a general problem for businesses in the world in terms of productivity. It has been reported that depressed and anxious employees are more limited in terms of productivity than other employees (Burton et al., 2008). Apart from psychiatric disorders, health-related diseases also affect WP. Rheumatoid arthritis disease is one of them, and the results of the research on workers with this disease indicate that rheumatoid arthritis significantly reduces WP due to its symptoms (Xavier et al., 2019). Another health problem is sclerosis. The research conducted shows that sclerosis diseases with fatigue and cognitive symptoms have a high productivity loss in the affected workers (Chen et al., 2018). In addition, the "dry eye" disease, which is observed especially in employees who use computers for their work, significantly affects WP by reducing the affected employees' physical ability to focus on their work (Yamada et al., 2012). Consequently, WP may decrease due to absenteeism with health problems and employees' attendance despite being sick (Chen et al., 2018).

2.2. Organizational Virtuousness

Within the modern management approach, all organizations want to work with individuals who have adapted to the working environment, are focused on solving problems, are in line with the objectives of the organization, and will realize them without external motivation. However, it is not possible for every employee to meet this demand of the organization. Employees who can meet this type of expectation should have the feature of "virtuousness". The origin of virtue comes from the word "virtus", which means "power or" virtue "in Latin. In ancient times, Plato and Aristotle defined virtue as desires and actions that provided personal and social benefits (Bright et al., 2006). Virtuousness is a strengthening effect that allows employees to be more connected to their roles and develop extra-role behaviors (Shahid & Muchiri, 2019). Virtue represents preserving ethical values and leaving a good legacy to future generations by applying these values (Karakas et al., 2015). Virtue is a specific symptom of a special type of virtuous character, while virtuousness refers to the ideal virtue of human or organizational character (Bright et al., 2006). Virtuousness, which is also examined as a feature in the literature, is known as the best personal feature, dignified behavior, human virtue, and human passion (Abedi et al., 2014).

The fact that individuals working in the organization are virtuous in organizational terms increases the benevolent tendency by emphasizing the values and is embedded in the social life fabric of this organization (Karakas et al., 2015). Organizational virtue, which is tried to be explained with qualities such as organizational goodness, social development, tolerance, honesty, and moral integrity is an organizational behavior subject that needs more research because it is a concept that can add value to the business in terms of the improvement and development of organizational culture and organizational communication and make the organization successful (Erkmen & Esen, 2012). To be able to call an organization virtuous, it is necessary to support and support virtuous activities for the members of the organization. Therefore, virtuousness in organizations refers to the increasing virtuous behavior of employees (Cameron, 2004). In this context, Cameron (2003: 50) defined OV as “is intimately tied to what is good to and for human beings”. It can be said that OV is a concept that includes the collective actions, cultural characteristics or processes of individuals that ensure the promotion and maintenance of virtuous behavior (Çöp & Doğanay, 2019). According to Pires & Nunes (2018: 381), “OV is based on a set of assumptions about human and organizational nature encompassing honesty, compassion, loyalty, respect, and forgiveness, a phenomenon studied through theories on extraordinary performance, positive deviance, and the positive spiral of flourishing”. In other words, OV can be considered as a culture based on virtue and emerging through shared beliefs and common behaviors (Williams et al., 2015).

If the main purpose of an organization is to avoid legally problematic behaviors, it does not need virtuous behaviors or proactive behaviors that can increase organizational performance (Barclay et al., 2012). However, being virtuous encourages employees to perform the tasks assigned to them, by putting forward self-efficacy, helps them not to repeat mistakes in their previous duties, and thus easily overcomes the problems and problems that will prevent the task from being performed successfully (Hur et al., 2017). Therefore, apart from the legal requirement, virtuousness is a required feature especially in terms of communication and effectiveness among employees. Virtuousness has many effects on organizational functioning. In a company with a high number of employees with virtuous behavior, the probability of encountering qualities such as goodness, tolerance, social development, moral goodness, and honesty will increase. Thus, the incidence of undesirable behaviors such as bribery and scandal will also decrease (Çöp & Doğanay, 2019). However, the sense of OV and the reputation, feelings of pride and commitment resulting from being part of the organization cause emotional and motivational responses at work such as dedication to work, motivation for more jobs, and proactive task skills (Hur et al., 2017). The culture of virtuousness enhances the communication between employees and the organization, making it better quality and ensuring that employees are happier in the business environment (Williams et al., 2015). Employees with the higher perception of virtuousness in organizations have a higher perception of job satisfaction and organizational support. However, the perception of OV reduces the negative impact of financial problems on job satisfaction and turnover intention (Nikandrou & Tsachouridi, 2015). Organizational virtuousness also has a direct relationship with the dimensions of organizational citizenship, civil virtue, altruism, and courtesy (Abedikooshki & Zeinabadi, 2016). OV is also very important for the future of organizations. OV has become an important issue for leaders and managers in order to achieve

sustainable development by increasing competitiveness in organizations (Bright et al., 2006). Because it is stated that OV is a precursor for success by creating upward spiral feelings among the members of the organization (Shahid & Muchiri, 2019). In addition, OV has a significant impact on performance among high-welfare employees. However, the righteousness of the employees for the performance targeted by the organizations is not a sufficient criterion alone. Therefore, in order to obtain the performance expected from virtuous employees, welfare must be provided within the organization (Magnier-Watanabe et al., 2017).

Employees have the power to harm or benefit the organization by preventing or enhancing its success. At the same time, employees who understand and perceive OV are more resistant to difficulties, and these individuals exhibit positive behaviors in the long term in helping the organization to recover from crisis-like factors (Nikandrou & Tsachouridi, 2015). In addition, these employees think that the organization they work with is different from others because of their honest and empathetic approach to people and society, and they are not motivated by the realization of their own interests (Tsachouridi & Nikandrou, 2016). Therefore, OV differs from organizational support in terms of positivity and lack of personal interests. Cameron (2004) stated that there is no certainty about virtuousness because both individuals and organizations cannot always be completely virtuous. Therefore, it is expected to be as virtuous as possible rather than an absolute virtuousness. OV (Yücel & Taşçı, 2008), which indicates volunteerism for his institution, indicates that s/he is not obliged to take on additional duties and think more about organizational issues (Cameron, 2004). Consequently, positive emotions arising from being virtuous lead to more realization of social capital and pro-social behavior (Barclay et al., 2012).

2.3. Organizational Justice

The individuals who interact with each other perceive all of the conditions and actions in the environment and pass them through a mental filter. In this process, one of the main evaluation criteria is justice. In the literature, the concept of justice is generally used by referring to the individual's perceptions and evaluations that are subjective about an outcome or process (Randeree & Malik, 2008). In terms of an organizational sense, the concept of justice has been first used in 1987 by Jerald Greenberg within his literature on organizational behavior and organizational psychology (Greenberg, 2011). OJ aims to put the effect of the concept of justice on the functionality of an organization (Tolukan & Akyel, 2019). The concept of OJ, which plays a key role in achieving organizational integrity, is defined by Cropanzano et al. (2007: 34) as “the members’ sense of the moral propriety of how they are treated—it’s the ‘glue’ that allows people to work together effectively,” Stamenkovic et al. (2018:427) defined it as “managing activities that shape the climate in an organization, the behavior of people in the process of work and commitment to the organization.” Abekah-Nkrumah & Atinga (2013:189) defined OJ as “an employee’s perception of fairness and equal treatment within an organization” and Tolukan & Akyel (2019:181) defined it as “the positive perception of the employees on the decisions and practices of the managers about the organization and employees.” As seen in these definitions, “justice” is an indispensable value of organizational work systems. Fair decisions

are very important in terms of organizational behavior and employees' well-being, so it is necessary to examine concrete events that create a perception of injustice in organizational lives (Wiili-Peltola et al., 2007). The principle of equality adopted in organizations with standardized human resources management is also shaped by the laws, regulations, and laws that regulate it (Stamenkovic et al., 2018). However, in different situations, practices and behaviors that can be described as unfair by managers or employees with different personalities can be observed. Individuals' perceptions of OJ and fairness strongly affect their organizational behaviors. In organizations, individuals are concerned with equality in economic earnings as well as justice and fairness (Stamenkovic et al., 2018). Therefore, the perception of justice needs to be analyzed in a very broad framework in organizations.

OJ has three dimensions: name-based, procedural, distributory, and interactional (Cropanzano et al., 2007). When the OJ literary studies are examined, it has been believed that the level of distributory, procedural, and interactive justice should be similar between all employees, but more attention has been paid to procedural justice. It has been also stated that these types of justice affect all behaviors and attitudes in an organization (Zhang et al., 2009).

The first justice dimension is procedural justice. Procedural justice refers to the employees' perceptions of the processes for determining rewards within the organization. Procedural justice (Randeree & Malik, 2008: 67) has five factors – “fairness, two-way communication, trust in a supervisor, clarity of expectations and an understanding of the performance appraisal process.” For the employees, it evokes the feeling of being proud and dignified to be members of their organization. (Bergami & Morandin, 2019). Most employees believe that the selection processes regarding rewards or interests are fair in an organization, but they do not have a bias that increases satisfaction and loyalty based on this belief (Khalid et al., 2014). Therefore, the continuity of the justice process is required. If there is a belief that the decision-making process is carried out in accordance with OJ principles, procedural justice is more important than distributory justice (Stamenkovic et al., 2018). Procedural justice is an effective factor in terms of employees' attitudes and behavioral outputs in their organizations, job satisfaction, commitment to the organizations, and the intention to quit (Hassan & Hashim, 2011). Providing employees the ability to be more vocal in their organization increases the perception of justice, not only in terms of affecting the fairness of the awards, but also in expressing the sense of being valued by expressing their own opinions and feelings (Muhammad, 2004). The increase in bad behaviors in organizations, including insults and swearing, causes systematic inefficiencies to develop low procedural justice perceptions in their employees (Ramdeo & Singh, 2019).

After procedural justice, scholars have added two OJ structures to the literature on how people are treated and whether there is control in their decision processes (Myhill & Bradford, 2013). Due to the intense relationship between employees in organizations and the interaction with superiors, the dimensions of interactions and distributory justice added to the justice dimensions also draw attention. “Interactional justice refers to an employee's perception of the degree to which they are treated with dignity, concern, and respect at the workplace” (Rai, 2015: 70). Interactional justice involves the extent to which employees' requests are taken into account in making business decisions,

and when these decisions are put into practice, it is about making satisfactory disclosures to employees (Bergami & Morandin, 2019). Managers' respect, courtesy, and appreciation of their employees are the requirements of interactional justice (Hao et al., 2016).

Distributive justice, on the other hand, states that within the framework of the expectation that the awards should be distributed fairly, the rights of individuals are respected, and these rights are protected (Haybatollahi & Gyekye, 2015). Basically, this justice dimension is based on the fact that not all employees are treated the same in organizations, and the obtained outcomes differ (Cropanzano et al., 2007). It may be tempting to take administrative decisions that may be in favor of certain employees regarding the distribution of organizational outputs within the framework of powers (Abekah-Nkrumah & Atinga, 2013). However, the distributive justice perception becomes valid only when the "win-win" situation occurs (Ismail & Baki, 2017). Therefore, in a business life, all employees compare the benefits they provide to the organization with the salary they receive, and in some cases, it improves the perception of injustice, and this affects the employees' perceptions of justice (Hao et al., 2016).

The instantaneous sense of justice that employees develop in the face of events and actions involving their organizations is important for the continuity of justice in the organization in the long run and for justice to become a part of the organizational culture (Haddad et al., 2019). Employees in organizations expect to be taken into consideration by their managers, their concerns and needs, and that the managers will be empathetic by showing empathy. For this, a free information flow should be provided in the organization, and interaction justice should be demonstrated (Abekah-Nkrumah & Atinga, 2013). Other situations such as unfair policies, decisions, and activities performed by the organizations cause perceptions of injustice to spread rapidly among the employees, and this causes disastrous results in the relations between the employees and their organization (Shamma, 2018). In order to prevent organizations from meeting these results, particular attention should be paid to their administrative practices. Organizations cannot achieve their goals without a binding commitment of management to be fair in the workplace (Abekah-Nkrumah & Atinga, 2013). According to the referenced managers, justice is regarded as getting the results that employees want, but the managers confuse fair outputs with appropriate ones. However, moral compatibility and fitness are different in terms of personal values (Cropanzano et al., 2007).

Enabling employees to express their views and feelings about management in their organizational climates is essential for the perception of justice (Muhammad, 2004). Equity and equality treatments have an important place in human resources management in terms of organizational management (Abekah-Nkrumah & Atinga, 2013). Accordingly, it is stated that the perceptions about the manager direct the perception of harmony and job satisfaction in the work environment (Tolukan & Akyel, 2019). The effect of justice is great due to its ability to affect the individual feelings of employees working in organizations and, accordingly, the success of the organization (Zhang et al., 2009). OJ, which is directly related to the working environment, expresses the role of equity (Hassan & Hashim, 2011). Problems related to OJ include multiple processes, such as ethical and moral thinking and equality assessment, that cause complex relationships on individuals (Jiang et al., 2015). It has been stated that as the perception of OJ increases in employees, commitment to the organization and job

satisfaction increase (Hassan & Hashim, 2011). OJ can affect the quality of social exchanges, which can trigger task relationships and attitudes and behaviors that can lead to successful or violated psychological contracts (Zhang et al., 2009). As a position, low-level employees in organizations develop stronger responses to the perception of injustice. However, when the levels of trust in mutual relations increase, the effect of this perception on business outputs, such as commitment, may change. When the level of trust increases, the level of loyalty may increase in employees (Jiang et al., 2015). Moreover, treating employees fairly within the organization makes it easier to adopt various organizational practices (Randeree & Malik, 2008).

3. Material and Method

Consistently high productivity is a desired and targeted result, regardless of the type of production and the nature of the substance produced. Therefore, it is necessary to investigate the factors that will increase productivity in organizations or cause productivity to decrease. From this point of view, the OV factor, which is thought to have an impact on WP, has also been addressed. When the literature on productivity is examined, Cameron et al. (2004) determined a significant relationship between performance and OV, and determined that virtuousness is positively reflected on performance with its protective feature of the organization. Lesiuk (2005) has found that playing music at work increases work quality and WP. Petreanu et al. (2013) have revealed that work stress negatively affects WP as a result of their research in Romania. Elqadri et al. (2015) have found that discipline in the office environment increased WP. Polatçı & Özçalık (2015) have found that interactional justice with procedural justice reduces anti-productivity behaviors at work. Sumiyati et al. (2016) have stated that a social work environment should be created in order to increase WP. Salem et al. (2017) have determined that diabetes and hypertensive diseases cause decreased WP. Velciu (2017) has stated that business conflicts with a colleague may decrease WP. Fernando et al. (2017) have found that presenteeism and absenteeism factors directly affect WP and increase costs. Atmaja (2018) has found that the work environment and job satisfaction increased WP. Similarly, Anggitaningsih & Handriyono (2019) have found that the working environment and leadership style significantly affect WP. Budiyo (2019) has determined that motivation and organizational commitment have an impact on WP, but organizational culture does not significantly affect WP. When the results of this research are examined, it is regarded that various factors have an effect on WP. However, in the literary review, no studies have been encountered which examine OV, WP, and OJ as a mediator variable. Therefore, the research carried out is important in terms of the fact that it contains the findings needed to increase productivity in workplaces, which is required for organizational performance. The research reveals the importance of OJ, contributes to the issues of OV and WP in the literature, and emphasizes the integrated effect of multiple factors in the field of organizational behavior.

3.1. Purpose of the Research

The aim of the research is to determine whether OV has a significant effect on WP, to examine whether OJ has an inter-role role on productivity, and to determine the statistical difference of WP according to demographic factors.

3.2. Population and Sample of the Research

This research applies to all employees; however, the sample of this study consists of the private sector employees in Karabük and Zonguldak, and some participant employees who work in the public sector. In this research, convenience-based sampling has been used from non-probabilistic sampling methods, and data has been obtained from 212 employees, but after the faulty/missing questionnaires were excluded, a sample volume of 197 people was achieved. Although the WP in the private sector was more intense, the sector selection was not incorporated in the sample selection since the productivity in the public sector is demanded by organizations, and OJ is an important factor for the optimal organizational climate in all organizations.

3.3. Data Collection Method of the Research

The data used in this study has been obtained by applying the face-to-face survey method. The survey used to obtain data consists of 3 scales in a 5-point Likert structure, namely OV, WP, and OJ. A 15-item scale developed by Cameron et al. (2004) and adapted to Turkish by Erkmen & Esen (2012) has been used to measure OV. To measure productivity, the Endicott WP Scale of 25 statements developed by Endicott & Nee (1997) and adapted to Turkish by Uguz et al. (2004) have been used. In order to measure OJ, a 20-item scale developed by Niehoff & Moorman (1993) and adapted to Turkish by Yıldırım (2002) has been used.

3.4. Model and Hypotheses of the Research

The scanning model has been used in this research. The dependent variable of the research is WP, the independent variable is OV, and the mediator variable is OJ.

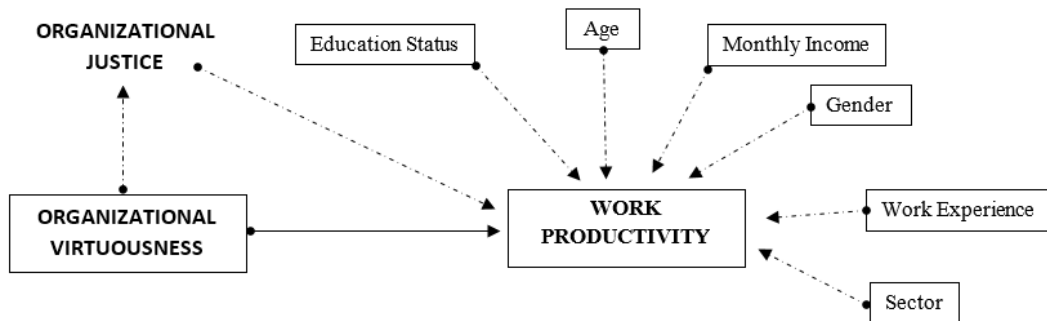


Figure 1: Conceptual Model

This Research Study's Hypotheses:

H_{1a} : There is a significant relationship between OV and WP.

H_{1b} : There is a significant relationship between OV and OJ.

H_{1c} : OJ has a mediating effect on the relationship between OV and WP.

H_{1d} : WP varies significantly between the sectors.

H_{1e} : WP varies significantly by employees' ages.

H_{1f} : WP varies significantly by employees' educational levels.

H_{1g} : WP varies significantly by employees' monthly income levels.

H_{1h} : WP varies significantly by employees' work experience.

H_{1k} : WP varies significantly by employees' genders.

3.5. The Analysis of the Research Data

The data required to test the hypotheses proposed within the scope of the research has been evaluated using the SPSS 20.0 (Statistical Package for Social Sciences) and AMOS 24.0 (Analysis of Moment Structures) programs. A Confirmatory Factor Analysis (CFA) has been utilized in determining the structural validity of the scales used in the research, reliability analysis in determining their internal consistency, simple and multiple regression analysis in order to determine the direction and severity of the relationship between the variables, and the Mann-Whitney U Test and Kruskal-Wallis H Tests in determining their differences.

4. Results

Descriptive statistics of the participant employees are given in Table 1. According to this table, 49.4% of the sample are male, and 50.6% are female. When the age distribution is examined, the sample includes a majority of 77.6%, mostly in the 21-40 age range. It has been determined that 55.1% of the employees participating in the research are university graduates. When the monthly income level of private-sector employees is examined, it is observed that the majority, 55.5%, have a monthly income at the minimum wage level. Considering the working time in the table, it has been determined that 90.1% of the sample had more than one year of work experience.

Table 1: Descriptive Statistics

	<i>Frequency</i>	<i>Percentage</i>
Gender		
<i>Male</i>	121	%61,4
<i>Female</i>	76	%38,6

Age		
<i>Younger than 21</i>	15	%7,6
<i>21-40</i>	130	%66,0
<i>41-60</i>	48	%24,4
<i>Older than 60</i>	4	%2,0
Education Status		
<i>Primary School</i>	22	%11,2
<i>High School</i>	61	%31,0
<i>Associate</i>	39	%19,8
<i>Undergraduate</i>	57	%28,9
<i>Post-Graduate</i>	18	%9,1
Monthly Income Level		
<i>Less than TRY 1000</i>	8	%4,1
<i>Between TRY 1001 - 2000</i>	33	%16,8
<i>Between TRY 2001 - 4000</i>	108	%54,8
<i>Between TRY 4001 - 6000</i>	38	%19,3
<i>TRY 6001 or more</i>	10	%5,1
Work Experience		
<i>Less than 1 year</i>	22	%11,2
<i>1-3 years</i>	39	%19,8
<i>4-6 years</i>	47	%23,9
<i>7-9 years</i>	41	%20,8
<i>10 years and above</i>	48	%24,4
Sector		
<i>Private</i>	125	%63,5
<i>Public</i>	72	%36,5

As presented in Table 2, a Confirmatory Factor Analysis (CFA) has been applied to determine the structural validity of the scales used in the study, and the compliance values obtained as a result of the factor analysis conducted for the OV scale which consists of 3 dimensions and 15 items.

Table 2: OV Scale / Fit Values

Compliance Criteria	χ^2	p	χ^2 / df	RMSEA	CFI	SRMR	NFI	GFI
Fit Values	70.375	0.000	2.346	0.08	0.963	0.04	0.938	0.936

When the compliance values in Table 2 are examined, it has been determined that the chi-square value is 70.375 units; p-value is 0.000 units; RMSEA value is 0.08 units; GFI value is 0.936 units; chi-square / degree of freedom is 2.346 units; SRMR value is 0.04 units; CFI value is 0.963 units, and the NFI value is 0.938 units. The standardized solution values for the OV scale tested in Figure 2 are specified.

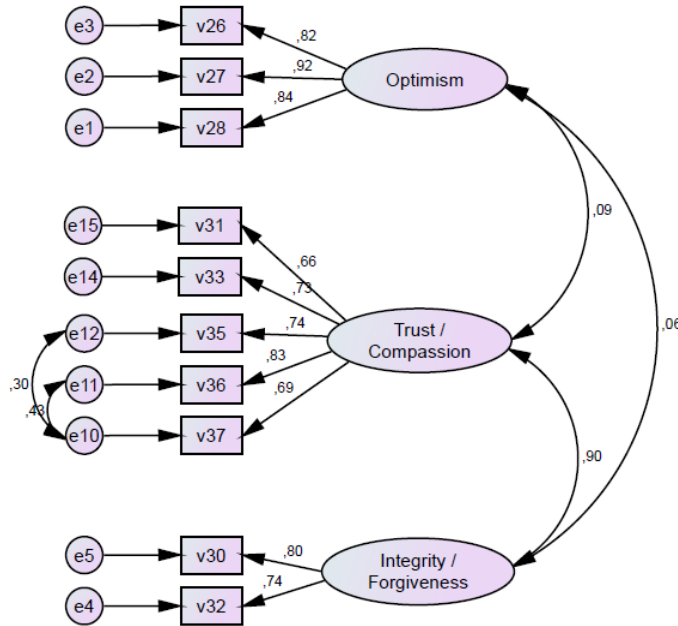


Figure 2: OV Scale / Standardized Analysis Values

During the Confirmatory Factor Analysis, five items were removed from the scale, and the reliability analysis results for the revised OV scale and scale dimensions are presented in Table 3.

Table 3: OV Scale – Reliability Analysis

	Cronbach's Alpha	N of Items
<i>Entirety of Scale</i>	0.811	10
<i>Distributive Justice</i>	0.894	3
<i>Procedural Justice</i>	0.854	5
<i>Interactional Justice</i>	0.744	2

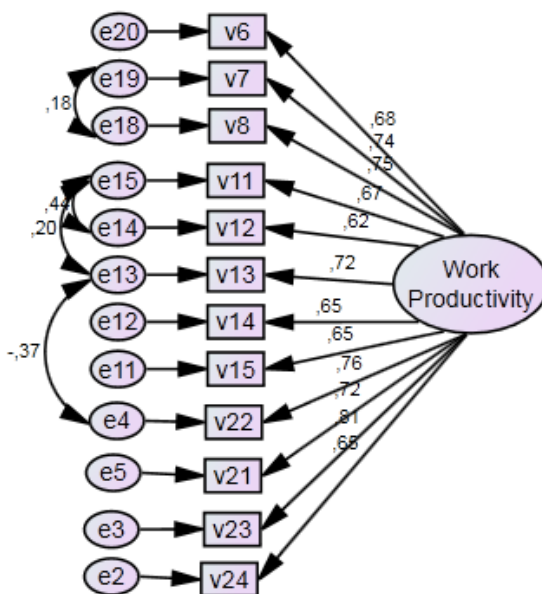
As a result of the analyses carried out, the Cronbach's Alpha coefficient is 0.811 units for the optimism dimension, 0.854 units for the trust and compassion dimension, and 0.744 units for the integrity and forgiveness dimension. For the entirety of the scale, the Cronbach's Alpha coefficient is 0.811 units. According to these values obtained, it has been determined that all of the dimensions and scales have internal consistency.

Table 4 presents the second scale used in the research, which is the productivity scale. The compliance values obtained as a result of the Confirmatory Factor Analysis was applied to this scale and consisted of 25 items.

Table 4: WP Scale / Fit Values

Compliance Criteria	χ^2	p	χ^2 / df	RMSEA	CFI	SRMR	NFI	GFI
Fit Values	111.680	0.000	2.234	0.07	0.951	0.04	0.916	0.909

When the compliance values in Table 2 are examined, it has been determined that the chi-square value is 111.680 units; p-value is 0.000 units; RMSEA value is 0.07 units; GFI value is 0.908 units; chi-square / degree of freedom is 2.234 units; SRMR value is 0.04 units; CFI value is 0.951 units, and the NFI value is 0.916 units. In Figure 3, the standardized solution values for the productivity scale in the work tested are specified.

**Figure 3:** WP Scale / Standardized Analysis Values

During the Confirmatory Factor Analysis, 13 items were removed from the scale, and the results of the reliability analysis for the revised job productivity scale are presented in Table 5. As a result of the analysis performed, Cronbach's Alpha coefficient was determined to be 0.921 units, and it has been determined that the scale has internal consistency.

Table 5: WP Scale – Reliability Analysis

	Cronbach's Alpha	N of Items
Entirety of Scale	0.921	12

The last scale used in the research is the OJ scale. Table 6 presents the fit values obtained by applying the Confirmatory Factor Analysis to this scale, which consists of 3 dimensions and 20 items.

Table 6: OJ Scale / Adaptation Values

Compliance Criteria	χ^2	p	χ^2 / df	RMSEA	CFI	SRMR	NFI	GFI
Fit Values	152.009	0.000	2.235	0.07	0.954	0.07	0.921	0.902

When the compliance values in Table 2 are examined, it has been determined that the chi-square value is 152.009 units; p-value is 0.000 units; RMSEA value is 0.07 units; GFI value is 0.902 units; chi-square / degree of freedom is 2.235 units; SRMR value is 0.07 units; CFI value is 0.954 units, and the NFI value is 0.921 units. The standardized solution values for the OJ scale tested are presented in Figure 4.

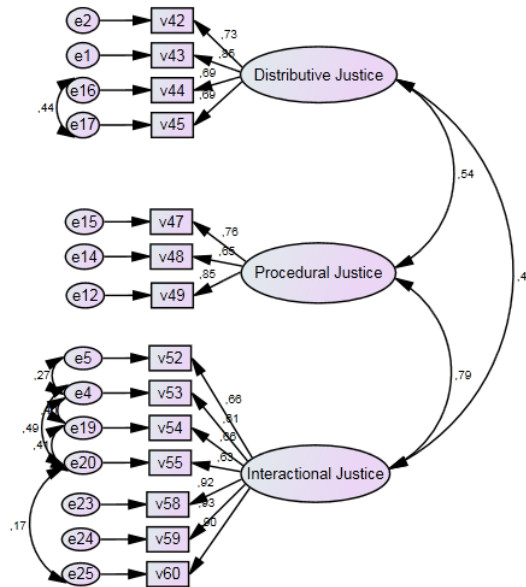


Figure 4: OJ Scale / Standardized Analysis Values

During the Confirmatory Factor Analysis, six items were removed from the scale, and the reliability analysis results for the dimensions of the revised scale are presented in Table 7.

Table 7: OJ Scale – Reliability Analysis

	Cronbach's Alpha	N of Items
<i>Entirety of Scale</i>	0.915	14
<i>Distributive Justice</i>	0.839	4
<i>Procedural Justice</i>	0.800	3
<i>Interactional Justice</i>	0.920	7

As a result of the analyses carried out, the Cronbach's Alpha coefficient has been 0.839 units for the distributive justice dimension, 0.800 units for the procedural justice dimension, 0.920 units for

the interactional justice dimension, and 0.915 units for the entire scale. According to these values obtained, it has been determined that all of the dimensions and scales have internal consistency. It has been determined that the fit values of the OV scale expressed in Table 2, the compliance values of the WP scale expressed in Table 4, and the compliance values of the OJ scale in Table 6 are compliant with the reliability statistics published by Schermelleh-Engel et al. (2003) and the construct validity of these scales is at an acceptable level.

The Kolmogorov-Smirnov and Shapiro-Wilk values that were determined as a result of the normality test conducted for this study's data are presented in Table 8. When the Kolmogorov-Smirnov values are interpreted considering the sample size ($n=197$), it is regarded that the data obtained from all of the scales used in the research do not show a normal distribution. Therefore, the skewness and kurtosis (kurtosis) values of the related scales are detailed.

Table 8: Normality Test Results

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
<i>OV</i>	0.132	197	0.000	0.916	197	0.000
<i>WP</i>	0.194	197	0.000	0.780	197	0.000
<i>OJ</i>	0.141	197	0.000	0.948	197	0.000

The skewness and kurtosis values of the data obtained from the scales used in the study are detailed in Table 9. When this table is examined, it has been determined that the skewness and kurtosis values for the OJ data set, which does not indicate a normal distribution based on the Kolmogorov-Smirnov value, are between -2 and $+2$. This data set shows a normal distribution based on the classification of George & Mallery (2003); the skewness and kurtosis values for OV and WP data sets are not between -2 and $+2$, and these data sets do not indicate a normal distribution.

Table 9: Normality Tests – Kurtosis and Skewness Values

	Statistics	Std. Error
<i>OV Scale</i>	<i>Skewness</i>	-1.248
	<i>Kurtosis</i>	2.974
<i>WP Scale</i>	<i>Skewness</i>	2.043
	<i>Kurtosis</i>	4.847
<i>OJ Scale</i>	<i>Skewness</i>	-0.847
	<i>Kurtosis</i>	0.657

Table 10 shows the results of the correlation analysis between the study's dependent variable and the independent variable, and between the mediator variable and the independent variable. According to this table, a low level and positive significant relationship have been found between the dependent variable, productivity, and independent variable, OV. A moderate and positive significant relation has been found between the mediator variable of the research and OJ and the independent variable, OV.

Table 10: Correlation Analysis Results

	<i>Spearman's rho</i>	<i>OV</i>
<i>WP</i>	Correlation	0.285
	Sig. (2-tailed)	0.000
<i>OJ (mediator)</i>	Correlation	0.418
	Sig. (2-tailed)	0.000

Table 11 shows the simple linear regression analysis for the relationship between *OV* and *WP*. When the regression analysis result was examined, it was found that the regression model to be established expresses a statistical significance, because the statistical significance value is less than 0.05 units.

Table 11: The Relationship between *OV* and *WP* – ANOVA

		Sum of squares		Mean square	F	Sig.
<i>Model 1</i>	<i>WP</i>	Regression	2313.128	2313.128		
		Residual	11968.557	61.377	37.687	0.000
		Total	14281.685			

The results of the performed regression analysis are presented in Table 12. According to these results, it was determined that 15.8% of the change in productivity is explained by the change in *OV*. Accordingly, the value of *WP* can be formulated as:

$$“WP = (0.600 \times OV)”$$

Table 12: *OV* and Productivity at Work – Model Summary

			β	t	Sig.	r^2	Adjusted r^2
<i>Model 1</i>	<i>WP</i>	<i>Constant</i>	-3.462	-0.921	0.358	0.162	0.158
		<i>OV</i>	0.600	6.139	0.000		

According to the model, an increase of 1 unit in *OV* seems to lead to a 0.600 unit increase in productivity. These findings confirm the H_{1a} hypothesis of the study. However, in order to test the assumption put forward in the H_{1b} hypothesis, it is necessary to examine the mediating role of *OJ*. For this, the mediator model designed by Baron & Kenny (1986) will be applied. In order to be able to talk about the mediating effect of a variable according to this model, the independent variable should have an effect on the dependent variable, the independent variable should effect the mediating variable, and when the intermediary variable is included in the regression analysis, the independent variable should have a significant effect on the dependent variable while the regression coefficient decreases the dependent variable. Accordingly, the performed regression analyses are stated below.

Table 13: *OV* and *OJ* (Mediator) – ANOVA

		Sum of squares		Mean square	F	Sig.
<i>Model 2</i>	<i>OJ</i>	Regression	5879.681	5879.681		
		Residual	13363.873	68.533	85.794	0.000
		Total	19243.553			

Table 13 shows a simple linear regression analysis for the relationship between OV and OJ. When the regression analysis result has been examined, it has been found that the regression model to be established expresses a statistical significance, because the statistical significance value is less than 0.05 units.

Table 14: OV and OJ (Mediator) – Model Summary

			β	t	Sig.	r^2	Adjusted r^2
<i>Model</i>	<i>OJ</i>	<i>Constant</i>	12.935	3.256	0.001	0.306	0.302
2		<i>OV</i>	0.956	9.262	0.000		

The results of the performed regression analysis are expressed in Table 14. Accordingly, it has been determined that 30.2% of the change in OJ explained the change in OV. The regression analysis performed for the last step required a measurement of the mediation effect, which is given below.

Table 15: OV, WP and OJ – ANOVA

		Sum of squares		Mean square	F	Sig.	
<i>Model</i>	3	<i>WP</i>	Regression	3370.105	1685.052		
			Residual	10911.581	56.245	29.959	0.000
			Total	14281.685			

Table 15 shows a multiple regression analysis for the relationship between the WP and OV and OJ. When the performed regression analysis was examined, it was found that the regression model to be established expresses statistical significance.

Table 16: OV, The Relationship between WP and OJ – Model Summary

			β	t	Sig.	R^2	Adjusted R^2
<i>Model</i>	3	<i>Constant</i>	-7.100	-1.921	0.056	0.236	0.228
		<i>OV</i>	0.331	2.948	0.004		
		<i>OJ</i>	0.281	4.335	0.000		

The results of the multiple regression analysis are expressed in Table 16. According to these results, it is determined that 22.8% of the change in productivity is explained by OV and the mediator variable OJ. When the 3 developed models are examined, it is determined that the regression coefficient is 0.600 units in the measurement of the relationship between OV and WP, and the regression coefficient related to OV decreased to 0.331 units in Model 3 and the OJ has shown a statistically significant effect. According to these results, OJ has been found to have a partial mediating effect on the relationship between OV and WP.

Table 17 explores the relationship between WP and the employees' genders. When the results in the table are examined, it was determined that the significance value has been less than 0.05 units, and the WP showed a significant difference according to the workers' genders. According to this, it is determined that the productivity level at work is higher in female employees than in male employees.

Table 17: WP and Gender / Mann-Whitney U Test

Gender	N	Mean	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)	
WP	<i>Male</i>	121	91.80	11107.50	3726.500	11107.500	-2.246	0.025
	<i>Female</i>	76	110.47	8395.50				

Table 18 explores the relationship between WP and the industry. When the analysis results are examined, it was determined that the significance value is less than 0.05 units, and the WP has shown a significant difference compared to the sector studied. When examined in detail, it has been determined that the level of WP is higher among those working in the private sector compared to those working in the public sector.

Table 18: WP and Sector / Mann-Whitney U Test

Sector	N	Mean	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)	
WP	<i>Private</i>	125	110.98	13873.00	3002.000	5630.000	-3.903	0.000
	<i>Public</i>	72	78.19	5630.00				

Table 19 explores the relationship between WP and the employees' ages. When the results in the table are examined, it is observed that the significance value is less than 0.05 units. Accordingly, it has been determined that the level of WP shows a significant difference according to the workers' ages. However, a Post-Hoc analysis was performed to determine which age groups differ significantly. When examined in detail, it was determined that the WP for the employees under the age of 21 was higher compared to the 21-40 age group and the 41-60 age group, and at the same time, the WP for the age group 21-40 is higher than that of the 41-60 age group.

Table 19: WP & Age / Kruskal-Wallis H Test

	Age	N	Mean Rank	Chi-Square	df	Asymp. Sig.
WP	<i>Younger than 21</i>	15	135.70	17.903	3	0.000
	<i>21-40</i>	130	102.74			
	<i>41-60</i>	48	74.16			
	<i>Older than 60</i>	4	138.00			

Table 20 explores the relationship between the educational attainment of the employees and the WP. When the results in the table are examined, it is observed that the significance value is less than 0.05 units. Accordingly, it has been determined that the productivity level at work showed a significant difference according to the workers' educational levels. However, a Post-Hoc analysis was performed in order to determine which education levels differ significantly. As a result of this analysis, it has been determined that the productivity level at work for undergraduate graduates is higher than that of the high school and primary school graduates.

Table 20: WP & Education Status / Kruskal-Wallis H Test

	Educational Status	N	Mean Rank	Chi-Square	df	Asymp. Sig.
WP	<i>Primary School</i>	22	81.55	13.202	4	0.010
	<i>High School</i>	61	87.26			
	<i>Associate</i>	39	99.76			
	<i>Undergraduate</i>	57	120.43			
	<i>Post-Graduate</i>	18	90.61			

Table 21 explores the relationship between the employees' monthly income level and WP. When the results in the table are examined, it was determined that the significance value has been greater than 0.05 units, and accordingly, WP did not differ significantly from the monthly income level of employees.

Table 21: WP & Monthly Income / Kruskal-Wallis H Test

	Monthly Income Level	N	Mean Rank	Chi-Square	df	Asymp. Sig.
WP	<i>Less than TRY 1000</i>	8	116.75	15.901	4	0.063
	<i>Between TRY 1001 - 2000</i>	33	120.36			
	<i>Between TRY 2001 - 4000</i>	108	99.21			
	<i>Between TRY 4001 - 6000</i>	38	90.80			
	<i>TRY 6001 or more</i>	10	43.20			

Table 22 explores the relationship between the duration of work experience and WP. When the values in the table are analyzed, it is regarded that the significance value is greater than 0.05 units. Accordingly, it has been found that the level of WP did not differ significantly from the work experience levels.

Table 22: WP & Work Experience / Kruskal-Wallis H Test

	Work Experience	N	Mean Rank	Chi-Square	df	Asymp. Sig.
WP	<i>Less than 1 year</i>	22	107.82	6.152	4	0.188
	<i>1-3 years</i>	39	116.26			
	<i>4-6 years</i>	47	93.73			
	<i>7-9 years</i>	41	95.48			
	<i>10 years and above</i>	48	89.10			

5. Discussion and Conclusion

With the research conducted, the productivity of work, which is very important for the continuity of the organizations, and the OV, which is thought to have an impact on this output, have been examined. The mediation effects of the perception of OJ on the relationship between these two factors have been tested. For this purpose, data have been obtained from a face-to-face sampling method from 212 employees, and these data have been evaluated with statistical package programs. As a result of this process, the H_{1a} hypothesis has been accepted by finding a significant relationship between

OV and WP. In addition, the H_{1b} hypothesis has been accepted by finding a significant relationship between OV and OJ. To test the mediation effect, simple and linear regression analyses were carried out to test the proposed H_{1c} hypothesis. As a result of the analysis based on Model 1, the effect of OV on WP has been determined as $\beta = 0.600$ units. In Model 2, which was created in accordance with the mediator model, the effect of OV on OJ has been determined as $\beta = 0.956$ units. In Model 3, the effect of OV on WP has been found to be $\beta = 0.331$ units, and the effect of OJ is $\beta = 0.281$ units. When the findings of this analysis are examined, it is observed that while the effect of the organizational virtue on WP is 0.600 units, this effect decreases at 0.331 units with the inclusion of OJ as a variable. Therefore, the mediating role of the OJ proposed in the hypothesis H_{1c} has been accepted, but the mediation role of the variable has been determined as the “partial agent.” As a result of the analyses conducted on other hypotheses, the hypothesis H_{1d} has been accepted due to a determination of high WP in private sector employees compared to the public sector employees, the hypothesis H_{1e} has been accepted due to determining that the employees in the age range of 21-40 have more WP compared to the employees in the age range of 41-60. The hypothesis H_{1f} has been accepted due to the fact that the WP is higher in undergraduate employees compared to high school and primary school graduates, and the hypothesis H_{1k} has been accepted due to the determination that WP is higher in female employees compared to male employees. The H_{1g} hypothesis and H_{1h} hypothesis have been rejected because the monthly income level and work experience were determined not to be a statistically impressive factor on WP. Thus, OV is an important predictor for productivity in work, which is vital for organizations, but this moderation is limited with the mediator model, while OV increases work productivity indirectly, but when examined in detail, the perception of OJ increases as an organization’s virtuousness increases, and therefore, it has been concluded that it positively affects WP.

With the research conducted, OV has been added to the literature as a new factor that affects WP. As seen in the research results, virtuousness affects justice in employees, and as a result, productivity increases in employees who develop a sense of equality and justice. Therefore, it is very important for organizations that the employees are virtuous. According to Cameron (2004:3), “OV includes individuals actions, collective activities, cultural attributes, or processes that enable dissemination and perpetuation of virtuousness in an organization.” Positive organizational behaviors, such as virtuousness and individual optimism, are the most important factors organizations need to survive in a bad environment (Ugwu, 2012). Prosocial movements are expected in individuals with a high perception of virtuousness and the desire to act positively without considering the consequences. Positive and supportive behaviors and a sincere desire are observed in these employees (Tsachouridi & Nikandrou, 2019). Behaviors which involve fairness, prudence, honesty, the management of emotional reactions, and the performance of ethical actions are characteristic of virtuous people (Fernando & Chowdhury, 2015). Virtuousness protects an organization and its employees from negative behaviors by strengthening positive ties, attitudes and behaviors, increasing flexibility, solidarity, and efficiency (Rego et al., 2010). In addition, since virtuous organizations have an upward spiral model that strengthens itself, thanks to this strengthening mechanism, individuals are directed to act virtuously in the spiral with the contributions of others (Meyer, 2018). Therefore, it is requested that the workforce that chooses to exhibit these behaviors will dominate the organization. However,

in order for individuals to perceive OV in the workplace, the positive human impact, moral well-being, and social well-being procedures in the organization and its processes, their organizational management must meet these expectations (Tsachouridi & Nikandrou, 2019).

Author Contribution

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and article preparation.

Conflict of Interest

The author declared no potential conflicts of interest.

Financial Support

The author received no financial support for the research, authorship, and/or publication of this article.

References

- Abedi, S. H., Eslami, H., & Amrolahi, N. (2014). The role of organizational virtuousness on the organizational commitment of employees (Case study: Islamic Azad university). *Interdisciplinary Journal of Contemporary Research in Business*, 5(10), 118-130.
- Abedikooshki, S., & Zeinabadi, H. (2016). Organizational Virtuousness in Schools: A Review of Factor Structure of a Tool in Secondary Schools. *Journal of Administrative Management, Education and Training*, 12(2), 60-69.
- Abekah-Nkrumah, G., & Atinga, R. A. (2013). Exploring the link between organisational justice and job satisfaction and performance in Ghanaian hospitals. *International Journal of Workplace Health Management*, 6(3), 189-204.
- Akçay, A., & Atilla, G. (2019). İş Motivasyon Araçlarının ve Eğitim-Geliştirme Faaliyetlerinin Çalışanların İş Üretkenliğine Etkisi. *International Social Sciences Studies Journal*, 5(31), 1459-1488.
- Anggitaningsih, R., & Handriyono, H. (2019). Effect of Environmental Work Leadership Style Compensation On Employee Productivity Intervening As Employee Satisfaction In Business Unit Pt. Brantas Bipraya In Jakarta. *International Journal of Scientific & Technology Research*, 8(7), 182-189.
- Atmaja, N. P. C. D., & Puspitawati, N. M. D. (2018). Effect of Physical Work Environment Through Productivity Employees Job Satisfaction As An Intervening Variable. *International Journal of Scientific & Technology Research*, 17(5), 98-103.
- Barclay, L. A., Markel, K. S., & Yugo, J. E. (2012). Virtue theory and organizations: considering persons with disabilities. *Journal of Managerial Psychology*, 27(4), 330-346.
- Baron, R. M., & Kenny, D. A. (1986) The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

- Been, I. D., & Beijer, M. (2014). The influence of office type on satisfaction and perceived productivity support. *Journal of Facilities Management, 12*(2), 142-157.
- Bendaravičienė, R., Vveinhardt, J., & Vinickyte, I. (2019). Guidelines of integrated management solutions: volunteers' emotional intelligence, intercultural training and work productivity. *Problems and Perspectives in Management, 17*(2), 404-414.
- Bergami, M., & Morandini, G. (2019). Relationship between perceived justice and identification. *Employee Relations, 41*(1), 176-192.
- Bhagat, V., Haque, M., & Simbak N. B. (2018). Burnout flattens the professional work productivity. *J Datta Meghe Inst Med Sci Univ, 13*, 217-226.
- Bright, D. S., Cameron, K. S., & Caza, A. (2006). The amplifying and buffering effects of virtuousness in downsized organizations. *Journal of Business Ethics, 64*(3), 249-269.
- Budiyono (2019). Motivation of Work, Organizational Culture, and Organizational Commitment towards Work Productivity Lecturers and Employees of Economics College AAS Surakarta. *Humanities & Social Sciences Reviews, 7*(5), 226-236.
- Burton, W. N., Schultz, A. B., Chen, C. Y., & Edington, D. W. (2008). The association of worker productivity and mental health: a review of the literature. *International Journal of Workplace Health Management, 1*(2), 78-94.
- Cameron, K. S. (2003). Organizational virtuousness and performance. *Positive organizational Scholarship, 48*-65.
- Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist, 47*(6), 766-790.
- Chandel, P. K., & Shahi, S. (2017). A Study to find out the Relationship Between Personality and Work Productivity. *Psyber News, 8*(1), 13-21.
- Chandraratne, M., Kodituwakku, D., & Upendra, J. (2018). Impact of Job Stress on Work Productivity: A Study Based on Travel Executives of Sri Lanka. *ICBT Campus, Annual International Research Symposium, Sri Lanka*.
- Chen, J., Taylor, B., Palmer, A. J., Kirk-Brown, A., van Dijk, P., Simpson Jr, S., ..., & van der Mei, I. (2019). Estimating MS-related work productivity loss and factors associated with work productivity loss in a representative Australian sample of people with multiple sclerosis. *Multiple Sclerosis Journal, 25*(7), 994-1004.
- Corbiere, M., Zaniboni, S., Dewa, C. S., Villotti, P., Lecomte, T., Taieb, H., Hupe, J., & Fraccaroli, F. (2019). Work productivity of people with a psychiatric disability working in social firms. *Work, 62*, 151-160.
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of management perspectives, 21*(4), 34-48.
- Çöp, S., & Doğanay, A. (2019). Pasif İletişim Tarzının Örgütsel Muhalefete Etkisinde Örgütsel Erdemliliğin Düzenleyici Rolü: Bir Alan Araştırması. *Third Sector Social Economic Review, 54*(3), 1458-1475.
- Demir, İ. B., Ürek, D., & Uğurluoğlu, Ö. (2017). Sağlık Çalışanlarının Sanal Kaytarma Davranışlarının İşte Üretkenliklerine Etkisi. *Online Academic Journal of Information Technology, 8*(30), 291-303.
- Duru, C. E., & Shimawua, D. (2017). The Effect of Work Environment on Employee Productivity: A Case Study of Edo City Transport Services Benin City, Edo State Nigeria. *European Journal of Business and Innovation Research, 5*(5), 23-29.
- Elqadri, Z. M., Wardoyo, D. T. W., & Priyono (2015). The Influence of Motivation and Discipline Work against Employee Work Productivity Tona'an Markets. *Review of European Studies, 7*(12), 59-66.
- Endicott, J., & Nee, J. (1997). Endicott Work Productivity Scale (EWPS): a new measure to assess treatment effects. *Psychopharmacology Bulletin, 33*(1), 13-16.

- Erkmen, T., & Esen, E. (2012). Örgütsel Erdemlilik Ölçeğinin Uyarlanması: Geçerlik ve Güvenirlik Çalışması/ Adaptation of the Organizational Virtuousness Scale: Validity and Reliability Studies. *Business and Economics Research Journal*, 3(4), 107-121.
- Esfandiari, M., Zaid, S. M., Ismail, M. A., & Aflaki, A. (2017). Influence of indoor environmental quality on work productivity in green office buildings: A review. *Chemical Engineering Transactions*, 56, 385-390.
- Fernando, M., & Chowdhury, R. (2015). *Cultivation of virtuousness and self-actualization in the workplace*. The handbook of virtue ethics in business and management, 1-13.
- Fernando, M., Caputi, P., & Ashbury, F. (2017). Impact on employee productivity from presenteeism and absenteeism: evidence from a multinational firm in Sri Lanka. *Journal of Occupational and Environmental Medicine*, 59(7), 691-696.
- George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference*, 4th ed., Boston, MA: Allyn & Bacon.
- Greenberg, J. (2011). Organizational justice: The dynamics of fairness in the workplace. In S. Zedeck (Ed.), *APA handbooks in psychology. APA handbook of industrial and organizational psychology*, Vol. 3. Maintaining, expanding, and contracting the organization (271–327). American Psychological Association
- Haddad, R., Karkoulian, S., & Nehme, R. (2018). The impact of 360 feedback appraisal system on organizational justice and sustainability: The mediating roles of gender and managerial levels. *International Journal of Organizational Analysis*, 27(3), 712-728.
- Hao, Y., Hao, J., & Wang, X. (2016). The relationship between organizational justice and job satisfaction. *Journal of Chinese Human Resource Management*, 7(2), 115-128.
- Hassan, A., & Hashim, J. (2011). Role of organizational justice in determining work outcomes of national and expatriate academic staff in Malaysia. *International Journal of Commerce and Management*, 21(1), 82-93.
- Haybatollahi, M., & Gyekye, S. A. (2015). Organizational Justice: A Cross-National Comparative Study of Ghanaian Industrial Workers and Their Finnish Counterparts. *International Journal of Organization Theory & Behavior (PrAcademics Press)*, 18(2), 231-252.
- Hur, W. M., Shin, Y., Rhee, S. Y., & Kim, H. (2017). Organizational virtuousness perceptions and task crafting. *Career Development International*, 22(4), 436-459.
- Ierodiakonou, C., & Stavrou, E. (2015). Part time work, productivity and institutional policies. *Journal of Organizational Effectiveness: People and Performance*, 2(2), 176-200.
- Ismail, M., & Baki, N. U. (2017). Organizational factors of justice and culture leading to organizational identification in merger and acquisition. *European Journal of Training and Development*, 41(8), 687-704.
- Jiang, Z., Gollan, P. J., & Brooks, G. (2015). Moderation of doing and mastery orientations in relationships among justice, commitment, and trust. *Cross Cultural Management*, 22(1), 42-67.
- Karakas, F., Sarigollu, E., & Kavaz, M. (2015). Discourses of collective spirituality and Turkish Islamic ethics: An inquiry into transcendence, connectedness, and virtuousness in Anatolian tigers. *Journal of business ethics*, 129(4), 811-822.
- Khalid, S., Muqadas, F., Farooqi, Y. A., & Nazish, A. (2014). Impact of LMX on organizational justice and organizational justice on organizational citizenship behavior. *European Journal of Business and management*, 5(2), 144-160.
- Khanzadi, M., Nasirzadeh, F., Mir, M., & Nojedehi, P. (2018). Prediction and improvement of labor productivity using hybrid system dynamics and agent-based modeling approach. *Construction Innovation*, 18(1), 2-9.
- Lesiuk, T. (2005). The effect of music listening on work performance. *Psychology of Music*, 33(2), 173-191.

- Magnier-Watanabe, R., Uchida, T., Orsini, P., & Benton, C. (2017). Organizational virtuousness and job performance in Japan: does happiness matter?. *International Journal of Organizational Analysis*, 25(4), 628-646.
- Matin, H. Z., Razavi, H. R., Azimy, L., & Emamgholizadeh, S. (2014). Is stress management related to workforce productivity?. *Iranian Journal of Management Studies*, 7(1), 1-19.
- Meyer, M. (2018). The evolution and challenges of the concept of organizational virtuousness in positive organizational scholarship. *Journal of Business Ethics*, 153(1), 245-264.
- Muhammad, A. H. (2004). Procedural justice as mediator between participation in decision-making and organizational citizenship behavior. *International Journal of Commerce and Management*, 14(3-4), 58-69.
- Myhill, A., & Bradford, B. (2013). Overcoming cop culture? Organizational justice and police officers' attitudes toward the public. *Policing: an international journal of police strategies & management*, 36(2), 338-356.
- Ngozi, N. P., & Ifeoma, O. R. (2015). The Role of Effective Communication on Organizational Performance: A Study of Nnamdi Azikiwe University, Awka. *Review of public administration and management*, 400(3617), 1-18.
- Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management journal*, 36(3), 527-556.
- Nikandrou, I., & Tsachouridi, I. (2015). Towards a better understanding of the "buffering effects" of organizational virtuousness' perceptions on employee outcomes. *Management Decision*, 53(8), 1823-1842.
- Okazaki, E., Nishi, D., Susukida, R., Inoue, A., Shimazu, A., & Tsutsumi, A. (2019). Association between working hours, work engagement, and work productivity in employees: A cross-sectional study of the Japanese Study of Health, Occupation, and Psychosocial Factors Relates Equity. *Psyber News*, 61(2), 182-188.
- Olusanya, S. O., Awotungase, S. A., & Chukwuemeka, O. E. (2012). Effective Planning and Organisational Productivity. *Journal of Humanities And Social Science*, 5(5), 31-39.
- Palvalin, M. (2019). What matters for knowledge work productivity. *Employee Relations*, 41(1), 209-227.
- Petreanu, V., Iordache, R., & Seracin, M. (2013). Assessment of work stress influence on work productivity in Romanian companies. *Procedia-Social and Behavioral Sciences*, 92, 420-425.
- Pires, M. L., & Nunes, F. (2018). The mediating role of virtuousness in human resource management and job outcomes. *Revista de Administração de Empresas*, 58(4), 380-392.
- Polatçı, S., & Özçalık, F. (2015). Çalışanların örgütsel adalet algıları ile üretkenlik karşıtı iş davranışları etkileşiminde pozitif ve negatif duygusallığın aracılık etkisi. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17(2), 215-234.
- Rai, S. (2015). Organizational justice and employee mental health's moderating roles in organizational identification. *South Asian Journal of Global Business Research*, 4(1), 68-84.
- Ramdeo, S., & Singh, R. (2019). Abusive supervision, co-worker abuse and work outcomes: procedural justice as a mediator. In *Evidence-based HRM: a Global Forum for Empirical Scholarship*, 7(3), 325-341.
- Randeree, K., & Malik, I. (2008). Models for Leading with Organizational Justice: Equitable Management of the Human Resource in Diverse Environments. *International Journal of Diversity in Organisations, Communities & Nations*, 7(6), 65-69.
- Ravianto, J. (1986). *Produktivitas dan Pengukuran*. Jakarta: Binaman Teknika Aksara
- Rego, A., Ribeiro, N., & Cunha, M. P. (2010). Perceptions of organizational virtuousness and happiness as predictors of organizational citizenship behaviors. *Journal of Business Ethics*, 93(2), 215-235.
- Salem, M. E. A., Hegazy, N. N., & Mohamed, S. G. (2016). The effect of diabetes and hypertension on work productivity and job satisfaction. *Menoufia Medical Journal*, 29(4), 1106-1111.

- Savery, L. K. (1996). Productivity improvement: a working person's view. *Journal of Management Development*, 5(7), 16-26.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(2), 23-74.
- Shahid, S., & Muchiri, M. (2019). Positivity at the workplace: Conceptualising the relationships between authentic leadership, psychological capital, organisational virtuousness, thriving and job performance. *International Journal of Organizational Analysis*, 27(3), 494-523.
- Shamma, F. (2018). Organizational Justice among School Principals within Israeli Arab Schools from the Teachers' Point of View. *International Journal of Science and Research*, 7(3), 130-132.
- Stamenkovic, S., Njegovan, B. R., & Vukadinovic, M. S. (2018). Intra-national diversity. *Cross Cultural & Strategic Management*, 25(3), 425-442.
- Sumiyati, S., Masharyono, M., Pratama, K. F., & Purnama, R. (2016). The Effect of Social Work Environment on Employee Productivity in Manufacturing Company in Indonesia. In *2016 Global Conference on Business, Management and Entrepreneurship*. Atlantis Press.
- Taiwo, A. S. (2010). The influence of work environment on workers productivity: A case of selected oil and gas industry in Lagos, Nigeria. *African Journal of Business Management*, 4(3), 299-307.
- Tolukan, E., & Akyel, Y. (2019). Research on the Relationship between Trainers' Turnover Intention and Organizational Justice. *International Journal of Higher Education*, 8(1), 181-192.
- Tsachouridi, I., & Nikandrou, I. (2016). Organizational virtuousness and spontaneity: A social identity view. *Personnel Review*, 45(6), 1302-1322.
- Ugwu, F. O. (2012). Are good morals often reciprocated? Perceptions of organizational virtuousness and optimism as predictors of work engagement. *Work*, 1(3), 188-198.
- Uğuz, Ş., İnanç, Y. B., Yerlikaya, E., & Aydın, H. (2004). Endicott İşte Üretkenlik Ölçeği'nin (EİÜÖ) Türk toplumunda geçerlilik ve güvenilirliğinin değerlendirilmesi. *Türk Psikiyatri Dergisi*, 15(3), 209-214.
- Velciu, M. (2017). Job Mismatch-Effects on Work Productivity. *SEA-Practical Application of Science*, (15), 395-398.
- Voordt, J. M. (2004). Productivity and employee satisfaction in flexible workplaces. *Journal of Corporate Real Estate*, 6(2), 133-148.
- Vveinhardt, J., Bendaraviene, R., & Vinickyte, I. (2019). Mediating factor of emotional intelligence in intercultural competence and work productivity of volunteers. *Sustainability*, 11(9), 2625.
- Wiili-Peltola, E., Kivimäki, M., Elovainio, M., & Virtanen, M. (2007). Organisational justice and employee perceptions on hospital management. *Journal of health organization and management*, 21(3), 320-332.
- Williams, P., Kern, M. L., & Waters, L. (2015). A longitudinal examination of the association between psychological capital, perception of organizational virtues and work happiness in school staff. *Psychology of Well-Being*, 5(5), 1-18.
- Xavier, R. M., Zerbini, C. A. F., Pollak, D. F., Morales-Torres, J. L. A., Chalem, P., Restrepo, J. F. M., ..., & Dávila, A. P. (2019). Burden of rheumatoid arthritis on patients' work productivity and quality of life. *Advances in Rheumatology*, 59(1), 47-58.
- Yamada, M., Mizuno, Y., & Shigeyasu, C. (2012). Impact of dry eye on work productivity. *ClinicoEconomics and outcomes research: CEOR*, 4, 307-312.
- Yıldırım, F. (2002). Çalışma Yaşamında Örgüte Bağlılık ve Örgütsel Adalet İlişkisi. Ankara: Ankara Üniversitesi Sosyal Bilimler Enstitüsü Psikoloji (Sosyal Psikoloji) Anabilim Dalı Yayınlanmış Doktora Tezi.

- Yücel, C., & Taşçı, S. K. (2008). Öğretmenlerin Kişilik Özellikleri ve Örgütsel Vatandaşlık Davranışı. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (20), 685-706.
- Zhang, L., Nie, T., & Luo, Y. (2009). Matching organizational justice with employment modes. *Journal of Technology Management in China*, 4(2), 180-187.

Resume

H. Tezcan UYSAL (Assoc, Prof.) is an Associate Professor at the Zonguldak Bülent Ecevit. Uysal's research interests have spanned a wide range of topics, from job satisfaction, motivation, stress, organizational climate, mobbing, reverse mobbing, decision making, job performance, to benchmarking, individual service quality, behaviour models, cynicism, burnout, leadership. In recent years, he has focused on the new techniques and models in work psychology such as Psychological Benchmarking. He has published over 50 articles in international refereed journals, conference proceedings. He is also a regular reviewer for a number of national and international refereed journals.