

INSTITUTO UNIVERSITÁRIO DE LISBOA

October, 2023

From Internal Communication to Organizational Citizenship Behavior through Work Engagement: Does virtuality matter?
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BUSINESS SCHOOL

October, 2023

Department of Marketing, Strategy and Operations

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Acknowledgments

Finishing two years of my master's degree in this way has a different flavour. They have been two of the most difficult years of my life so far, especially the last year of my Master's, which, between work, projects and family, proved to be complex and complicated, but it is true that every day is a new opportunity to believe and fight back. If achieving a goal is important, it's the journey that brings the pleasure, and that's made up of people. There is no doubt that without them and their love, in the form of insistence, presence, a hug or a positive word, were always there for me.

Without a doubt, without my family, this would never have been an objective that I would have seen fulfilled. That's why, although it's very little to thank, I would like to thank my parents, José Augusto Silva and Sandra Isabel Silva, who always let me dream and, by my side, made me believe, giving me wings to continue and to achieve yet another goal, supporting me every moment in many ways. I can't forget my brother, Gonçalo Silva, who has also accompanied me during this phase of my growth and has often been part, in one way or another, of what I've been developing over the last two years, never shying away from what I've been doing. To my grandparents, on my mother's side, José Manuel Vieira and Nazaré Leitão Vieira, and on my father's side, Francisco Maria Silva and Laurinda Macedo Silva, who have always encouraged and dreamed of me, making my dream theirs too. To my girlfriend, Vera Filipa Martins, who at various times encouraged, persisted and insisted that this thesis should go ahead, giving me the hope and presence, I needed to continue and finish my master's degree.

I would also like to say a very special thank you to my supervising professor, Maria Teresa de Almeida, who was undoubtedly the person who would have made the development of my master's thesis possible. Very present, insistent, reinventive, always tried to motivate me so that I could take this work forward. The fact that you believed in me and in this thesis was half the battle to ensure that the work was carried out in the best possible way. You were tireless and for that I thank you.

Without "my" people and their love, it would have been much harder to believe. A big and deep thank you.

Sumário

Na atual ambiente mudança em que vivemos, o marketing centra-se principalmente na venda

a clientes externos, sendo a sua dimensão interna muitas vezes posta de lado. O marketing

interno vê os empregados como clientes internos, cujas necessidades devem ser satisfeitas para

garantir o seu empenhamento e satisfação. Uma das estratégias mais importantes do marketing

interno é a comunicação interna, que pode ser tanto formal como informal. Este contexto de

mudança pode pôr em causa estratégias já estabelecidas, nomeadamente as relacionadas com

as práticas de comunicação. Para responder a esta questão, esta investigação analisa o papel

moderador da virtualidade na relação entre a comunicação e os comportamentos de cidadania

organizacional através do comprometimento com o trabalho. Para testar o modelo proposto,

377 participantes responderam a um inquérito online. Os resultados indicam que o impacto da

comunicação no comportamento de cidadania organizacional não depende dos níveis de

virtualidade, o que realça o papel da comunicação interna. Além disso, a comunicação informal

tem um impacto direto nos comportamentos de cidadania organizacional.

Palavras-Chave: Marketing Interno, Comunicação Informal e Formal, Comprometimento com

o Trabalho, Comportamento de Cidadania Organizacional, Virtualidade, Recursos Humanos

JEL Classification System: M31 – Marketing; O15 – Human Resources

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Abstract

In a world permanently changing where marketing is focusing on selling to clients, it is often

forgotten what is marketed within an organization is reflected in many levels, internally and

externally. The Internal marketing sees employees as internal customers, whose needs must be

met to ensure their commitment and satisfaction. One of the most important internal marketing

strategies is internal communication, which can be both formal and informal. Here, formal and

informal communication plays a crucial role towards organizational citizenship behaviors.

However, more companies are working without the requirement of having physical places to

work, meaning working remotely and changing the regular interaction between people. This

research focuses on how the interaction between (formal and informal) communication and

organizational citizenship behavior on a virtual environment is. Through an online survey with

377 participants, it was possible to understand on above-mentioned interaction that it has no

effect due to virtuality, although it was possible to understand the informal communication as

a major impact in promoting organizational citizenship behavior, way more than formal

communication.

Keywords: Internal Marketing, Informal and Formal Communication, Work Engagement,

Organizational Citizenship Behavior, Virtuality, Human Resources

JEL Classification System: M31 – Marketing; O15 – Human Resources

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Glossary

Internal Marketing – IM Informal Communication – IC Formal Communication – FC Work Engagement -WE Organizational Citizenship Behavior - OCB Helping Behavior – H Civic Virtue - CV Sportsmanship - S Virtuality - V Remote Work - RW Human Resources – HR Job Demands-Resources – JD-R Virtual Reality – VR Social Exchange Theory – SET Information and Communication Technologies - ICT Composite Reliability - CR Average Variance Extracted - AVE Partial Least Squares Structural Equations Modelling - PLS-SEM

Supported-S

Not Supported - NS

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INTRODUCTION

Communication is primarily concerned with the process of meaning creation. Specific issues include how meaning is created psychologically, socially, and culturally; how messages are comprehended intellectually; and how ambiguity occurs and is addressed, according to Rosengren (1999). This translates the importance of communication within organizations are increasingly becoming more and more important to keep teams working efficiently, motivated, and committed to the organization (Baker, 2007). The concept of communication is essential to organizational and management theory (Tompkins, 1987) and much of the nascent research on this topic has emerged from scholars of organizational communication (Goldhaber, 1990; Jablin & Putnam, 2001).

This topic gains more relevance across the years and even more when Covid-19 pandemic hit. In the wake of the Covid-19 pandemic, a considerable number of companies have expressed a sincere desire to adopt these working practices and investing in remote work (RW) programs is one of their top objectives for the foreseeable future (Pianese & Errichiello, 2022). With the Covid-19 pandemic, most of the work activities were required to be done remotely, which created fundamental changes, for example, Galanti et al. (2021) suggests employees are required to cook at least three meals a day (breakfast, lunch, and dinner) for themselves and their entire family. They must also help children with their homework in the afternoon and spend quality time with them after they finish it. Consequently, workers experience increased family-work conflict at work, which may have detrimental influence on workers' job satisfaction and productivity as well as stress associated to unfinished remote work. According to the findings (Yang et al. 2021), the company's wide adoption of remote work made the collaborative network of employees more rigid and isolated, with fewer links connecting dissimilar components, where asynchronous communication increased while synchronous communication decreased, and which consequently may have made it more difficult for staff members to gather and distribute fresh information over the network. If communication was already important, now it is crucial to understand how organizations can use internal marketing (IM), not only for in-person work but also for remote work to be well succeeded.

More than ever, introduced by the Covid-19 pandemic, organizations must adapt to changes as fast as they can. For example, the Global CAD, in 2020, suggested a methodical action plan which a company can use to adapt to Covid-19 and other upcoming changing periods, aiming the long-term organizational survival, and where communication is critical for

a successful adaptation. Moreover, understanding if the application of the different practices changes while in remote work or in-person work is crucial to support the companies' survival as Organ (1988) shares. His research suggests that the employees work engagement (WE) through organizational citizenship behavior (OCB) is essential to the organization's survival, once it increases productivity enhancement and stability, the management of resources, the coordination of group activities, personnel recruitment, and the capacity to respond to external changes.

This thesis will try to understand how important internal marketing, in terms of informal and formal communication (IC and FC) is, how it relates to work engagement and with organizational citizenship behaviors within the organizations when there are certain levels of virtuality (V). Furthermore, it will be founded on the premise that the conventional practice of only selling a company's ideas and products to customers is no longer a sustainable long-term solution for businesses once many businesses frequently promote an image to the public that is different from their internal reality. Internal marketing adopts a perspective where employees are viewed as internal customers. This approach prioritizes employee satisfaction and commitment as crucial drivers of organizational success, with a strong emphasis on internal communication and motivation to nurture customer-conscious employees. To achieve a concise market approach and foster enhanced customer relationships, the internal promotion of the company within the organization becomes imperative, where empathy and truth must be on the table because customers want to feel that they are being helped and want genuine connections these days, rather than just trying to sell them goods or services, as mentioned by Tapscott (1999). The implementation of this strategic approach underlines the importance of communications, and it is imperative in fostering not only work engagement and performance, but also extra-role behaviors, as organizational citizenship behaviors. Moreover, OCB, characterized by discretionary behaviors, significantly enhances organizational effectiveness. Effective communication emerges as a linchpin in motivating OCB, fostering a positive environment, and inspiring pro-social behaviors among employees. Furthermore, work engagement is a dynamic concept involving employees channeling their energies into their roles, resulting in elevated performance and organizational benefits. Organizations increasingly explore interventions, including bottom-up approaches, to empower employees to shape their own work engagement. Also, the last variable, virtuality, is rooted in Virtual Reality (VR), assumes a pivotal role in the contemporary workplace. The widespread adoption of remote work, particularly accelerated by the recent pandemic, has rendered virtuality ubiquitous. Virtual teams, regardless of geographical proximity, exhibit varying degrees of

virtuality, shaped by communication technology. This thesis explores various theories, including cues-filtered-out theories, social construction theories, and adaptive structuration theory, explore the multifaceted impact of virtuality on work engagement, OCB, communication and organizational adaptability.

Additionally, this thesis will work to provide suggestions over the conduct study and future research regarding internal marketing on remote work with concise and reliable data. It will as well seek to contribute to the theoretical field, but that it will also look for discuss practical implications. Moreover, this thesis has three main goals, namely: to understand how internal communication (formal and informal) is directly associated to organizational citizenship behaviors; the mediating role of work engagement; the moderator effect of virtuality. The structure of the following thesis is composed by five chapters. The first one is conceptualizes the literature review where the topics of internal marketing, organizational citizenship behavior, the mediator role of work engagement and the moderator role of virtuality will be developed to further set up hypothesis and it is where it will be presented the conceptual model. On the chapter 2, it is provided the method used for developing the research and where the data analysis strategy, the ample, the procedure, the measures and measurement model is described and analyzed to further discuss. The chapter three provides the results, starting by the descriptive and bivariate statistics and the structural model. The chapter four, it is where the discussion will take place and the theoretical contribution and practical implications are developed. This thesis will conclude with the limitations, what to take in consideration for future research and some recommendations, in the chapter five.

In conclusion, the relevance of communications within organizations is undeniable. It supports teamwork, and employee engagement, and the Covid-19 pandemic has amplified the importance of the communication itself due to remote work.

CHAPTER 1 – LITERATURE REVIEW

Literature review starts by describing internal marketing, its relevance and the specific role of internal communication, both formal and informal. Then, we describe a set of positive and discretionary behaviors (i.e., organizational citizenship behaviors) that we propose can be influenced by internal communication practices. Then, departing from the job demands and resources framework, we introduce work engagement as a possible mediator between a valuable organizational resource (i.e., internal communication) and OCB. We conclude the section by introducing the possible moderator role of virtuality (i.e., the degree of remote work), that, from literature, can be conceived of as a job demand that will interact with internal communication practices.

1.1. Internal Marketing

The concept of internal marketing was originally proposed as a marketing approach to further improve external marketing concepts such as loyalty and satisfaction (Huang, 2020). Promoting the practice of considering employees as internal customers (a concept first tested by Japanese quality managers in the 1950s) and adding a twist by treating employees' jobs as internal products (Ballantyne, 1997), contributed to the emergence of the most well-known internal marketing definition: "employees as customers" (Berry, 1981, p.33-9). Accordingly, this concept is based on the fundamental idea that, like external customers, internal customers want to have their needs met.

In a similar vein, ten years later, for Berry and Parasuraman (1991) Internal Marketing goes beyond internal communication, viewing employees as internal customers, viewing jobs as internal products that satisfy the needs and wants of these internal customers while addressing the objectives of the firm. Additionally, Helman and Payne (1992) were among the first to introduce and emphasize the significance of internal marketing as a marketing approach boost organizational effectiveness by treating employees as customers in service management. They first proposed internal marketing as a method for managing services wherein involved the traditional marketing concept and the associated marketing mix are applied internally within an internal market, where employees are treated as customers of the company in order to enhance corporate effectiveness by strengthening relationships within the internal market.

The above definitions prioritize the idea of the employees as internal customers. However, other perspectives placed attention to a perspective that emphasizes the roles of internal communication, motivation and costumer conscious employees (Grönroos, 1981). This author proposed internal marketing as a way to retain motivated and obtain customer-conscious employees across the organization through the improvement of communication and the design of coordinated tasks. Additionally, according to George (1990), internal marketing is a concept that views employees as a set of internal stakeholders whose needs must be satisfied in order for them to meet the demands of the external clients.

A similar idea was also previously proposed by Cowell (1984) that conceived internal marketing as a management strategy that enables and motivates all members of the organization - whether "front-line" service performers or "back-office" service support workers - to examine their own roles and adopt a customer consciousness and service orientation in order to meet the needs of external customers. In common to all these definitions is the idea that all see the employees as a central focus. More recently, Sohail and Jang (2017, p.3) clearly operationalize this employee-cantered perspective cascade effect: "internal marketing leads to employee satisfaction; employee satisfaction leads to service quality; service quality leads to customer satisfaction; customer satisfaction leads to repeat purchases of the service, and repeated purchases lead to organizational profitability".

Other perspectives emerged but have shown some overlap issues. For example, Piercy and Morgan (1991), advised using external marketing tactics (4Ps – Product, Promotion, Price, Placement) in internal marketing initiatives. However, this initiative found some difficulties in practice, as legitimate tasks of other activities overlapped and could led to conflicts when coordination with other departments was ignored, such as between the Marketing and HR department (Collins & Payne, 1991). Gilmore et al. (1995), on the other hand, argued that using the marketing mix is unlikely to address all the internal issues necessary for success in the external environment, including hiring and selection, training, teamwork, empowerment, performance appraisals and measurement, communication, and culture. Nevertheless, even before this, a different perspective by Jean-Paul Flipo (1986) offers a solution to improve this overlap issued called inter-functional integration. This perspective emphasizes the importance of inter-functional communication and coordination to minimize conflicts between functions and achieve strategic objectives.

According to Lings and Greenley (2005), internal market orientation transcends the borders between the marketing and human resources management functional areas and strives to strike a balance between employees' perceptions of what they contribute into and receive

from their jobs. It suggests a value-driven approach that it is referred to as an "internal market orientation," departing from the conventional, firm-driven, internal marketing perspective (Lings, 2004; Gounaris, 2006, 2008). Employee satisfaction, retention, and commitment are three internal organizational performance factors that are directly positively impacted by internal market orientation. These internal factors then have an impact on external market orientation and external performance, which includes customer satisfaction, retention, and profit (Lings, 2004). Relationship-focused internal marketing initiatives are more likely to be developed by businesses with higher levels of internal market orientation (Ferdous et al., 2013). A mechanism for the internal market of the company to create value is internal market orientation. Internal market orientation helps organizations create greater reciprocal value propositions for their workforce (Boukis, 2019).

Berry and Parasuraman (1991) presented six pertinent internal marketing elements, including recruiting, fostering professional growth, inspiring, and retaining personnel. Internal marketing dimensions were viewed by Gummesson in 1991 as communication, training, education, and information. Varey (1995) cited employee growth, motivation, and training. Bansal et al. (2001) further identified six elements of internal marketing by merging aspects of HR management and services marketing literature, including reduced status distinctions, comprehensive training, attractive rewards, and information sharing. Training, administrative assistance, internal communication, and human resource management were presented by Chang and Chang (2007) as internal marketing dimensions. Later on, it was added by Ahmed et al. (2003) the strategic rewards, internal communications, training and development, inter-functional coordination, incentive systems, and empowerment. Service training initiatives and performance efforts were additionally emphasized as internal marketing components (Tsai & Tang, 2008).

Nonetheless, there is not a widely agreed conceptualization of internal marketing which made the literature adopt different angles. Moreover, Qaisar et al. (2021), asserted that internal marketing is defined mostly in terms of the outcomes an organization can have and they recognize that the fundamental tenet of all lay on the recognition that employees are the company's initial market and that managers must first identify and satisfy their needs because they are crucial to an organization's success. However, there is not a linear line on the conducted literature over the years. In order to establish some alignment and improve conceptual clarity, Qiu et al. (2021) suggest to group internal marketing literature into four different periods: 1) the emergence period, where specialists emphasize the need for service firms to improve the management of their staff through marketing and HR procedures in order

to increase consumer perception of service quality; 2) the establishment period, a time where many strategies were developed, and it became clear that internal marketing practices have a strong impact on how well employees connect with their own customers; 3) the explosion period, during the era of the information explosion and that demonstrated how internal marketing aspects influenced workers' actions, intentions, and attitudes as well as how internal marketing was related to business success; 4) and the "ennui" era, where most of the research on the benefits of internal marketing on organizations, and the role of adopting a customer experience was conducted.

Crossing the information of all of the six dimensions and considering the four periods, Qiu et al. (2021) was able to understand the Internal communication dimension was recurrently studied compared to other dimensions suggesting being one of the most relevant dimensions for the authors, such as it is mentioned in table 1.1.

Table 1.1. – Statistical distribution of IM dimensions across the four periods

	Emergence Before 2007		Establishing 2007 - 2012		Explosion 2013 - 2016		Ennui 2017 - Onwards		Total		
IM Dimensions	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	Chi-sq test
Internal Market Analytics	6 (8.2) ¹	17.14%	17(16.2)	24.64%	18(17.8)	23.68%	19(17.8)	25.00%	60	23.44%	X ² = 0.934; n.s
Internal Communication	27(30.2)	77.14%	54(59.6)	78.26%	69(65.6)	90.79%	71(65.6)	93.42%	221	86.33%	$X^2 = 10.828; p < .05$
Employee Development	18(21.9)	51.43%	41(43.1)	59.42%	45(47.5)	59.21%	56(47.5)	73.68%	160	62.50%	$X^2 = 6.517$; n.s
Employee Rewards and Recognition	18(17.2)	51.43%	37(34.0)	53.62%	29(37.4)	38.16%	42(37.4)	55.26%	126	49.22%	$X^2 = 5.435$; n.s
Job Design and Empowerment	24(21.7)	68.57%	41(42.9)	59.42%	51(47.2)	67.11%	43(47.2)	56.58%	159	62.11%	$X^2 = 2.627$; n.s
Leadership and Organizational Culture	19(19.8)	54.29%	46(39.1)	66.67%	36(43.0)	47.37%	44(43.0)	57.89%	145	56.64%	X ² = 5.612; n.s
No. of articles	35		69		76		76		256		,

1. Cell numbers: Observed (Expected)

Source: Qiu et al. (2021, p. 6)

Among the above-mentioned dimensions, it is clear that internal communications dimension, is the one which was studied the most. Internal marketing is regarded to have a relational element, and it has been demonstrated that regular employee communication greatly increases organizational engagement and job satisfaction (Moreira, 2020). According to several authors (Bearden & Netemeyer, 1999; Tsai & Tang, 2008), managers need good communication to convey the organization's goal. Additionally, effective communication can help teams function more effectively and strengthen their bonds (Helm et al., 2006).

Due to the relevance of internal communication for the Internal Marketing (Kandampully, 2006), we decided to focus on this specific practice. The internal communication is presented as an internal marketing practice comprehending formal internal communication and informal internal communication where the formal internal communication seeks to gather employee opinions about the standard of work, employee attitudes, and the regular dissemination of

information to employees (Lings & Greenley, 2005; Rafiq & Ahmed, 2000; To et al., 2015). Due to its periodic nature, a management team utilizing formal internal communication alone is unable to promptly address employee requirements and wishes (Clampitt et al., 2000). Because of this, informal internal communication plays a crucial role in completing formal internal communication by establishing a network of unofficial or personal contacts between management and employees (Boswell et al., 2006; Kraut et al., 1990). Thus, according to Mohr et al. (1996), more individualized and impromptu contact between two individuals is referred to as informal communication. According to Martin and To (2013), the key internal marketing strategies formal internal communication and informal internal communication are strongly, significantly related to both employee and consumer satisfaction. Another relevant work-related variable that is related to Internal Marketing, including communication, is organizational citizenship behaviors (Abzari & Ghujali, 2011).

1.2. Organizational Citizenship Behavior

Organizations are always looking for workers who can successfully contribute to the achievement of broad goals in the current business climate, which is characterized by perpetual disruption and hyper-competition (Kasekende et al., 2020). Moreover, organizations are expecting certain discretionary work-related behaviors from workers that promote one's psychological and social environment which are not necessary for their job formal duties, such as organizational citizenship behaviors (Ersoy et al., 2015). This concept was initial developed be Katz and Kahn (1966) to study employees' extra-role conduct at work. The term "organizational citizenship behavior" (OCB) was later developed by Bateman and Organ (1983). According to Organ et al. (2006), the Japanese management literature suggested that during the 1960s and 1970s, Japanese firms' employees demonstrated voluntarily workplace behaviors, which were believed to contribute significantly to their great success. Organ (1988, p. 4) defined OCB as "individual behavior that is discretionary, is not directly or explicitly recognized by the formal reward system, and in aggregate promotes the effective functioning of the organization", and those who perform in such a way can be seen as the "good soldiers". However, according to studies (e.g., Morrison, 1994), OCB is not always discretionary if it is expected by supervisors and co-workers. Organ (1997) later on redefined the concept, referring to OCB as any discretionary work-related behavior that goes beyond routine duties, and which supports one's social or psychological environment. According to Podsakoff et al. (2000) the Organ's (1988) definition was actually based on earlier distinctions made between in-role and

extra-role behavior, Barnard's (1938) concept of individuals' "willingness to cooperate" and Katz's (1964) differentiation between one's reliable performance of work functions and "innovative and spontaneous behaviors."

The Organ's (1997) concept reconstruction provided several benefits: it complies with Borman and Motowidlo's (1993) definition of contextual performance, where task performance is defined as producing materials or providing services, such as expertise in job-related tasks, and contextual performance is defined as the degree to which organizational context contributes to organizational effectiveness (Motowidlo, 2003), eliminates the need that OCBs be considered as "extra-role" behavior; and avoids the claim that OCBs are not rewarded by the formal organizational reward system (Motowidlo, 2000). More recently, according to Srivastava and Pathak (2020), organizational citizenship behavior is an employee's pro-social behavior that is optional and outside of their formal job duties and has an impact on other employees as well as the company. All in all, OCB has been widely labelled with the expression "go the extra mile" (Organ, 1988, 1997; Dick et al., 2006).

For many years several dimensions of Organization Citizenship Behaviors were proposed, however, according to Organ (1988) and subsequently, according to Konovsky and Organ (1996) it was proposed that OCB is divided into five dimensions: conscientiousness, sportsmanship (S), courtesy, altruism, and civic virtue (CV). Just four years after, Podsakoff et al. (2000), concluded, mostly based on the research of Organ (1988, 1990), helping behavior (H), civic virtue and sportsmanship as the most crucial dimensions for the OCB. Civic virtue for Podsakoff et al. (2000, p. 525) "represents a macro-level interest in, or commitment to, the organization as a whole" where exists an active involvement in governance, observation of the external environment, and protecting of the organization's interests. According to Organ et al. (2006), sportsmanship is the readiness on the part of the employee to tolerate less-than-ideal organizational settings without complaining or exaggerating issues and for Podsakoff et al. (2000), it is also the professional act of accepting failure and rejection, responding positively when recommendations are rejected, and selflessly putting aside personal interests in favor of the success of the group. Podsakoff et al. (1997, 2000) defined helping behavior as a composed of courtesy, altruism, cheerleading and peacekeeping (Organ, 1988), and it was defined Helping behavior as voluntarily assisting others with, or averting the occurrence of, issues connected to the performance of one's job. In addition to the broad societal relevance, helping behaviors have been shown to have transdisciplinary meanings (Gadot, 2006). Other researchers believe there are at least two fundamental second-order dimensions of OCB. For example, Williams and Anderson (1991) and LePine et al. (2002) claim OCBs can be identified depending on who might profit from them. While Organizational Citizenship Behavior for individuals (OCBIs), directly benefit particular individuals and indirectly contribute to the organization, on the other hand, Organizational Citizenship Behavior for organizations (OCBOs), help the organization as a whole. Although there is disagreement among scholars regarding what those dimensions are the two most notable OCBIs are altruism and civility, while other behaviors, such as cooperating with others (Borman & Motowidlo, 1993), may also be included. The same is true for the OCBO, where the most recognized virtues are civic virtue, sportsmanship, and conscientiousness, but others may exist, such as loyalty to the organization (Graham, 1991).

So, empirical research has found that OCB significantly contributes to the organization's efficiency and effectiveness by increasing employee productivity, preparing the company for a variety of external changes, and establishing stronger inter- and intra-workgroup coordination (Obedgiu et al., 2020). Nonetheless, as mentioned, there is no requirement on the part of employees to demonstrate these extra-role behaviors in tandem with their in-role behaviors, even if they foster a favorable work attitude and atmosphere (Ramdeo & Singh, 2019). However, according to Kandlousi et al. (2010), if employees are happy with the way the organization handles communication, they will eventually develop favorable views toward their communication style and strive to give something back to the organization by participating in organizational citizenship behaviors. Moreover, Yildirim (2014) found that communication must be seen as a crucial issue to promote the organizational citizenship behaviors from the employees. Furthermore, Chan and Lai's (2017) mentioned in their research, communication is excellent predictor of OCB. It became clear, year after year, that it is crucial to prioritize communication within the organizations as a way to encourage people to have organizational citizenship behaviors.

Accordingly, we propose the following hypotheses:

H1: Internal communication is positively associated with OCB.

- H1a: Formal Communication is positively associated with Civic Virtue.
- H1b: Formal Communication is positively associated with Helping behavior.
- H1c: Formal Communication is positively associated with Sportsmanship.
- H1d: Informal Communication is positively associated with Civic Virtue.
- H1e: Informal Communication is positively associated with Helping behavior.
- H1f: Informal Communication is positively associated with Sportsmanship.

Although we hypothesize an impact of both formal and informal communication on OCB, we expect this association to be mediated by the activation of psychological state, such as work engagement.

1.3. The mediator role of Work Engagement

The first study on "personal engagement" by Kahn (1990), who stated that employees decide d to fully commit themselves to their roles based on their working experiences, was published more than 30 years ago. By defining job engagement as the channeling of one's own energies into physical, emotional, and cognitive labor, Kahn (1990) first established a theoretical framework for it. Moreover, a physically involved, emotionally invested, and cognitively alert employee is regarded to be engaged, whereas a physically detached, emotionally disconnected, and defensive individual is thought to be disengaged. Three psychological states can be attained through the channeling of one's own energies: psychological meaningfulness (reward for devoting time and effort to role performance), psychological safety (the ability to express oneself without worrying about negative consequences), and psychological availability (a feeling of having the necessary mental, emotional, and physical resources for role performance). In combination, these circumstances support a sense of "full presence" and produce positive work results including increased output and performance standards (Kahn, 1992; Rich et al., 2010).

The idea of engagement developed by Kahn (1990) was separated in two by Christian et al. (2011): First, rather than an attitude toward aspects of the organization or the job, the term "work engagement" should relate to a psychological connection with the accomplishment of work tasks (Maslach et al., 2001). Second, work engagement concerns the self-investment of personal resources in work. According to Christian et al. (2011), work engagement encompasses various dimensions (physical, emotional, and cognitive) of the self in addition to just one element of the self.

Maslach and Leiter (1997) revived the idea of work engagement as a state of energy at work in contrast to burnout, where employees are stressed and perceive work as demanding. Moreover, employees who are engaged with there work are seen as more energizing and they view work as a challenge, drawing a parallel with employees who are burnt out, where they are stressed, representing the work engagement as the complete opposite of burnout (exhaustion, cynicism, and ineffectiveness).

As Stated by Schaufeli and Bakker (2004), the term "work engagement" refers to a favorable, contented psychological state that is directly tied to one's job. It is a result of the interaction of three interrelated dimensions: vigor, dedication, and absorption. Therefore, engaged workers feel energized and effectively connected to their work activities. Vigor is characterized by high levels of energy and mental toughness; dedication is manifested by a deep investment in work and a sense of pride and significance; absorption is characterized by being completely focused and enjoyingly absorbed in one's work (Shimazu et al., 2010)

According to Bakker and Xanthopoulou (2009) motivated workers are better at their jobs because (1) they feel good, which encourages them to look for opportunities and be more optimistic; (2) they are healthier, which allows them to put more energy into their work; (3) they are better able to develop their own resources through social support and feedback; and (4) they influence their co-workers' work engagement, which improves team performance. The favorable correlation between job engagement and performance results has been confirmed by empirical studies. Moreover, it has been empirically supported (S) that work engagement of employees is correlated with positive organizational outcomes including low turnover intention (Schaufeli & Bakker, 2004), organizational commitment (Richardsen et al., 2006), and service climate and client loyalty (Salanova et al., 2005), life satisfaction (Shimazu et al., 2015), higher human resources (HR) retention (Koyuncu et al., 2006), work-family facilitation (Culbertson et al., 2012), job performance (Bakker & Bal, 2010), productivity (Harter et al., 2002), and financial benefits (Xanthopoulou et al., 2009), according to a sizable and expanding body of research in various disciplines, particularly business and psychology (Bakker et al., 2011). All in all, for Schaufeli and Bakker (2010), employees that are engaged are frequently totally absorbed in their professional activities and feel energized and passionate about it. The work engagement enables people to be very focuses and invest effortlessly in their work (Hopstaken et al., 2014) which shows that compared to job satisfaction, work engagement is a stronger predictor of job performance (Christian et al., 2011).

This theory was proposed by Demerouti et al. (2001) and has its foundations in the conservation of resource (COR) theory (Hobfoll, 1989; Halbesleben et al., 2014) which postulates that resources are valuable, and that in the workplace, employees highly value and treasure the resources that will help them succeed in their jobs.

The Job Demands-Resources (JD-R) model (Bakker et al., 2007; Demerouti et al., 2001) defines three main factors of job characteristics in the JD-R: job resources, personal resources and job demands. It is asserted that job resources, psycho-social work characteristics like autonomy, social support, and job feedback, activate a motivational pathway that leads to work

engagement and improved well-being. Personal resources—individual traits like self-efficacy, resilience, and optimism—are the second factor that stimulates this route and helps people stay motivated and overcome obstacles at work. This is supported by the broaden-and-build theory (Fredrickson, 2001), where people with positive emotions have more personal resources since their range of possible behaviors and thoughts is wider. For Bakker and Demerouti (2017), resources have the capacity to motivate people because they assist people (1) lessen the burden of energy-draining job demands, (2) accomplish work-related goals, and (3) learn and develop as people. The third factor is the job demands, the workload, deadline pressure, and emotional demands of the job can trigger a health impairment pathway that lowers engagement, performance, and well-being. Given this, job resources, rather than job demands, have consistently been found to be important determinants of work engagement (Hakenen et al., 2006; Mauno et al., 2007).

The JD-R theory can be supported by the Social Exchange Theory (SET) (Cook et al., 2013) which refers those interactions between different stakeholders in the company, such as the employers, leaders, and employees, have an impact on how engaged employees are at work. According to SET, people decide by weighing the benefits and drawbacks of a situation or action, then maximizing their eventual gain. According to the research' hypotheses (Rai et al., 2017) employees would be more engaged at work if a positive rapport between them and their employers had been developed. The Wushe and Shenje (2019) study concluded that there is a favorable correlation between effective leadership and work engagement. For instance, social support from co-workers and one's superior, as well as performance feedback, coaching, job control, possibilities for growth and development, task variety, and training facilities, all appear to be positively correlated with work engagement (Schaufeli et al. 2002; Hakanen et al. 2006; Hakanen et al. 2008; Xanthopoulou et al, 2009; Halbesleben, 2010). Thus, it stands to reason that employees are more likely to feel engaged when there are more employment resources available.

As a result, Bakker et al., (2011) firms are becoming more and more interested in ways to increase employee engagement. Bakker et al. (2011), refers that an important opportunity for organizational action to support employee work engagement is presented by a solid theoretical case that suggests interventions can affect employee engagement.

A wide variety of work engagement initiatives are emerging over time, including those that promote healthy lifestyles (Strijk et al., 2013), train leaders (Biggs et al., 2014), and develop workplace resources (Bakker et al., 2020). According to Hornung et al. (2010), these interventions generally follow one of two approaches: top-down (started and driven by senior

management, frequently with the goal of creating organization-wide effects) or bottom-up (started and driven by employees and focused on bringing about changes that will affect the employees themselves and their immediate work environment).

Some authors, such as Grant et al. (2008) and Bakker (2017), contend that as working life becomes more dynamic and organizations have less time to provide resourceful work environments for their employees, organizations must more rely on employees' proactive activity and involvement. Therefore, it has been proposed that by providing interventions in which employees learn, practice, and implement unique bottom-up tactics, businesses can support and aid employees in creating workplace resources for the promotion of job engagement, which, in place are associated with extra-developmental behaviors, a variant of organizational citizenship (Salanova et al., 2011). In a similar vein, Babcock-Roberson and Strickland (2010) found a positive association between work engagement and organizational citizenship behaviors.

Accordingly, we propose the following hypotheses:

H2: Work engagement mediates the positive relationship between communication and OCB.

- H2a: Work engagement mediates the positive relationship between Formal communication and Civic Virtue.
- H2b: Work engagement mediates the positive relationship between Formal communication and Helping Behavior.
- H2c: Work engagement mediates the positive relationship between Formal communication and Sportsmanship.
- H2d: Work engagement mediates the positive relationship between Informal communication and Civic Virtue.
- H2e: Work engagement mediates the positive relationship between Informal communication and Helping Behavior.
- H2f: Work engagement mediates the positive relationship between Informal communication and Sportsmanship.

1.4. The moderator role of Virtuality

The idea of virtuality first emerged out of Virtual Reality from the terms "artificial reality" and "video place" which were first used in the middle of the 1970s by media pioneer Myron

Krueger, who was trained as a computer scientist. According to Turoff (1997), a computer system's virtuality is its ability to encourage the real world to act in accordance with the virtual system's predetermined patterns, so transforming a virtual system (working inside the computer) into a real system. Based on Ted Nelson, a philosopher and sociologist who is associated with creating hypertext, everything has both a reality and a virtuality. He defined in 1965 virtuality as the appearance of something and claims that it is made up of conceptual framework and emotion.

Over the years, a number of computer-mediated working arrangements that were previously impractical have emerged as a result of increased accessibility to communication technologies, enabling businesses to successfully transcend organizational and spatial boundaries (Gibson & Cohen, 2003). Additionally, in a globalized society, collaboration across diverse cultures, nations, and time zones is necessary, necessitating a greater reliance on virtual tools than on in-person interactions (Straus & Olivera, 2000). The degree of virtuality within each team can be used to categorize them. Particularly, the level of virtuality increases as teams rely more on virtual tools for collaboration and communication than on in-person interactions (Gibson & Cohen, 2003; Griffith et al., 2003). Nonetheless, there are some scholars which see remote work differently. When in remote work employees are likely required to cook at least three meals a day (breakfast, lunch, and dinner), help children with their homework and spend quality time with them after they finish it, which make this working experience a family-work conflict at work and may have negative impact on workers satisfaction, engagement and productivity, generating stress due to a permanent unfinished work (Galanti et al, 2021).

Up to 75% of employees typically work remotely, according to a global survey (IWG, 2019). Additionally, the Covid-19 pandemic gave virtuality a boost, increasing the likelihood that employees may conduct their work from home (Guyot & Sawhill, 2020), remotely. According to a comprehensive definition of remote work, it is an alternative work arrangement in which individuals perform tasks away from their primary offices while interacting with people both inside and outside of their organization using information and communication technologies (ICTs) (Spreitzer et al., 2017). This presumes the existence of a virtual team and illustrates how interdependent people frequently operate remotely and heavily rely on communication technologies to accomplish their shared professional objectives (Gilson et al., 2015; Raghuram et al., 2019). Moreover, the degree to which employees rely on computer-mediated communication to complete work is the main determinant of virtuality at work (Berry, 2011). In 2003, Griffith et al. acknowledges, as example, that members of the financial audit team, sitting in the same room, would send reports and information to the team member

by using wireless networks rather than directly in order to make digital copies of the information available.

More people are working remotely and forming regular virtual teams that rely on these tools as remote work becomes more widespread and those teams are "assembled using a combination of telecommunications and information technologies to accomplish a variety of critical tasks" (Townsend et al., 1998, p. 17). Additionally, according to Kirkman and Mathieu (2005), geographic dispersion is a defining characteristic of virtual teams (e.g., Griffith et al., 2003; Morrison-Smith & Ruiz, 2020), but for them co-located teams can also exhibit high levels of virtuality. Accordingly, some scholars as Gibson and Cohen (2003) and Martins et al. (2004), argue all teams can be characterized in terms of their virtuality, either they are virtual teams or co-located teams.

Previous studies have highlighted the fact that working in virtual teams takes longer to function than working in face-to-face teams (Baltes et al., 2002), which raises the question whether it influences work engagement or organizational citizenship behaviors or not. Additionally, for some scholars, remote work, can be viewed as a help the raising overall job demand on the organizations, as digital communication channels are being utilized more frequently at work and mobile or remote working is becoming the norm (Gaudecker et al., 2020; Wang et al., 2020). However, it commonly accepted that virtuality allows the organizations to have teams and include people who work across different locations and time (Lipnack & Stamps, 2000) with the usage of technology, zones according to Wang et al. (2020), and companies have been using remote work possibilities as a competitive advantage to draw in and keep talent (Morgan, 2014) as well as to improve the work-life balance of their employees (Felstead & Henseke, 2017).

On the other hand, some scholars proposed different ways of looking into this topic, as the social construction theories, which mainly see effective teamwork as more dependent on the social-cognitive construction of an event than it is on the structural characteristics that teams operate (Walther & Parks, 2002). Another school of thought, known as adaptive structuration theory, contends that teams are more likely to accept new technologies if they perceive them as having the potential to ease coordination burdens and enhance teamwork (DeSanctis et al., 2000).

Other known theories well-known are the cues-filtered-out theories which the central premise is that team virtuality negatively impacts collaboration because technology removes crucial social cues that make it more challenging to transmit and receive subtle communication nuances such as irony or nonverbally expressed sadness (Walther & Parks, 2002). Cues-

filtered-out theories, as for example, the media richness theory developed by Daft and Lengel in 1986, place a major emphasis on the structural properties of team virtuality. It is commonly understood by structural properties -objective features – as communication technology (e.g., how many and what kind of social cues a technology can transmit) and/or the team's members' distance. Ortiz De Guinea et al. (2012) and Ganesh and Gupta (2010) believe those structural properties are crucial to perceive the challenges in virtual teams' work. Reportedly, McDonough et al. (2001) mentioned that highly virtual teams typically exhibit weaker relational ties to their teammates than traditional teams do. Furthermore, accordingly with this perspective of the cues-filtered-out theories, virtuality can be seen as a job demand and under the theory of JD-R (Bakker et al. 2007) as virtuality can be seen a Job demand which is a requirement of work which means being often seen as not positive.

Therefore, we set the following hypotheses:

H3: High levels of virtuality weaken the direct relationship between Communication and OCB and between Communication and Work Engagement.

- H3a: High levels of virtuality weaken the relationship between Formal Communication and Civic Virtue.
- H3b: High levels of virtuality weaken the relationship between Formal Communication and Helping Behavior.
- H3c: High levels of virtuality weaken the relationship between Formal Communication and Sportsmanship.
- H3d: High levels of virtuality weaken the relationship between Formal Communication and Work Engagement.
- H3e: High levels of virtuality weaken the relationship between Informal Communication and Civic Virtue.
- H3f: High levels of virtuality weaken the relationship between Informal Communication and Helping Behavior.
- H3g: High levels of virtuality weaken the relationship between Informal Communication and Sportsmanship.
- H3h: High levels of virtuality weaken the relationship between Informal Communication and Work Engagement.

H4: High levels of virtuality weaken the relationship between Communication and OCB via Work Engagement.

- H4a: High levels of virtuality weaken the relationship between Formal Communication and Civic Virtue via Work Engagement.
- H4b: High levels of virtuality weaken the relationship between Formal Communication and Helping Behavior via Work Engagement
- H4c: High levels of virtuality weaken the relationship between Formal Communication and Sportsmanship via Work Engagement
- H4d: High levels of virtuality weaken the relationship between Informal Communication and Civic Virtue via Work Engagement.
- H4e: High levels of virtuality weaken the relationship between Informal Communication and Helping Behavior via Work Engagement
- H4f: High levels of virtuality weaken the relationship between Informal Communication and Sportsmanship via Work Engagement

1.5. Conceptual Model

The conceptual model is presented in figure 1.1.

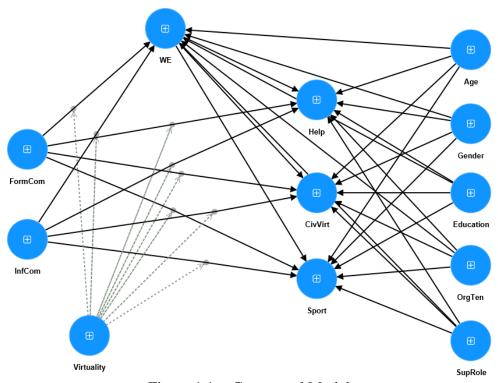


Figure 1.1. - Conceptual Model

CHAPTER 2 – METHOD

2.1. Data analysis strategy

We started by assessing the psychometric quality of the scales by testing the confirmatory factor analysis, reliability, convergent validity, and discriminant validity. The CFA results were judged based on Hair et al. (2019) recommendations. Reliability was assessed with composite reliability (CR; Joreskog, 1971), and all the factors should have at least 0.70. For convergent validity we used the average variance extracted (AVE), that should be above 0.500 (Fornell & Larcker, 1981). Discriminant validity was checked with the heterotrait-monotrait ratio (Henseler et al., 2014), that should be below 0.90. To test the hypotheses, we used Partial Least Squares Structural Equations Modelling (PLS-SEM). To test the structural model, 5000 extractions bootstrapping for a 95% confidence interval was used.

2.2. Sample

A total of 377 employees completed the survey. Most participants were female (61.8%), 34.2% were male and 4% preferred not to answer. The age ranged from 21 to 70 years old, with an average age of 42.3 (SD=11.19). In this sample, 73.2% participants do not have a leadership position, 14.8% are team leaders, 7.7% are middle managers, and 4.3% have a top management position. On average, participants work for their current organization for 13.68 years (SD=10.95). In terms of educational background, 44.1% possess a university degree, 40.5% completed high school, and 15.4% did not complete this level of education.

2.3. Procedure

An online survey was developed in Qualtrics with, and a link was shared by social media, as LinkedIn, Facebook and Instagram, it was also shared via email and some intranet systems of few companies. This data collection took place from February 1st, 2023, to June, 9th 2023. The requirement to be eligible to this study was to be an active worker.

2.4. Measures

Internal communication was measured with To et al. (2015) scale that comprehends two dimensions: informal communication (4 items; e.g. "When at work, our manager regularly talks to us to find out about our work."; "When at work, when our manager notices that one of us is acting differently than normal, he will try to find out why.") and formal communication (4 items; e.g. "The company has regular staff appraisals in which people discuss what employees want."; "Managers interact formally and directly with employees to find out how to make employees more satisfied."). The CFA of the original scale showed suboptimal fit indices $(X^{2}(19)=77.651, X^{2}/df=4.087, CFI=0.974, TLI=0.961, RMSEA=0.91 90\% CI[0.70: 0.112]$ PClose=0.001; SRMR=0.0320). Lagrange Multipliers suggested the removal of one item (IM4). The new solution showed a good fit $(X^2(13)=36.051, X^2/df=2.773, CFI=0.989,$ TLI=0.982, RMSEA=0.069 90% CI[0.043: 0.096] PClose=0.112; SRMR=0.022). This solution has both convergent validity and reliability (AVE_{FC}=0.699; CR_{FC}=0.873; AVEIC=0.730; CRIC=0.915). However, the covariances between the latent constructs were high, so we ran a CFA for a second order construct. The solution has both convergent validity and reliability (AVE=0.891 CR=0.942). Given the purpose of the study although keeping a second order construct, we used the first order dimensions presented in the conceptual model. The items were rated on a five-point Likert scale (1=strongly disagree to 5=strongly agree).

Work Engagement was measured with UWES9 (Schaufeli et al., 2006) scale that comprehends 3 dimensions: Vigor (3 items; e.g. "At my work, I feel bursting with energy"; "At my job, feel strong and vigorous"), Dedication (3 items; e.g. "I find the work that I do full of meaning and purpose"; "I am enthusiastic about my job") and Absorption (3 items; e.g. "Time flies when I'm working"; "When I am working, forget everything else around me"). The CFA of the original scale showed good fit indices (X²(23)=67.597, X²/df=2.939, CFI=0.983, TLI=0.974, RMSEA=0.072 90% CI[0.052: 0.092] PClose=0.034; SRMR=0.025). The solution has both convergent validity and reliability (AVE_{Vig}=0.757; CR_{Vig}=0.903; AVE_{Ded}=0.682; CR_{Ded}=0.862; AVE_{Abs}=0.656; CR_{Abs}=0.851). However, the covariances between the latent constructs were high, so we ran a CFA for a second order construct. The solution has both convergent validity and reliability (AVE_{WE}=0.898; CR_{WE}=0.964). The items were rated on a five-point scale (1=never to 5=always).

Organizational Citizenship Behavior (OCB) was measured with Podsakoff et al. (1997) scale that comprehends 3 dimensions: Helping (7 items; e.g. "Help each other out if someone

falls behind in his/her work."; "Willingly share their expertise with other members of the crew."; "Willingly share their expertise with other members of the crew.".), Civic Virtue (3 items; e.g. "Provide constructive suggestions about how the crew can improve its effectiveness.") and Sportsmanship (3 items; e.g. "Always focus on what is wrong with our situation, rather than the positive side."). The CFA of the original scale showed good fit indices (X2(62)=167.407, X²/df=2.700, CFI=0.959, TLI=0.948, RMSEA=0.067 90% CI[0.055; 0.080] PClose=0.011; SRMR=0.0378). The solution has both convergent validity and reliability (AVE_{Help}=0.599; CR_{Help}=0.912; AVE_{CivVir}=0.589; CR_{CivVir}=0.809; AVE_{Sport}=0.501; CR_{Sport}=0.750). Although there is a high covariance between Civic virtue and Helping behavior, there are no discriminant validity issues (HTMT<0.820). The items were rated on a five-point Likert scale (1=strongly disagree to 5=strongly agree).

Virtuality was measured using Jong et al. (2008) score that is based on Baltes et al. (2002) scale that classifies communication virtuality (e.g., "face-to-face"; "E-mail"; Videoconference"). Participants are asked to answer about the time they spend in face-to-face communication, e-mail, chat, teleconference, videoconference and other. The cumulative percentage of all channels should be 100%. An index is calculated using the following weights: 0.14 to face-to-face, 0.52 to videoconference, 0.41 to teleconference, 0.85 to chat, and 0.96 to email.

Control Variables as demographic variables were collected for control purposes, namely gender (1- Female, 2 – Male, 3 – Another, 4 - Rather not sharing), age, education (1 - 1st Cycle of Basic Education (4th year), 2 - 2nd Cycle of Basic Education (6th grade), 3 - 3rd Cycle of Basic Education (9th grade), 4 - High School (12th grade), 5 – Bachelor's Degree, 6 – Master's Degree, 7 - PhD), having a supervisory role (1 – No, 2 – Team Leadership, 3 – Middle Management, 4 – Top Management), and organizational tenure (1 – Up to 10 people, 2 – 10 to 49 people, 3 – 50 to 249 people, 4 - 250 to 499 people, 5 – 500 or more).

2.5. Measurement Model

The measurement model was assessed by associating all the model's latent variables. This model shows good fit ($X^2(362) = 643.451$, $X^2/df=1.777$, CFI=0.964, TLI=0.959, RMSEA=0.045 90% CI[0.040; 0.051] PClose=0.904; SRMR=0.0403). When combining internal communication and work engagement the fit worsens ($X^2(365) = 890.715$, $X^2/df=2.440$, CFI=0.932, TLI=0.924, RMSEA=0.062 90% CI[0.057; 0.067] PClose=0.000;

SRMR=0.0708). When combining work engagement and organizational citizenship behavior the fit is also worse than the original ($X^2(368) = 846.883$, $X^2/df=2.301$, CFI=0.938, TLI=0.932, RMSEA=0.059 90% CI[0.054; 0.064] PClose=0.003; SRMR=0.0848). When fusing all latent variables in one factor, the model shows poor fit ($X^2(368)=1074.961$, $X^2/df=2.921$, CFI=0.909, TLI=0.899, RMSEA=0.071 90% CI[0.067; 0.076] PClose=0.000; SRMR=0.0968).

We assessed collinearity, and the highest VIF value (3.617) is below the threshold of 5. The HTMT requirements were also met (the highest value is 0.803 for formal and informal communication).

CHAPTER 3 - RESULTS

The results section starts with the presentation of descriptive statistics and bivariate correlations between the conceptual model constructs. Then, we present the structural model and the hypotheses testing results.

3.1. Descriptive and bivariate statistics

Table 3.1., shows the descriptive and bivariate correlations between constructs being possible to understand the following correlations.

Both formal and informal communication show low to moderate means (M_{Formal} =2.72; SD_{Formal} =1.076; $M_{Informal}$ =2.89; $SD_{Informal}$ =1.070), with formal communication falling below the scale's midpoint ((t(376)=-5.01, p<.001) whereas informal communication does not significantly differ from the midpoint (t(376)=-1.93, p=0.055). Work engagement's mean is above the scales' midpoint (M_{WE} =3.23; SD_{WE} =0.924; t(376)=4.91, p<.001), which is also the case for the three OCB dimensions (M_{Help} =3.77; SD_{Help} =0.729; t(376)=20.43, p<.001; M_{CV} =3.75; SD_{CV} =0.721; t(376)=20.17, p<.001; M_{Sport} =3.56; SD_{Sport} =0.846; t(376)=12.84, p<.001). On average, the virtuality level is 55.43%.

When first considering the association between socio-demographic variables and the criterion variables, we find that both education level and having a supervisor position have a moderate positive correlation with work engagement ($r_{education*WE}=.315$, p<.001; $r_{suprole*WE}=.300$, p<.001). The same characterization variables show weak positive correlations with helping behavior and civic virtue ($r_{education*Help}=.141$, p=.008; $r_{education*CV}=.193$, p<.001; $r_{suprole*Help}=.161$, p=.003; $r_{suprole*CV}=.185$, p<.001).

Formal and informal communication strongly correlate positively with work engagement ($r_{Formal*WE}=.549$, p<.001; $r_{Informal*WE}=.583$, p<.001). A similar pattern is observed for the association between these communication practices and two of the OCB dimensions ($r_{Formal*Help}=.388$, p<.001; $r_{Informal*Help}=.472$, p<.001; $r_{Formal*CV}=.427$, p<.001; $r_{Informal*CV}=.442$, p<.001). The correlations with sportsmanship are weaker ($r_{Formal*Sport}=.164$, p=.001; $r_{Informal*Sport}=.195$, p<.001), and, for all situations, informal communication has stronger associations with the predicted variables than formal communication.

Table 3.1. - Descriptive and bivariate correlations between constructs.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	-	-											
2. Age	42.96	11.185	015	_									
3. Educ	-	-	0	.025	_								
4. SupRole	-	-	.203***	.256***	241***	_							
5. OrgTen	13.68	10.951	051	.663***	137*	.095	_						
6. FormCom	2.72	1.076	.093	087	184***	.211***	226***	_					
7. InfCom	2.89	1.070	.064	087	232***	.215***	243***	.803***					
8. WE	3.23	0.924	.134*	.161**	315***	.300***	062	.549***	.583***	_			
9. Help	3.77	0.729	.095	.014	.141**	.161**	081	.388***	.472***	.521***	_		
10. CivVirt	3.75	0.721	.061	.03	193***	.185***	037	.427***	.442***	.486***	.680***	_	
11. Sport	3.56	0.846	05	.115*	.068	.089	.115*	.164**	.195***	.196***	.375***	.363***	_
12. Virt	55.43	20.917	.009	.077	.147**	.023	.148**	064	140**	006	138**	048	.07

Note. * p < .05, ** p < .01, *** p < .001

Work engagement is strongly positively associated with helping behavior and civic virtue ($r_{WE*Help}$ =.521, p<.001; r_{WE*CV} =.486, p< .001), and has a weaker association with sportsmanship ($r_{WE*Sport}$ =.196, p<.001). The moderator variable shows no relationship (or weak associations) with the other conceptual model variables.

3.2. Structural model

The model shows a good fit (SRMR= 0.054 and NFI = 0.878). Table 3.2. presents the Stone-Geisser's Q2 and adjusted R^2 , which indicate that all the endogenous variables have a good explanatory power, with the exception of sportsmanship. The model accounts for 5.4% of variance in sportsmanship, 26.9% in civic virtue, 31% in helping behavior, and 43.9% in work engagement.

Table 3.2. – Model's Predictive Power

	Q ²	Adjusted R ²
Work engagement	0.884	43.9%
Helping	0.340	31%
Civic virtue	0.367	26.9%
Sportsmanship	0.392	5.4%

To test the hypotheses, we run the PLS analysis with 95% confidence intervals bootstrapping. Table 3.3. depicts the coefficients for the direct, indirect and interaction effects, as presented by the hypotheses.

Table 3.3. – Structural model coefficients.

	Original	Sample	p-value	CI	CI	f^2	НН	Test
T.C. CIV	sample (O)	mean (M)	0.060	5.00%	95.00%			
FC -> CV	0.129	0.130	0.069	-0.016	0.273	0.008	1a	NS
FC -> H	-0.068	-0.070	0.185	-0.193	0.054	0.002	1b	NS
FC -> S	0.007	0.001	0.468	-0.152	0.152	0	1c	NS
IC -> CV	0.149	0.147	0.053	-0.001	0.303	0.009	1d	NS
IC -> H	0.290	0.291	0.000	0.159	0.421	0.038	1e	S
IC -> S	0.171	0.177	0.027	0.030	0.324	0.01	1f	S
FC -> WE	0.218	0.217	0.000	0.119	0.314	0.029		
IF -> WE	0.360	0.361	0.000	0.256	0.462	0.077		
WE -> CV	0.319	0.319	0.000	0.200	0.432	0.078		
WE -> H	0.397	0.397	0.000	0.300	0.490	0.129		
$WE \rightarrow S$	0.106	0.104	0.072	-0.018	0.222	0.007		
$FC \rightarrow WE \rightarrow CV$	0.070	0.069	0.000	0.032	0.112		2a	S
$FC \rightarrow WE \rightarrow H$	0.087	0.086	0.000	0.044	0.133		2b	S
$FC \rightarrow WE \rightarrow S$	0.023	0.022	0.090	-0.004	0.052		2c	NS
$IF \rightarrow WE \rightarrow CV$	0.115	0.116	0.000	0.063	0.176		2d	S
$IF \rightarrow WE \rightarrow H$	0.143	0.143	0.000	0.092	0.201		2e	S
IF \rightarrow WE \rightarrow S	0.038	0.038	0.090	-0.006	0.086		2f	NS
Virt x FC \rightarrow CV	0.026	0.028	0.381	-0.109	0.173	0	3a	NS
Virt x FC -> H	0.065	0.060	0.217	-0.078	0.191	0.002	3b	NS
Virt x FC \rightarrow S	-0.016	-0.028	0.434	-0.192	0.117	0	3c	NS
Virt x FC -> WE	-0.047	-0.054	0.245	-0.169	0.052	0.001	3d	NS
Virt x IF \rightarrow CV	-0.082	-0.083	0.175	-0.229	0.058	0.003	3e	NS
Virt x IF -> H	-0.091	-0.087	0.143	-0.224	0.058	0.004	3f	NS
Virt x IF \rightarrow S	0.011	0.020	0.447	-0.113	0.167	0	3g	NS
Virt x IF \rightarrow WE	-0.046	-0.040	0.235	-0.138	0.071	0.001	3h	NS
Virt x FC \rightarrow WE \rightarrow CV	-0.015	-0.017	0.260	-0.058	0.016		4a	NS
Virt x FC \rightarrow WE \rightarrow H	-0.019	-0.022	0.250	-0.070	0.019		4b	NS
Virt x FC \rightarrow WE \rightarrow S	-0.005	-0.006	0.300	-0.024	0.006		4c	NS
Virt x IF \rightarrow WE \rightarrow CV	-0.015	-0.013	0.240	-0.045	0.024		4d	NS
Virt x IF \rightarrow WE \rightarrow H	-0.018	-0.016	0.240	-0.054	0.029		4e	NS
Virt x IF \rightarrow WE \rightarrow S	-0.005	-0.004	0.280	-0.020	0.008		4f	NS

Findings show a non-significant association between formal communication and the three OCB dimensions (B_{CV} =0.129, 95% CI [-0.016; 0.273]; B_{H} =-0.068, 95% CI [-0.193; 0.054]; B_{S} =0.007, 95% CI [-0.152; 0.152]), thus not supporting H1a, H1b and H1c. Informal communication has a direct effect on helping behaviour and sportsmanship (B_{H} =0.290, 95% CI [0.159;0.421]; B_{S} =0.171, 95% CI [0.030; 0.324]), thus supporting H1e, and H1f; however, no association was found between informal communication and civic virtue (B_{CV} =0.149, 95% CI [-0.001; 0.303]), does not supporting H1d.

Formal communication has an indirect effect on both civic virtue and helping behavior via work engagement (effect_{CV}=0.070, 95% CI [0.032; 0.112]; effect_H =0.087, 95% CI [0.044; 0.133]), supporting H2a and H2b; however, the same indirect effect was not found for sportsmanship (effect_S =0.023, 95% CI [-0.004; 0.052]), thus not supporting H2c. The exact same pattern of indirect effects was found for informal communication (effect_{CV} =0.115, 95% CI [0.063; 0.176]; effect_H =0.143, 95% CI [0.092; 0.201]; effect_S =0.038, 95% CI [-0.006; 0.086]), so the findings support H2d, H2e, and do not support H2f.

Virtuality showed no moderation effect for any interaction ($B_{FC*V\to CV}=0.026$, 95% CI [-0.109; 0.173]; $B_{FC*V\to H}=0.065$, 95% CI [-0.078; 0.191]; $B_{FC*V\to S}=-0.016$, 95% CI [-0.192; 0.117]; $B_{FC*V\to WE}=-0.047$, 95% CI [-0.169; 0.052]; $B_{IC*V\to CV}=-0.082$, 95% CI [-0.229; 0.058]; $B_{IC*V\to H}=-0.091$, 95% CI [-0.224; 0.058]; $B_{IC*V\to S}=0.011$, 95% CI [-0.113; 0.167]; $B_{IC*V\to WE}=-0.046$, 95% CI [-0.138; 0.071]), thus not supporting H3. Given the previous results, H4 was also not supported ($B_{FC*V\to WE\to CV}=-0.015$, 95% CI [-0.058; 0.016]; $B_{FC*V\to WE\to H}=-0.019$, 95% CI [-0.07; 0.019]; $B_{FC*V\to WE\to S}=-0.005$, 95% CI [-0.024; 0.006]; $B_{IC*V\to WE\to CV}=-0.015$, 95% CI [-0.045; 0.024]; $B_{IC*V\to WE\to H}=-0.018$, 95% CI [-0.054; 0.029]; $B_{IC*V\to WE\to S}=0.005$, 95% CI [-0.020; 0.008]). All these findings consider the effect of the control variables, as it is possible to analyze in Figure 3.1.

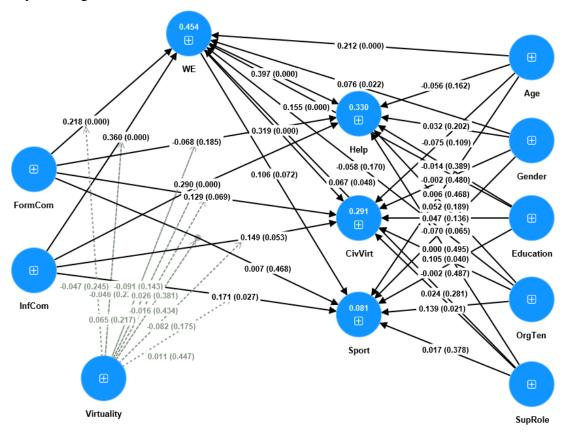


Figure 3.1. – Structural model.

CHAPTER 4 - DISCUSSION

The study was designed to test the impact of both formal and informal communication on OCB, the mediating role of work engagement, and whether virtuality could weaken this process. In this section, results will be discussed in light of theory and also with consideration of their practical implications. Suggestions for future research will be offered while acknowledging potential limitations of the present study.

4.1. Theoretical Contribution

This study was motivated by testing the role of virtuality into the impact of different communications strategies (i.e., formal, and informal) on organizational citizenship behaviors via work engagement. The discussion that follows elaborates on these findings, looks at their ramifications, and lists possible assumptions.

Firstly, findings show that formal and informal communication follow different patterns as predictors of OCB. Accordingly, contrary to our expectations, formal communication is not associated to any OCB dimensions (thus rejecting H1a, H1b, H1c). Given the extra-role nature of these behaviors as mentioned in the literature review by Organ (1988) and the inherent nature of formal communication channels, it may make sense that they are not motivated by formal actions once formal communication often revolves around official instructions, policies, and procedures, which opposes to Organ's (1997) conceptualization once it does not directly encourage employees to engage in voluntary extra-role activities. It may be something that depends more on informal dynamics or the involvement of the employee themselves, suggesting that employees may not view formal communication as a source of inspiration for engaging in behaviors, as it was conceptualized by Organ (1997), that go beyond their prescribed job duties. Expectably, in line with the fact that informal communication is positively associated with OCB dimensions (Helping Behavior and Sportsmanship, with the exception of Civic Virtue, which is very close to the limit (p=0.053); thus, supporting H1e and H1f. By the definition of Civic virtue by Podsakoff et al. (2000, p. 525) "represents a macrolevel interest in, or commitment to, the organization as a whole" which indicates an active involvement in governance and commitment to the organization, it is not perceivably a more formal behavior than an informal behavior in comparison with the helping behavior definition of Organ (1988), which it is a voluntarily assisting of others with problems related to the execution of one's job, or the prevention of those issues and the definition of Organ et al. (2006) about sportsmanship, which defines as the readiness of an employee to deal with and tolerate less-than-ideal work circumstances without complaining or making excessive critiques. While both helping behavior and sportsmanship may be directly influenced by informal communication as it can foster a sense of camaraderie (Tripathy et al., 2023) and positive attitudes (Kandlousi et al., 2010), civic virtue with its proactive macro-level engagement might be more directly influenced by contextual factors such as organizational culture or individual personality traits (Mohanty et al., 2012; Leephaijaroen, 2016) or activated through psychological mechanisms such as engagement (Kataria et al, 2013).

In some circumstances, the role of leadership in promoting Organizational Citizenship behavior might be more prominently associated with informal communication. This implies that supervisors and managers who engage in informal interactions with their subordinates, such as casual conversations, friendly exchanges, and approachability, may be more effective in fostering a culture of Organizational Citizenship behavior. Employees may feel a stronger sense of commitment and loyalty to the organization when they have a positive rapport with their leaders, leading them to voluntarily engage in behaviors that benefit the organization as a whole. It is as well conceivable that informal communication provides a platform for employees to share their ideas, concerns, and suggestions more openly. This exchange of ideas and the feeling of being heard could potentially lead to increased Organizational Citizenship behavior, particularly in the areas of Helping Behavior and Sportsmanship. This is mostly supported by our literature review as Kandlousi et al. (2010), mentioned that employees who are happy with communications within the organization, they will eventually develop favorable appreciation towards the communication style and make an effort to contribute to the organization by engaging in organizational citizenship behaviors. Employees who feel valued and supported in informal interactions with their colleagues may be more inclined to offer assistance and exhibit sportsmanship conduct, fostering a positive workplace environment. However, the influence of formal communication on Organizational Citizenship behavior could be indirect. For instance, while formal communication channels may not directly impact these behaviors, they may serve to convey organizational values, goals, and expectations. These, in turn, may indirectly shape the informal dynamics within the organization, thereby affecting organizational citizenship behaviors. This indirect influence could explain why informal communication is more strongly associated with these behaviors, as it directly reflects the interpersonal relationships and collaborative atmosphere within the organization. Nevertheless, the results indicate a need for organizations to reconsider their communication

strategies. By recognizing the positive association between informal communication and Organizational Citizenship behavior (Kandlousi et al., 2010), organizations may choose to foster more open and collaborative communication channels that encourage employees to interact informally. This could involve promoting team-building activities, encouraging crossfunctional collaboration, or creating opportunities for employees to share ideas and feedback in a less structured, informal manner.

Secondly, findings show that work engagement mediates the relationship between both formal and informal communication and Civic Virtue and Helping Behavior, thus supporting H2a, H2b, H2d, H2e. This suggests that when employees are more engaged with their work, they are more likely to exhibit Civic Virtue and Helping Behavior. These findings are in line with the idea that work engagement serves as a pipeline through which employees internalize the values and goals of the organization. In the context of formal communication, when employees receive clear and supportive messages through official channels, they may become more engaged with their work, and this increased engagement can translate into a greater willingness to contribute to the civic well-being of the organization, thus enhancing Civic Virtue. Similarly, informal communication that fosters a sense of companionship and purpose among employees may lead to higher work engagement, which, in turn, encourages helping behavior. These results are consistent with the idea that work engagement is a vital link between communication and Organizational Citizenship Behavior as it was conceived in the literature review by Babcock-Roberson and Strickland (2010).

However, no mediation effect was found between both formal and informal communication and sportsmanship, which does not support H2c and H2f and suggests that there might be another activation process at play when it comes to employees exhibiting Sportsmanship. It could be speculated that Sportsmanship, being a behavior related to fairness, respect, and courtesy, as referred in the literature review by Podsakoff et al. (2000), that is the professional act of putting aside one's own interests in favor of the group's success, embracing failure and rejection, and responding constructively when recommendations are refused - it may depend on situational factors or immediate triggers more than the continuous, sustained influence of work engagement. This might involve specific incidents or interactions in the workplace that prompt employees to demonstrate sportsmanship behavior, and this activation process might not be as closely associated to overall work engagement levels being instead more strongly influenced by immediate social interactions, ethical considerations, or situational factors rather than the continuous and sustained effects of work engagement.

As mentioned before by McDonough et al. (2001), highly virtual teams normally exhibit weaker relational ties with their colleagues than regular in-person teams do. Furthermore, from the cues-filtered-out theories' point of view, virtuality can be viewed as a job demand. Similarly, under Bakker et al. 2007's theory of JD-R, virtuality can be viewed as a job demand, which is a work requirement often viewed a negative. Although, surprisingly, no moderation effect of the Virtuality was found, thus not supporting H3 and H4, indicating that the impact of Virtuality is not dimension-specific and the consistent. As such, the previously established relationships between these variables may hold true irrespective of whether work is conducted in a physical or virtual setting.

These findings suggest the absence of a Virtuality moderation effect might imply that, from the perspective of the specific variables studied, the shift to virtual work settings may not substantially alter the way formal and informal communication influences Organizational Citizenship behavior. It also raises questions about the adaptability of existing models and theories in the context of virtual work environments, implying that these models may remain applicable in both physical and virtual settings. This consistency suggests that organizations do not need radically adjust to their communication strategies when transitioning to virtual work, as formal and informal communication remains a relevant driver of these positive behaviors and as well that employees may be equally motivated to exhibit these behaviors. This seems not to be aligned with the Cues-filtered-out theories (Walther and Parks, 2002) as that would predict a negative impact of virtuality due to difficulty of transmitting and receiving subtle communication nuances. However, research suggests the Virtuality as whole does not impact the collaboration once the remain intact either in-person and remote work.

Additionally, this absence of moderation effects due to Virtuality implies that the potential challenges associated with virtual work, such as reduced interpersonal interaction, may not necessarily hinder employees from engaging in Organizational Citizenship behavior. It is plausible that employees have found alternative ways to maintain relationships and collaboration, mitigating the impact of virtuality on these behaviors. This adaptation could involve using digital tools for informal communication, scheduling regular virtual team meetings, or fostering a strong sense of shared purpose and commitment, all of which can contribute to Organizational Citizenship behavior (Yamada, 2023).

4.2. Practical Implications

This study provides insightful information about the complex interactions between formal and informal communication, work engagement, organizational citizenship behavior, and the challenges brought by virtuality. Along with the complexity brought on by the virtual environment, the importance of effective communication in fostering excellent work behaviors is obvious. While some hypotheses found support, others suggest more research is necessary. These results provide a strong platform for further investigations into organizational citizenship behaviors and management as well as for useful applications.

It is possible to identify 3 practical applications from the developed study: Development of a Communication Strategy: it is highlights in the study the crucial part that effective communication plays in influencing work engagement and promoting OCB inside companies. Organizations should properly reevaluate their communication strategy considering the importance of both formal and informal communication and, moreover, never forgetting the spectrum of educational backgrounds and hierarchical structures that define the organization's workforce that must be acknowledged and accommodated while developing these strategies. Given these results, it is crucial to implement focused training programs and interventions that aim to improve communication skills; Building a Culture of Organizational Citizenship: For organizations looking to create a culture of organizational citizenship, it is crucial to comprehend the elements that affect OCB dimensions including civic virtue, helpful behavior, and sportsmanship. The study offers useful insights into the factors that influence these behaviors, enabling firms to create programs that not only support employees but also reward them for their contributions to the overall success of the company. Such acknowledgment can be a powerful encouragement for workers to engage in good citizenship behaviors; And engaging with the Challenges of In-person and Online communication: as there is no changes on the effect of communication on promoting the organizational citizenship behaviors either in-person or remotely, companies must not consider a disinvestment on internal marketing and more specifically the internal communication when in remote work, once the continuous development of strategies and tools for internal communication are important to keep fostering organizational citizenship behaviors.

Understandably these insights have implications for organizations which are looking to improve their engagement, communication, and overall organizational citizenship behaviors in order to succeed. It is impossible to emphasize the value of tailored strategies that consider both organizational and individual characteristics when designing those strategies. By

understanding these complex interactions (organizational and individual characteristics) becomes essential as organizations handle a dynamic workplace. However, the journey is far from accomplished, and more research is required to develop a more sophisticated knowledge of how organizations may use communication and virtuality to increase work engagement, organizational citizenship behaviors, and consequently, maximize a wide range of organizational goals (e.g., productivity, employee retention, satisfaction) (e.g., Obedgiu et al., 2020; Großer & Baumöl 2017; Sohail & Jang, 2017)

CHAPTER 5 – CONCLUSION AND RECOMMENDATIONS

This study's thorough analysis reveals the complex interrelationships between organizational characteristics, communication styles, work engagement, and organizational citizenship behavior. The findings from this research have wide-ranging and diverse consequences which can be helpful insights for businesses looking to improve their work engagement, communication strategies, and organizational culture. The study also opens the door for a number of compelling directions for future research that can enhance our understanding of these complicated dynamics.

The thesis provides a comprehensive exploration of the interconnected concepts of internal marketing, organizational citizenship behavior, work engagement, and virtuality within modern organizations. It highlights how these concepts relate to one another, which we believe is important to enhance organizational effectiveness. The study outlines key perspectives on internal marketing, challenges in implementing it, and its impact on employee behaviors (i.e., OCB). It also discusses the three dimensions of organizational citizenship behavior and how they positively affect organizational efficiency. The role of communication, especially internal communication, in fostering organizational citizenship behavior is emphasized.

While this study has shed light on the intricate relationships that exist between organizational characteristics, communication styles, work engagement, and organizational citizenship behavior, it is important to recognize several limitations that are inherent in the research method. It is essential to be aware of these restrictions in order to properly assess the study's findings and direct future work in this area. As we acknowledge that every research endeavor operates within restrictions that affect the scope and generalizability of its conclusions, we shall describe the limitations of this study in this section.

First, because of its correlational and cross-sectional nature, this study does not permit causal explanations Future research may consider adopting a longitudinal or an experimental approach (Lacourse et al., 2002).

Taking in consideration the formal and informal communication future research should have a look into the current strategies and tools that are used to communicate within the organization, vertically and horizontally.

We also need to acknowledge that although the study looks into how virtual environments affect communication and employee outcomes, it does not go into great detail about the precise mechanisms by which virtual environments influence these relationships. Research in the future might examine the precise ways that virtual worlds affect engagement and

communication. Moreover, there are challenges of virtual communication. While the study emphasizes the detrimental effects of virtuality on communication and OCB, it does not provide concrete solutions to address these challenges. Given its growing universality, future studies should look into ways to reduce the negative effects of virtuality on communication and employee outcomes. Moreover, the Civic Virtue is very close to the limit of significance (p=0.053) in its association with informal communication suggests that there might be a nuanced relationship. It could be hypothesized that the connection between informal communication and Civic Virtue is not as strong as with other dimensions, indicating that this particular aspect of Organizational Citizenship behavior may be influenced by a combination of formal and informal factors, or that the association is contingent on specific contextual variables not captured in this study. Further research may be needed to explore this dimension in more detail. Nevertheless, further research is also needed to explore and identify the specific situational factors or triggers that lead to Sportsmanship behaviors, and to determine whether these are influenced by different aspects of formal and informal communication or other contextual variables not accounted for in this study. Understanding the distinct mechanisms at play for different dimensions of Organizational Citizenship Behavior can provide organizations with more precise strategies for encouraging these behaviors among their employees and a productive workplace. Some strategies are directly connected to the relationship with the superior roles, meaning that future research could look into how management, team leaders, and players affect sportsmanship, civic virtues, and helping behaviors. The deeper implications of OCB may be revealed by examining how it impacts organizational performance and culture. This also implies specific communication strategies and although the study identifies how formal and informal communication affects OCB, it does not offer organizations any concrete strategies to foster these effects. In order to facilitate training and development programs, further research could concentrate on identifying specific communication practices or channels that work the best in encouraging civic virtue and helping behavior.

One last topic to be considered are the cultural differences once our study does not analyze how differences in culture affect the relationships that are being examined. Additional studies in this area may reveal how cultural factors affect engagement, communication, and OCB and how organizations could adapt their practices accordingly.

We are confident that by addressing these limitations in future research endeavors can further advance the understanding of these complex dynamics in organizational settings.

In conclusion, the work provides a comprehensive understanding of the interconnections between internal marketing, organizational citizenship behavior, work engagement, and virtuality within modern organizations. While this journey has been enlightening, it is clear that more research is needed to further our understanding of these intricate dynamics. The workplace is evolving, and our exploration of communication and its impact on employee behavior is far from complete. As we move forward, we must continue to seek deeper insights, adapt to changing circumstances, and use this knowledge to drive organizational success in a complex and dynamic world.

REFERENCES

- Abzari, M., & Ghujali, T. (2011). Examining the Impact of Internal Marketing on Organizational Citizenship Behavior. *International Journal of Marketing Studies*, 3(4), 95-104. https://doi.org/10.5539/ijms.v3n4p95
- Ahmed, P. K., Rafiq, M., & Saad, N. M. (2003). Internal marketing and the mediating role of organisational competencies. *European Journal of Marketing*, *37*(9), 1221–1241. https://doi.org/10.1108/03090560310486960
- Kandlousi, N. S., Ali, A. J., & Abdollahi, A. (2010). Organizational citizenship behavior in concern of communication satisfaction: The role of the formal and informal communication. *International Journal of Business and Management*, *5*(10), 51-61. https://doi.org/10.5539/ijbm.v5n10p51
- Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of Psychology*, *144*(3), 313–326. https://doi.org/10.1080/00223981003648336
- Baker D. (2007). *Strategic change management in public sector organisations*. Chandos Publishing. https://doi.org/10.1016/C2013-0-16581-6
- Bakker, A. B., Hakanen, J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274–284. https://doi.org/10.1037/0022-0663.99.2.274
- Bakker, A. B., & Xanthopoulou, D. (2009). The crossover of daily work engagement: Test of an actor–partner interdependence model. *Journal of Applied Psychology*, 94(6), 1562–1571. https://doi.org/10.1037/a0017525
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206. https://doi.org/10.1348/096317909x402596

- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4–28. https://doi.org/10.1080/1359432x.2010.485352
- Bakker, A. B. (2017). Strategic and proactive approaches to work engagement.

 Organizational Dynamics, 46(2), 67–75. https://doi.org/10.1016/j.orgdyn.2017.04.002
- Bakker, A. B., & Demerouti, E. (2017). Job demands—resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. https://doi.org/10.1037/ocp0000056
- Bakker, A. B., Hetland, J., Olsen, O. K., Espevik, R., & De Vries, J. D. (2020). Job crafting and playful work design: Links with performance during busy and quiet days. *Journal of Vocational Behavior*, 122(1), 103478. https://doi.org/10.1016/j.jvb.2020.103478
- Ballantyne, D. (1997). Internal networks for internal marketing. *Journal of Marketing Management*, 13(5), 343–366. https://doi.org/10.1080/0267257x.1997.9964479
- Baltes, B. B., Dickson, M. W., Sherman, M. P., Bauer, C. C., & LaGanke, J. S. (2002).
 Computer-Mediated Communication and Group Decision Making: A Meta-Analysis.
 Organizational Behavior and Human Decision Processes, 87(1), 156–179.
 https://doi.org/10.1006/obhd.2001.2961
- Bansal, H. S., Mendelson, M., & Sharma, B. (2001). The impact of internal marketing activities on external marketing outcomes. *Journal of Quality Management*, 6(1), 61–76. https://doi.org/10.1016/s1084-8568(01)00029-3
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the Good Soldier: The relationship between affect and employee "Citizenship". *Academy of Management Journal*, 26(4), 587–595. https://doi.org/10.2307/255908

- Bearden, W. O., Netemeyer, R. G., & Research, A. C. (1999). *Handbook of Marketing Scales: Multi-Item Measures for Marketing and Consumer Behavior Research* (2nd ed.). Sage Publications.
- Berry, L.L. (1981). The employee as customer. *Journal of Retail Banking*, 3(1), 33-40.
- Berry, L.L. & Parasuraman, A. (1991). *Marketing services: Competing through quality*. The Free Press.
- Berry, G. R. (2011). Enhancing effectiveness on virtual teams: Understanding why traditional team skills are insufficient. *Journal of Business Communication*, 48(2), 186–206. https://doi.org/10.1177/0021943610397270
- Biggs, A., Brough, P., & Barbour, J. P. (2014). Enhancing work-related attitudes and work engagement: A quasi-experimental study of the impact of an organizational intervention. *International Journal of Stress Management*, 21(1), 43–68. https://doi.org/10.1037/a0034508
- Borman, W. C., & Motowidlo, S. M. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). Jossey-Bass.
- Boswell, W. R., Bingham, J., & Colvin, A. J. (2006). Aligning employees through "line of sight.". *Business Horizons*, 49(6), 499–509. https://doi.org/10.1016/j.bushor.2006.05.001
- Boukis, A. (2019). Internal market orientation as a value creation mechanism. *Journal of Services Marketing*, *33*(2), 233–244. https://doi.org/10.1108/jsm-10-2017-0336
- Chan, S. H., & Lai, H. Y. (2017). Understanding the link between communication satisfaction, perceived justice and organizational citizenship behavior. *Journal of Business Research*, 70(1), 214–223. https://doi.org/10.1016/j.jbusres.2016.08.017

- Chang, C., & Chang, H. H. (2007). Effects of internal marketing on nurse job satisfaction and organizational commitment: Example of medical centers in southern Taiwan. *Journal of Nursing Research*, *15*(4), 265–274.

 https://doi.org/10.1097/01.jnr.0000387623.02931.a3
- Chester I. B. (1938). The functions of the executive. Harvard University Press.
- Clampitt, P. G., DeKoch, R. J., & Cashman, T. J. (2000). A strategy for communicating about uncertainty. *Academy of Management Perspectives*, *14*(4), 41–57. https://doi.org/10.5465/ame.2000.3979815
- Collins, B., & Payne, A. (1991). Internal marketing: A new perspective for HRM. *European Management Journal*, 9(3), 261–270. https://doi.org/10.1016/0263-2373(91)90006-c
- Cook, K. S., Cheshire, C., Rice, E., & Nakagawa, S. (2013). Social exchange theory. In R. T. Serpe (Eds.), *Handbooks of sociology and social research* (pp. 61–88). Springer. https://doi.org/10.1007/978-94-007-6772-0_3
- Cowell, D. W. (1984). Sales promotions and the marketing of local government recreation and leisure services. *European Journal of Marketing*, *18*(2), 114–120. https://doi.org/10.1108/eum0000000004775
- Culbertson, S. S., Mills, M. J., & Fullagar, C. (2012). Work engagement and work-family facilitation: Making homes happier through positive affective spillover. *Human Relations*, 65(9), 1155–1177. https://doi.org/10.1177/0018726712440295
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*(1), 89–136. https://doi.org/10.1111/j.1744-6570.2010.01203.x
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, *32*(5), 554–571. https://doi.org/10.1287/mnsc.32.5.554

- De Guinea, A. O., Webster, J., & Staples, D. S. (2012). A meta-analysis of the consequences of virtualness on team functioning. *Information & Management*, 49(6), 301–308. https://doi.org/10.1016/j.im.2012.08.003
- De Jong, R., Schalk, R., & Curşeu, P. L. (2008). Virtual communicating, conflicts and performance in teams. *Team Performance Management*, *14*(7), 364–380. https://doi.org/10.1108/13527590810912331
- DeSanctis, G., Poole, M.S. & Dickson, G.W. (2000). Teams and technology interactions over time. In M. A. Neale & E. A. Mannix (Eds.), *Research on managing groups and teams* (pp. 1-27). Emerald Group Publishing. https://doi.org/10.1016/S1534-0856(00)03002-4
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499
- Ersoy, N. C., Derous, E., Born, M. P., & Van Der Molen, H. T. (2015). Antecedents of organizational citizenship behavior among Turkish white-collar employees in The Netherlands and Turkey. *International Journal of Intercultural Relations*, 49(1), 68–79. https://doi.org/10.1016/j.ijintrel.2015.06.010
- Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment*, 32(3), 195–212. https://doi.org/10.1111/ntwe.12097
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226. https://doi.org/10.1037/0003-066x.56.3.218

- Ferdous, A. S., Herington, C. A., & Merrilees, B. (2013). Developing an integrative model of internal and external marketing. *Journal of Strategic Marketing*, 21(7), 637–649. https://doi.org/10.1080/0965254x.2013.817474
- Flipo, J. (1986). Service firms: Interdependence of external and internal marketing strategies. *European Journal of Marketing*, 20(8), 5–14.

 https://doi.org/10.1108/eum0000000004658
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388. https://doi.org/10.1177/002224378101800313
- Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak. *Journal of Occupational and Environmental Medicine*, 63(7), 426–432. https://doi.org/10.1097/jom.0000000000002236
- Ganesh, M., & Gupta, M. (2010). Impact of virtualness and task interdependence on extrarole performance in software development teams. *Team Performance Management*, 16(3), 169–186. https://doi.org/10.1108/13527591011053250
- Gaudecker, H. M., Holler, R., Janys, L., Siflinger, B., & Zimpelmann, C. (2020, April).

 Labour supply in the early stages of the CoViD-19 Pandemic: Empirical Evidence on hours, home office, and expectations. *Institute of Labor Economics*.

 https://www.iza.org/publications/dp/13158/labour-supply-in-the-early-stages-of-the-covid-19-pandemic-empirical-evidence-on-hours-home-office-and-expectations
- George, W. R. (1990). Internal marketing and organizational behavior: A partnership in developing customer-conscious employees at every level. *Journal of Business**Research*, 20(1), 63–70. https://doi.org/10.1016/0148-2963(90)90043-d
- Gibson, C. B., & Cohen, S. G. (2003). Virtual teams that work: Creating conditions for virtual team effectiveness. Jossey-Bass.

- Gilmore A., & Carson D. (1995). Managing and marketing to internal customer. In W. J.

 Glynn & J. G. Barnes (Eds.), *Understanding service management* (pp. 295-321). John

 Wiley & Sons.
- Gilson, L. L., Maynard, M., Young, N. C., Vartiainen, M., & Hakonen, M. (2014). Virtual teams research. *Journal of Management*, *41*(5), 1313–1337. https://doi.org/10.1177/0149206314559946
- Goldhaber, G. M. (1990). Organizational Communication (5th ed.). W.C. Brown Publishers
- Global CAD (2020, 17th July). GlobalCAD 2020 report: More than a decade transforming societies. *Global Centre of Partnerships for Development*. https://globalcad.org/wp-content/uploads/2020/07/Ten-years-reportJuly172020_compressed.pdf
- Gounaris, S. (2006). Internal-market orientation and its measurement. *Journal of Business Research*, 59(4), 432–448. https://doi.org/10.1016/j.jbusres.2005.10.003
- Gounaris, S. (2008). The notion of internal market orientation and employee job satisfaction: some preliminary evidence. *Journal of Services Marketing*, 22(1), 68–90. https://doi.org/10.1108/08876040810851978
- Graham, J. A. (1991). An essay on organizational citizenship behavior. *Employee**Responsibilities and Rights Journal, 4(4), 249–270.

 https://doi.org/10.1007/bf01385031
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28(1), 3–34. https://doi.org/10.1016/j.riob.2008.04.002
- Großer, B., & Baumöl, U. (2017). Organizational structures for an implementation of virtual teamwork A case study analysis. In W. M. P. Van der Aalst, S. Ram, M. Rosemann,
 C. Szyperski & G. Guizzardi (Eds.), *Lecture notes in business information processing* (pp. 268-278). Springer International Publishing. https://doi.org/10.1007/978-3-319-64930-6_20

- Gronroos, C. (1981). Internal marketing: An integral part of marketing theory. In J. Donnelly & W. George (Eds.), *Marketing services* (pp. 236–238). American Marketing Association.
- Gummesson, E. (1991). Marketing-orientation revisited: The crucial role of the part-time marketer. *European Journal of Marketing*, 25(2), 60–75. https://doi.org/10.1108/03090569110139166
- Guyot, K. & Sawhill, I. (2020, 6th April). Telecommuting will likely continue long after the pandemic. *Brookings Institution*. https://www.brookings.edu/articles/telecommuting-will-likely-continue-long-after-the-pandemic/
- Griffith, T. L., Sawyer, J. E., & Neale, M. A. (2003). Virtualness and knowledge in teams:

 Managing the love triangle of organizations, individuals, and information technology.

 Management Information Systems Quarterly, 27(2), 265-287.

 https://doi.org/10.2307/30036531
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E.
 (2019). Multivariate Data Analysis (8th ed.). Cengage.
 https://search.worldcat.org/pt/title/1082318713
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 102–117). Psychology Press.
- Halbesleben, J. R. B., Neveu, J., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR": Understanding the role of resources in conservation of resources theory. *Journal of Management*, 40(5), 1334–1364.
 https://doi.org/10.1177/0149206314527130

- Hakanen, J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. Work & Stress, 22(3), 224–241.
 https://doi.org/10.1080/02678370802379432
- Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*(6), 495–513. https://doi.org/10.1016/j.jsp.2005.11.001
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A metaanalysis. *Journal of Applied Psychology*, 87(2), 268–279. https://doi.org/10.1037/0021-9010.87.2.268
- Helm, A., Peltier, J. W., & Scovotti, C. (2006). Understanding the antecedents to recruiting foster care and adoptive parents: A comparison of white and african-american families. *Health Marketing Quarterly*, 23(4), 109–129. https://doi.org/10.1080/07359680802131590
- Helman, D., & Payne, A. (1992). *Internal marketing: Myth versus reality*. Cranfield School of Management.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress.

 *American Psychologist, 44(3), 513–524. https://doi.org/10.1037/0003-066x.44.3.513
- Hopstaken, J. F., Van Der Linden, D., Bakker, A. B., & Kompier, M. A. J. (2014). A multifaceted investigation of the link between mental fatigue and task disengagement. *Psychophysiology*, 52(3), 305–315. https://doi.org/10.1111/psyp.12339

- Hornung, S., Rousseau, D. M., Glaser, J., Angerer, P., & Weigl, M. (2010). Beyond top-down and bottom-up work redesign: Customizing job content through idiosyncratic deals.

 *Journal of Organizational Behavior, 31(3), 187–215. https://doi.org/10.1002/job.625
- Huang, Y. (2019). Internal marketing and internal customer: A review, reconceptualization, and extension. *Journal of Relationship Marketing*, 19(3), 165–181.
 https://doi.org/10.1080/15332667.2019.1664873
- IWG (2019, March). The IWG global workspace survey: Welcome to generation flex The employee power shift. *International Workplace Group*.
 https://assets.regus.com/pdfs/iwg-workplace-survey/iwg-workplace-survey-2019.pdf
- Jablin, F. M., & Putnam, L. L. (2001). The new handbook of organizational communication.
 Sage Publications. https://doi.org/10.4135/9781412986243
- Jöreskog, K. G. (1971). Simultaneous factor analysis in several populations. *Psychometrika*, 36(4), 409–426. https://doi.org/10.1007/bf02291366
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724. https://doi.org/10.5465/256287
- Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321–349. https://doi.org/10.1177/001872679204500402
- Kandampully, J. (2006). The new customer-centred business model for the hospitality industry. *International Journal of Contemporary Hospitality Management*, 18(3), 173–187. https://doi.org/10.1108/09596110610658599
- Kasekende, F., Nasiima, S., & Otengei, S. O. (2020). Strategic human resource practices, emotional exhaustion and OCB: The mediator role of person-organization fit. *Journal of Organizational Effectiveness*, 7(3), 275–295. https://doi.org/10.1108/joepp-04-2020-0056

- Kataria, A., Garg P., & Rastogi, R. (2013). Employee engagement and organizational effectiveness: The role of organizational citizenship behavior. *The Business Management Review*, 6(1), 102-113.
- Katz, D. (1964). The motivational basis of organizational behavior. *Systems Research and Behavioral Science*, 9(2), 131–146. https://doi.org/10.1002/bs.3830090206
- Katz, D., & Kahn, R.L. (1966). The social psychology of organizations. Wiley.
- Kirkman, B. L., & Mathieu, J. E. (2005). The dimensions and antecedents of team virtuality. *Journal of Management*, 31(5), 700–718. https://doi.org/10.1177/0149206305279113
- Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*, 17(3), 253– 266. https://doi.org/10.1002/(SICI)1099-1379(199605)17:3<253::AID-JOB747>3.0.CO;2-Q
- Koyuncu, M., Burke, R. J., & Fiksenbaum, L. (2006). Work engagement among women managers and professionals in a Turkish bank. *Equality, Diversity and Inclusion*, 25(4), 299–310. https://doi.org/10.1108/02610150610706276
- Kraut, R. E., Fish, R. S., Root, R. W., Chalfonte, B. L., Oskamp, I. S., & Spacapan, S. (1990).
 Informal communication in organizations: Form, function, and technology. In S.
 Oskamp & S. Spacapan (Eds.), *Human reaction to technology: Claremont symposium on applied social psychology* (pp. 145–199). Sage Publications.
- Lacourse, É., Côté, S. M., Nagin, D. S., Vitaro, F., Brendgen, M., & Tremblay, R. E. (2002).

 A longitudinal–experimental approach to testing theories of antisocial behavior development. *Development and Psychopathology*, *14*(4), 909–924.

 https://doi.org/10.1017/s0954579402004121
- Leephaijaroen, S. (2016). Effects of the big-five personality traits and organizational commitments on organizational citizenship behavior of support staff at Ubon

- Ratchathani Rajabhat University, Thailand. *Kasetsart Journal of Social Sciences*, 37(2), 104–111. https://doi.org/10.1016/j.kjss.2015.03.002
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1), 52–65. https://doi.org/10.1037/0021-9010.87.1.52
- Lings, I., & Greenley, G. E. (2005). Measuring internal market orientation. *Journal of Service Research*, 7(3), 290–305. https://doi.org/10.1177/1094670504271154
- Lings, I. (2004). Internal market orientation. *Journal of Business Research*, *57*(4), 405–413. https://doi.org/10.1016/s0148-2963(02)00274-6
- Lipnack, J., & Stamps, J. (2000). *Virtual teams: People working across boundaries with technology* (2nd ed.). John Wiley & Sons.
- Maslach, C., & Leiter, M. P. (1997). The truth about burnout: How organizations cause personal stress and what to do about it. Jossey-Bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. https://doi.org/10.1146/annurev.psych.52.1.397
- Martin, E., & To, W. M. (2013). Effect of internal market orientation on organizational performance: the case of Macao's gaming industry. *International Journal of Hospitality & Tourism Administration*, *14*(3), 233–254. https://doi.org/10.1080/15256480.2013.809980
- Martins, L. D. L., Gilson, L. L., & Maynard, M. (2004). Virtual teams: What do we know and where do we go from here? *Journal of Management*, 30(6), 805–835. https://doi.org/10.1016/j.jm.2004.05.002
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70(1), 149–171. https://doi.org/10.1016/j.jvb.2006.09.002

- McDonough, E. F., Kahnb, K. B., & Barczaka, G. (2001). An investigation of the use of global, virtual, and colocated new product development teams. *Journal of Product Innovation Management*, 18(2), 110–120.
 https://doi.org/10.1016/s0737-6782(00)00073-4
- Mohanty, J., & Rath, B. P. (2012). Influence of organizational culture on organizational citizenship behavior: Three-sector study. *Global Journal of Business Research*, 6(1) 65-76.
- Mohr, J. J., Fisher, R. J., & Nevin, J. R. (1996). Collaborative communication in interfirm relationships: Moderating effects of integration and control. *Journal of Marketing*, 60(3), 103-115. https://doi.org/10.2307/1251844
- Motowidlo, S. J. (2000). Some basic issues related to contextual performance and organizational citizenship behavior in human resource management. *Human Resource Management Review*, 10(1), 115–126.

 https://doi.org/10.1016/s1053-4822(99)00042-x
- Motowidlo, S.J. (2003). Job performance. In W.C. Borman, D.R. Ilgen & R.J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (12th ed., pp. 39-53). John Wiley & Sons.
- Mero, N. M., Hidalgo-Fernández, A., Alcívar, M. I. L., & Cruz, F. G. S. (2020). Influence of internal marketing dimensions on organizational commitment: An empirical application in Ecuadorian co-operativism. Sage Open, 10(3), 1-10. https://doi.org/10.1177/2158244020945712
- Morgan, J. (2014). The future of work: Attract new talent, build better leaders, and create a competitive organization. John Wiley & Sons.

- Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal*, *37*(6), 1543–1567. https://doi.org/10.5465/256798
- Morrison-Smith, S., & Ruiz, J. (2020). Challenges and barriers in virtual teams: A literature review. *SN Applied Sciences*, 2(6), 1096. https://doi.org/10.1007/s42452-020-2801-5
- Nelson, T. H. (1965). Complex information processing: A file structure for the complex, the changing and the indeterminate. *Proceedings Of The 1965 20th National Conference*, 20(1), 84–100. https://doi.org/10.1145/800197.806036
- Obedgiu, V., Nkurunziza, G., Simiyu, G., & Lubogoyi, B. (2020). An investigation of key predictors of organizational citizenship behavior of civil servants. *International Journal of Organization Theory and Behavior*, 23(2), 101–119. https://doi.org/10.1108/ijotb-03-2019-0041
- Organ, D.W. (1988). Organizational citizenship behaviour: The good soldier syndrome. Lexington Books.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In M. Gberevbie (Eds.), *Research in organizational behavior* (12th ed., pp. 43-72). Jai Press.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time.

 Human Performance, 10(2), 85–97. https://doi.org/10.1207/s15327043hup1002_2
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Sage Publications. https://doi.org/10.4135/9781452231082
- Pianese, T., Errichiello, L., & Da Cunha, J. V. (2022). Organizational control in the context of remote working: A synthesis of empirical findings and a research agenda.

 European Management Review, 20(2), 326–345. https://doi.org/10.1111/emre.12515

- Piercy, N. F., & Morgan, N. (1991). Internal marketing—The missing half of the marketing programme. *Long Range Planning*, 24(2), 82–93. https://doi.org/10.1016/0024-6301(91)90083-z
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513–563. https://doi.org/10.1177/014920630002600307
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82(2), 262–270. https://doi.org/10.1037/0021-9010.82.2.262
- Qaisar, F. S., & Muhamad, N. (2021). Internal marketing: a review and future research agenda. *Asia Pacific Business Review*, 27(2), 267–300. https://doi.org/10.1080/13602381.2021.1858590
- Qiu, J., Boukis, A., & Storey, C. (2021). Internal marketing: A systematic review. *Journal of Marketing Theory and Practice*, 30(1), 53–67. https://doi.org/10.1080/10696679.2021.1886588
- Rai, A., Ghosh, P., Chauhan, R., & Mehta, N. K. (2017). Influence of job characteristics on engagement: does support at work act as moderator? *International Journal of Sociology and Social Policy*, 37(2), 86–105. https://doi.org/10.1108/ijssp-10-2015-0106
- Rafiq, M., & Ahmed, P. K. (2000). Advances in the internal marketing concept: Definition, synthesis and extension. *Journal of Services Marketing*, *14*(6), 449–462. https://doi.org/10.1108/08876040010347589

- Raghuram, S., Hill, N. S., Gibbs, J. L., & Maruping, L. M. (2019). Virtual work: Bridging research clusters. *The Academy of Management Annals*, *13*(1), 308–341. https://doi.org/10.5465/annals.2017.0020
- Ramdeo, S., & Singh, R. (2019). Abusive supervision, co-worker abuse and work outcomes:

 Procedural justice as a mediator. *Evidence-based HRM*, 7(3), 325–341.

 https://doi.org/10.1108/ebhrm-09-2018-0060
- Richardsen, A. M., Burke, R. J., & Martinussen, M. (2006). Work and health outcomes among police officers: The mediating role of police cynicism and engagement.

 International Journal of Stress Management, 13(4), 555–574.

 https://doi.org/10.1037/1072-5245.13.4.555
- Rosengren, K. E. (2000). Communication: An introduction. Sage Publications.
- Salanova, M., Nieto, S. A., & Peíró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217–1227. https://doi.org/10.1037/0021-9010.90.6.1217
- Salanova, M., Lorente, L. M., Chambel, M. J., & Martínez, I. (2011). Linking transformational leadership to nurses' extra-role performance: The mediating role of self-efficacy and work engagement. *Journal of Advanced Nursing*, 67(10), 2256–2266. https://doi.org/10.1111/j.1365-2648.2011.05652.x
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, *3*(1), 71–92. https://doi.org/10.1023/A:1015630930326

- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. https://doi.org/10.1002/job.248
- Shimazu, A., Schaufeli, W. B., Miyanaka, D., & Iwata, N. (2010). Why japanese workers show low work engagement: An item response theory analysis of the Utrecht work engagement scale. *BioPsychoSocial Medicine*, *4*, 17. https://doi.org/10.1186/1751-0759-4-17
- Shimazu, A., Schaufeli, W. B., Kamiyama, K., & Kawakami, N. (2014). Workaholism vs. work engagement: The two different predictors of future well-being and performance. *International Journal of Behavioral Medicine*, 22(1), 18–23. https://doi.org/10.1007/s12529-014-9410-x
- Spreitzer, G. M., Cameron, L., & Garrett, L. E. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*(1), 473–499. https://doi.org/10.1146/annurev-orgpsych-032516-113332
- Sohail, M. S., & Jang, J. (2017). Understanding the relationships among internal marketing practices, job satisfaction, service quality and customer satisfaction: An empirical investigation of Saudi Arabia's service employees. *International Journal of Tourism Sciences*, 17(2), 67–85. https://doi.org/10.1080/15980634.2017.1294343
- Srivastava, S., & Pathak, D. (2019). The role of moderators in linking job crafting to organizational citizenship behaviour: A study on the Indian hospitality sector. *Vision*, 24(1), 101–112. https://doi.org/10.1177/0972262919869747
- Strijk, J., Proper, K. I., Van Mechelen, W., & Van Der Beek, A. J. (2012). Effectiveness of a worksite lifestyle intervention on vitality, work engagement, productivity, and sick

- leave: Results of a randomized controlled trial. *Scandinavian Journal of Work, Environment & Health*, *39*(1), 66–75. https://doi.org/10.5271/sjweh.3311
- Straus, S. G., & Olivera, F. (2000). Knowledge acquisition in virtual teams. In M. A. Neale & E. A. Mannix (Eds.), *Research on Managing Groups and Teams* (3rd ed., pp. 257–282). Emerald Publishing. https://doi.org/10.1016/S1534-0856(00)03013-9
- Tapscott, D. (1999). Marketing in the Digital. In Scammell A. (Ed.), *i in the sky: Visions of the information future* (pp. 55-60). Routledge. https://doi.org/10.4324/9781003421955
- Tompkins, P. K. (1987). Translating organizational theory: Symbolism over substance. In F.
 M. Jablin, L. L. Putnam & L. W. Porter (Eds.), *Handbook of organizational*communication: An interdisciplinary perspective (pp. 70–96). Sage Publications.
- To, W. M., Martin, E., & Yu, B. T. (2015). Effect of management commitment to internal marketing on employee work attitude. *International Journal of Hospitality*Management, 45(1), 14–21. https://doi.org/10.1016/j.ijhm.2014.11.002
- Townsend, A. M., Demarie, S. M., & Hendrickson, A. R. (1998). Virtual teams: Technology and the workplace of the future. *Academy of Management Perspectives*, *12*(3), 17–29. https://doi.org/10.5465/ame.1998.1109047
- Tripathy, S., Chhabra, S., Deorari, R., Sreenivasgoud, P., Hussein, A., & Alazzam, M. B.
 (2023). Virtual teams: Analysis of best technology to optimize with the goal setting of all technical aspects. 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 3(1), 857–861.
 https://doi.org/10.1109/icacite57410.2023.10182578
- Turoff, M. (1997). Virtuality. *Communications of the ACM*, 40(9), 38–43. https://doi.org/10.1145/260750.260761

- Tsai, Y., & Tang, T. (2008). How to improve service quality: Internal marketing as a determining factor. *Total Quality Management & Business Excellence*, *19*(11), 1117–1126. https://doi.org/10.1080/14783360802323479
- Van Dick, R., Grojean, M. W., Christ, O., & Wieseke, J. (2006). Identity and the extra mile:

 Relationships between organizational identification and organizational citizenship
 behaviour. *British Journal of Management*, 17(4), 283–301.

 https://doi.org/10.1111/j.1467-8551.2006.00520.x
- Varey, R. J. (1995). Internal marketing: A review and some interdisciplinary research challenges. *International Journal of Service Industry Management*, 6(1), 40–63. https://doi.org/10.1108/09564239510078849
- Varey, R. J. (1995). A model of internal marketing for building and sustaining a competitive service advantage. *Journal of Marketing Management*, 11(3), 41–54. https://doi.org/10.1080/0267257x.1995.9964328
- Vigoda-Gadot, E. (2006). Compulsory citizenship behavior: Theorizing some dark sides of the good soldier syndrome in organizations. *Journal for the Theory of Social Behaviour*, 36(1), 77–93. https://doi.org/10.1111/j.1468-5914.2006.00297.x
- Walther, J. B., & Parks, M. R. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. In M. L. Knapp & J. A. Daly (Eds.), *The handbook of interpersonal communication* (3rd ed., pp. 529–563). Sage Publications.
- Wang, M., Zhu, T., Zhang, T., Zhang, J., Yu, S., & Zhou, W. (2020). Security and privacy in 6G networks: New areas and new challenges. *Digital Communications and Networks*, 6(3), 281–291. https://doi.org/10.1016/j.dcan.2020.07.003
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601–617. https://doi.org/10.1177/014920639101700305

- Wushe, T., & Shenje, J. (2019). The antecedents of employee engagement and their effect on public sector service delivery: The case study of government departments in Harare.

 SA Journal of Human Resource Management, 17(1), 1-11.

 https://doi.org/10.4102/sajhrm.v17i0.1082
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement.
 Journal of Vocational Behavior, 74(3), 235–244.
 https://doi.org/10.1016/j.jvb.2008.11.003
- Yamada, R. (2023). The impact of cross-cultural communication on organizational citizenship behavior in global virtual teams (Master's degree thesis, Aalto University School of Business). Aalto University Repositorium.

 https://aaltodoc.aalto.fi/items/3fd420f9-51a3-4252-982a-a4db14e3fee2
- Yang, L., Holtz, D., Jaffe, S., Suri, S., Sinha, S., Weston, J., Joyce, C., Shah, N., Sherman, K., Hecht, B., & Teevan, J. (2021). The effects of remote work on collaboration among information workers. *Nature Human Behaviour*, 6(1), 43–54. https://doi.org/10.1038/s41562-021-01196-4
- Yıldırım, O. (2014). The Impact of Organizational communication on organizational citizenship Behavior: research findings. *Procedia - Social and Behavioral Sciences*, 150(1), 1095–1100. https://doi.org/10.1016/j.sbspro.2014.09.124

Appendix

Annex A - Survey

Q1

O presente questionário foi desenvolvido no âmbito de uma investigação académica no ISCTE-Instituto Universitário de Lisboa. O objetivo do mesmo é investigar alguns aspetos relativos à atividade profissional da população portuguesa. Contamos com o seu contributo. A sua participação é anónima e voluntária, assim como os dados obtidos são confidenciais e serão estritamente utilizados para fins académicos. Não existem respostas certas ou erradas, pelo que pedimos a sua opinião sincera durante o preenchimento. O questionário tem a duração média de 5 minutos. Se houver alguma dúvida por favor contacte-nos em bjvsa@iscte-iul.pt. Se estiver de acordo em participar, por favor carregue na seta abaixo. Agradecemos a sua disponibilidade em participar!

Q2
De momento está a trabalhar?
○ Sim
○ Não

Q3 - IM

As seguintes afirmações relacionam-se com a forma como a organização e a chefia direta comunicam com os seus colaboradores. Por favor, leia atentamente cada uma delas e indique em que medida as seguintes frases descrevem o que se passa no seu local de trabalho.

	Discordo Fortemente	Discordo	Não Concordo, Nem Discordo	Concordo	Concordo Fortemente
1. A empresa faz regularmente avaliações de desempenho nas quais se discute o que os colaboradores querem.	0	0	0	0	0
2. As chefias interagem formal e directamente com os colaboradores para descobrir como os tornar mais satisfeitos.	0	0	\circ	0	\circ
3. As chefias reúnem regularmente com os colaboradores para descobrir que expectativas têm relativamente ao seu trabalho.	0	0	0	0	0
4. A empresa realiza inquéritos aos colaboradores pelo menos uma vez por ano para avaliar a qualidade do emprego.	0	0	0	0	\circ
5. A nossa chefia fala regularmente connosco para se inteirar do nosso trabalho.	0	0	0	0	0
6. Quando a nossa chefia repara que um de nós está a agir de forma diferente do normal, tenta compreender o motivo.	0	0	\circ	0	\circ
7. A nossa chefia procura perceber o que queremos da empresa.	0	\circ	0	0	0
8. A nossa chefia tenta perceber os nossos verdadeiros sentimentos sobre o trabalho.	0	0	0	0	0

Q4 - WE

As seguintes afirmações relacionam-se com a forma como se sente no trabalho. Por favor, leia atentamente cada uma delas e indique em que medida as seguintes frases descrevem a frequência de como se sente no seu local de trabalho.

	Nunca/ Quase Nunca	Raramente	Às Vezes	Regularmente	Sempre/ Quase Sempre
1. No meu trabalho sinto-me cheio/a de energia.	0	0	0	0	0
2. No meu trabalho sinto-me forte e ativo/a.	0	\circ	\circ	\circ	\circ
3. Estou entusiasmado/a com o meu trabalho.	0	\circ	\circ	\circ	\circ
4. O meu trabalho inspira-me.	0	\circ	\circ	\circ	\circ
 Quando me levanto de manhã, apetece-me ir trabalhar. 	0	0	0	\circ	0
6. Sinto-me feliz quando estou a trabalhar intensivamente.	0	\circ	\circ	\circ	\circ
7. Acho que o meu trabalho tem muito significado e utilidade.	0	0	0	0	\circ
8. Quando estou a trabalhar esqueço tudo o que se passa à minha volta.	0	0	0	\circ	0
9. O tempo passa a voar quando estou a trabalhar.	0	0	0	0	0

Q5 - OCB

Indique em que medida os seguintes comportamentos são característicos na sua equipa de trabalho.

	Discordo Fortemente	Discordo	Não Concordo, Nem Discordo	Concordo	Concordo Fortemente
Entreajuda quando alguém se atrasa no seu trabalho.	0	0	0	0	0
2. Partilhar de livre vontade o conhecimento com outros membros da equipa.	0	\circ	\circ	\circ	\circ
3. Tentar agir como mediadores quando outros membros da equipa têm desentendimentos.	0	\circ	\circ	\circ	\circ
4. Tomar medidas para tentar evitar problemas com outros membros da equipa.	0	\circ	\circ	\circ	\circ
5. Dar voluntariamente o seu tempo para ajudar os membros da equipa que tenham problemas relacionados com o trabalho.	0	\circ	0	0	0
6. Entrar em contacto com outros membros da equipa antes de iniciar ações que os possam afetar.	0	\circ	\circ	\circ	\circ
7. Encorajar-se mutuamente quando alguém está em baixo.	0	\circ	\circ	\circ	\circ
8. Apresentar sugestões construtivas sobre como a equipa pode melhorar a sua eficácia.	0	\circ	\circ	\circ	\circ
 Estar disposto a arriscar a desaprovação para expressar as suas crenças sobre o que é melhor para a equipa. 	0	\circ	0	0	\circ
10. Estar presente e participar activamente nas reuniões da equipa.	0	\circ	\circ	\circ	\circ
11. Focar sempre no que está errado, em vez de ver o lado positivo.	0	\circ	\circ	\circ	\circ
12. Passar muito tempo a queixar-se de assuntos triviais.	0	\circ	\circ	\circ	\circ
13. Encontrar sempre falhas no que os outros membros da equipa estão a fazer.	0	\circ	0	\circ	\circ

Q6	
Há quantos anos trabalha na organização em que está?	
Q7	_
Em que setor de atividade trabalha?	
Q8	_
Qual a dimensão da organização em que se encontra?	
○ Até 10 pessoas	
O Entre 10 a 49 pessoas	
○ Entre 50 a 249 pessoas	
○ Entre 250 a 499 pessoas	
○ 500 ou mais pessoas	
Q9	
Tem um cargo de chefia?	
○ Não	
O Sim, chefia de equipa	
O Sim, chefia intermédia	
○ Sim, chefia de topo	

Q10	
Que tipo de vínculo tem com o seu empregador?	
O Trabalho temporário	
O Prestação de serviços	
Contrato a termo incerto	
O Contrato a termo certo	
O Contrato sem termo	
Q11	
Indique o seu género:	
○ Feminino	
O Masculino	
Outro	
O Prefiro não partilhar	
Q12	
Indique o ano em que nasceu:	

Q13

Os membros da organização onde trabalha usam vários meios para comunicar entre si. Pense em toda a comunicação interna que ocorreu consigo e indique em que medida cada um dos meios abaixo listados foi utilizado para comunicar na organização. Distribua as percentagens até um total cumulativo de 100%. Por favor, preencha para cada meio de comunicação a

percentagem de uso. (Atenção: acumulando todos os valores, a percentagem total de uso deve ser 100%).
Cara-a-cara : E-Mail : Mensagens (sms, whatsapp, messenger, etc) : Teleconferência (via conexão áudio, telefone) : Videoconferência (via vídeo + conexão áudio) : Outro, nomeadamente: (qual?) : Total :
Q14
Indique o seu nível de escolaridade:
O 1º Ciclo do Ensino Básico (4º ano)
2º Ciclo do Ensino Básico (6º ano)
○ 3º Ciclo do Ensino Básico (9º ano)
Ensino Secundário (12º ano)
O Licenciatura
O Mestrado
ODoutoramento