



## Review article

## The individuals' discretionary behaviors at work. An overview and analysis of its growing interest

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## ABSTRACT

Nearly forty years have passed since the term Organizational Citizenship Behavior appeared. Despite a current consensus among scholars about the citizenship gestures as prosocial acts of employees that benefit the organization, it does not apply commonly to the exponential growth of all OCB-related concepts. The concept's expansion has confused the researchers and practitioners, mainly when choosing the most appropriate instruments (constructs) and dimensions to use in their area of interest and context. A systematic literature review was conducted and 420 articles were analyzed. Results point that the trends on OCB-like behaviors goes higher, with an average annual growth rate of new studies of 3.13%. United States (39%) and China (25%) lead but some "under-studied" contexts like Africa, Latin America, the Caribbean, and Oceania start being studied towards OCB. New trends appear in the spectrum of the many different domains and disciplines related to OCB, while leadership and task performance remain the most studied domains and disciplines. In future studies, researchers must freely choose the OCB dimensions and constructs they want to use or adapt to meet their needs and research needs since there is no written rule about their use, only the care to be taken with the context and discipline studying.

## 1. Introduction

Nearly forty years have passed since the term "Organizational Citizenship Behavior" (OCB), and its dimensions were first used (Bateman and Organ, 1983; Smith et al., 1983). All started with Katz and Kahn (1978), who first coined the importance of innovative and supportive individual discretionary behaviors in organizations. Since then, researchers have used a variety of different related concepts to measure and describe individual behavior, like OCB (Bateman and Organ, 1983; Smith et al., 1983), prosocial organizational behavior (Brief and Motowidlo, 1986), extra-role behavior (Dyne and Lepine, 1998; Van Dyne et al., 1995), organizational spontaneity (George and Brief, 1992; George and Jones, 1997), and contextual performance (Motowidlo et al., 1997). Podsakoff et al. (2000) analyzed these concepts, arguing that it is possible to find some differences between them besides being conceptually similar. Despite the existence of other concepts, OCB, supported by its dimensions and outcomes, has become widely used to describe and measure the impact of individuals' discretionary behavior at work (Organ, 2018).

Organizations, which are facing an ever-increasingly dynamic and complex environment that requires higher effectiveness and working performance, started to interest in OCB-like behaviors, mainly because of

its potential consequences on organizations, essentials to the development of sustainable business growth (Hoffman et al., 2007; Organ, 2015; Podsakoff and MacKenzie, 1997). OCB is connected with job performance because citizenship behaviors are part of the spontaneous and innovative actions essential for effective organizations (Katz and Kahn, 1978; Organ and Konovsky, 1989). OCB is characterized by the individuals' behavior who voluntarily benefit the organization and are not supported by the organization's gratification system (Organ, 1988, 1997). They are spontaneous gestures of collaboration and protective actions to safeguard the organization and everything related to it (Rego, 2002). Katz (1964) argues in favor of these behaviors' importance, writing that "An organization which depends solely upon its blueprints of prescribed behavior is a very fragile social system."

The scientific literature uses not only several terms to label discretionary behaviors like OCB. They use several taxonomies on their usage (Farh et al., 1997; Organ, 1988; Podsakoff et al., 2000). Many researchers have identified a vast number of different OCB dimensions through the years, showing a lack of consensus regarding OCB dimensions. All started with Smith et al. (1983), which conceptualized a two-dimensional OCB framework, including altruism and generalized compliance behaviors. Five years later, Organ (1988) expanded this framework to a

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five-dimensional model consisting of altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. Then, Podsakoff et al. (1990) extended Organ (1988) work and created one of the most widely used measurement models with 24 questions representing these dimensions. At the same time, Williams and Anderson (1991) suggested that Organ (1988) dimensions should be grouped into two different dimensions and must be viewed in terms of behaviors directed towards individuals (altruism and courtesy) versus those directed towards the organization (conscientiousness, civic virtue, and sportsmanship). These conceptualizations kept growing over the years with further proposals (Dyne et al., 1994; Farh et al., 1997; Moorman and Blakely, 1995).

As OCB has evolved, the subject's interest and curiosity have also increased, and it is now studied in many scientific domains and disciplines. OCB's research began mainly involving the private sector businesses (Smith et al., 1983), addressing the traditional fields of human resource management, such as leadership (Podsakoff et al., 1990), organizational justice (Moorman, 1991), and job satisfaction (Williams and Anderson, 1991). Over the years, the literature has expanded and started to include non-traditional fields of interest, such as marketing (DeConinck, 2015; Shannahan et al., 2017), education (Blondheim and Somech, 2019; Notanubun, 2020; Thomsen et al., 2016), public administration (Rayner et al., 2012; Wiedenhöft et al., 2019), computer science (Turel et al., 2020; Yoon, 2009), and nursing (Tourigny et al., 2013; Yu et al., 2018). Furthermore, although less studied in some geographical contexts, this expansion came with an international acknowledgment of the concept (Rego et al., 2010).

Although the literature on OCB reveals a consensus among scholars about the citizenship gestures as prosocial acts of employees that benefit the organization (Smith et al., 1983; Moorman, 1991), OCB's conceptions, dimensions, and constructs usually vary through the study's regional and national culture and domains and disciplines (Organ, 2015). In the early 2000s, more than 30 different dimensions were reported (Podsakoff et al., 2000). Twenty years later, it is possible to find in this study more than 90. Such dimensions are essential for measuring distinct OCB manifestations (Graham, 1991). This growth also potentiates creating many different constructs (74 found in this study), confusing researchers, and preventing results from being comparable across studies (Organ, 2018).

Thus, this study aims to synthesize and clarify the literature about OCB dimensions, constructs, fields of application, and how these concepts influence each other. A systematic literature review (SLR) was the methodology chosen to perform it, as it is a practical approach recognized by the scientific community and used by many behavioral sciences researchers (Bos-Nehles et al., 2017; de Geus et al., 2020; Parris and Peachey, 2013). A total of 420 articles published in most respectful conferences, journals, and books were analyzed.

## 2. Research method

An SLR is a valuable approach to identify, evaluate, and interpret all available relevant research to a particular topic of interest in a structured and transparent way that can be performed by other researchers (Kitchenham, 2007; Okoli and Schabram, 2010; Tranfield and Denyer, 2009; Weed, 2005). Thus, this SLR adopts Webster and Watson (2002) concept-centric approach and Kitchenham (2007) guidelines and recommended steps. Figure 1 illustrates these steps.

### 2.1. Planning the review

This section details how the protocol was adopted to perform the SLR, starting with the electronic databases used to obtain more information about these domains. The following databases were selected: IEEE Xplore Digital Library; SpringerLink; AIS eLibrary; ACM Digital Library; ScienceDirect and Taylor & Francis Online.

To proceed with the search, the following research string was defined: ("Organizational Citizenship Behavior" OR "OCB") OR (("Organizational

Citizenship Behavior" OR "OCB") AND ("dimensions" OR "construct" OR "forms").

Plus, to better filter our data set, a set of inclusion and exclusion criteria was used. On the one hand, the articles included in our research are English language articles, Articles from any date available online, and articles that use the OCB dimensional conception in its domain. On the other hand, all the articles that are not in English, do not use OCB but not use its dimensions, are unclear, which is, for some reasons that do not match with the goals of this study, board the OCB concept or even does not use it, and studies that do not pass in the filtration process are excluded.

Articles were also filtered by the ranking of the respective conference/journal. The Conference Ranks<sup>1</sup> were used in conferences, while Scimago<sup>2</sup> was used in journals. In total, four filters were set and split like this:

- **1<sup>st</sup> filter:** Remove articles where keywords did not match the study title, abstract, or keywords.
- **2<sup>nd</sup> filter:** Exclusion of the duplicated articles.
- **3<sup>rd</sup> filter:** Remove all the published articles in journals or conferences with a lower ranking. There are two types of ranking to validate conferences:
  - o ERA ranking: only articles in A and B were accepted.
  - o QUALIS ranking: only articles in A1, A2, B1, and B2 were accepted.

Finally, if both rankings have validated a conference, QUALIS prevails. All the articles that did not have Q1 and Q2 rankings on quartiles connected with organizational behavior, human resource management, organizational management, and applied psychology are excluded from journals.

- **4<sup>th</sup> filter:** The last filter is a manual analysis of all articles, ensuring that the ones that are not relevant and do not match the review's objective are excluded.

### 2.2. Conducting the review

After applying our research string in the selected databases and pursuing the filtration process, we have reached the final set of articles that can be seen in Table 1.

Of the 420 selected articles, approximately 95% are journals, with most of them being Q1 (80%), demonstrating the selected articles' quality. Table 2 shows in detail the characteristics of our sample.

## 3. Reporting the review

### 3.1. The world interest is growing faster

Like the other concepts related to individuals' discretionary behaviors, the first studies on OCB date back almost 40 years (Bateman and Organ, 1983; Smith et al., 1983). In the first ten years of existence, OCB did not substantially impact the field, interest in it, and related concepts. However, after a slow start, the number of OCB-related studies began to proliferate over the years. Twenty years after the first studies, in the early 2000s, according to Podsakoff et al. (2000), it was possible to find 135 studies on OCB. Seven years later, Hoffman et al. (2007) found more than 350 articles related to OCB, and recently Podsakoff et al. (2014) refer more than 2100 OCB-related articles in his study. In Figure 2, it is possible to see the cumulative growth of OCB studies over the years, the number of studies published by year, and the growth rate, which enables us to confirm an exponential increase of OCB studies over the years, with an average annual growth rate of 3.13%.

<sup>1</sup> <http://www.conferencerranks.com/>.

<sup>2</sup> <https://www.scimagojr.com/>.

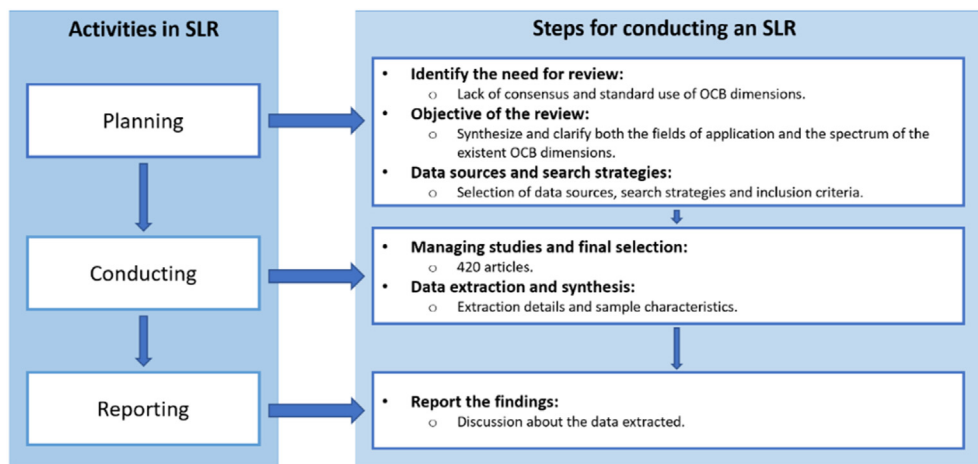


Figure 1. Systematic literature review guidelines.

Table 1. Final article selection.

	No filter	1 <sup>st</sup> filter	2 <sup>nd</sup> filter	3 <sup>rd</sup> filter	4 <sup>th</sup> filter
ACM digital library	202	21	20	15	0
AIS eLibrary	325	30	30	23	10
IEEE Xplore digital library	161	157	156	54	6
ScienceDirect	6185	668	657	547	192
SpringerLink	5304	172	171	146	62
Taylor & Francis Online	3270	294	285	225	150
Total studies	15447	1342	1319	1010	420

The publication of OCB-related studies has peaked temporally since the turn of the 21st century (>90%). Moreover, it is also striking that almost half of them were published in the last five years, showing the growing interest in this subject, as predicted by Podsakoff et al. (2000). Being originally linked to the field of organizational behavior, the number of studies started to grow drastically with the expansion of the concept and the variety of different domains and disciplines that began to have an interest in citizenship-like behaviors (Podsakoff et al., 2000).

If this study can validate the growing interest in OCB by the number of studies conducted, it can also demonstrate that the amount of quantitative data provided shows that it has been its driving force. The importance of quantitative data is also shared by Podsakoff et al. (2000) and Podsakoff et al. (2009), who found in the early 2000s over than 30 different data samples of OCB in the literature, and ten years later more than 200, six times more, respectively. Twenty years later, this research found 400 independent data samples, standing for 95% of the cases. As shown in Figure 3, in most cases, we analyze a quantitative study, where more than half of all studies analyze sets of at least 250 records, clarifying that a meta-analysis today will be more accurate than ever.

Table 2. Sample characteristics.

	Ranking type	Rank	Studies	
Journal	Scimago	Q1	336	400
		Q2	62	
Conference	QUALIS	A1	0	15
		A2	1	
		B1	8	
		B2	1	
		ERA	A	
		B	1	
Other	N/A	N/A	5	5

From Figure 3, it is possible to see from the number of qualitative reviews and theoretical papers (5%) versus the amount of quantitative research (95%) that the interest of the literature is focused on understanding the relationships between organizational citizenship and other domains and disciplines, rather than exploring its nature or how members of the organizations perceive it at various levels (Podsakoff et al., 2000). Furthermore, despite the many meta-analyses reviews (Nielsen et al., 2009; Podsakoff et al., 2009, 2014; Whitman et al., 2010) recently made, the crescent number of data provided makes them somewhat outdated.

### 3.2. A dimension of relationships: the older One's play better together

To the best of our knowledge, Podsakoff et al. (2000) were the first to synthesize all the existent OCB dimensions in one study. At that time, they have found 30 different OCB dimensions. Due to the conceptual overlapping between dimensions, the authors have grouped them into seven distinct behaviors: helping behavior, sportsmanship, loyalty, organizational compliance, individual initiative, civic virtue, and self-development. Despite that effort, the conceptualization of new dimensions continued to arise, and in this research, 96 distinct OCB dimensions were found. Most studies tend to use the same 20 dimensions to support their needs, representing 91.30% of OCB dimensions' general use. Table 3 lists the top 20 most used OCB dimensions and their definition, the total number of times they were used in different studies, and the relevance of using the dimension compared to the total dimensions.

Due to the immense capacity of OCB to include different behaviors, many authors tried to introduce their dimensions, such as IS infusion (Kim et al., 2012) and OCB-Security (Turel et al., 2020). This new set of dimensions shows that the OCB dimensions' domain is not yet complete and that there may be more dimensions to identify (Coleman and Borman, 2000). However, the literature points it as a difficult task, and the free will to propose and operationalize new taxonomies of OCB-like behaviors brings disadvantages, despite the coverage achieved. These disadvantages can be grouped into four leading causes.

Firstly, as LePine et al. (2002) shown, many, if not most, overlap this wide range of existent dimensions. For example, the dimensions created by Dyne et al. (1994) are very similar to the Organ (1988) dimensions. This overlapping is visible in social participation, which overlaps with altruism and courtesy; and in loyalty, which was extended over to cover sportsmanship and a part of civic virtue.

Secondly, it can be risky to encourage certain types of behaviors. For example, Kim et al. (2013) show an insignificant risk to exhibit helping behavior because it is generally valued. In contrast, voice OCB is risky because challenging the status quo causes others' resistance (Van Dyne et al., 1995).

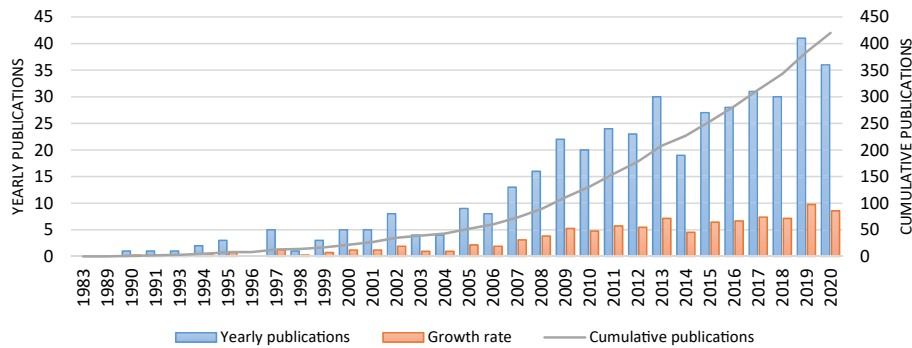


Figure 2. OCB study evolution<sup>3</sup>.

Thirdly, Zhao et al. (2012) found a problem of validation on some dimensions operated by Farh et al. (1997), showing that their results may reflect other behavior types. Thus, the dimensional conception of interpersonal harmony and protecting company resources analyzed in the Farh et al. (1997) study were validated as a false positive as they do not reflect OCB's definition but carried in the content of deviant behaviors.

Lastly, changes in the nature of work can set up a status quo of irrelevance on some dimensions. Dekas et al. (2013) suggest that some historical and commonly used dimensions have become irrelevant or outdated and encourage authors to pursue new dimensions, such as social participation and personal sustainability (Agarwal, 2016). However, in contrast to the older dimensions, the new ones are expected to have minor relationships with other dimensions, having to be predicted by different antecedents (LePine et al., 2002).

Regarding the OCB dimensions usage, there are no rules. They only have to fulfill the author's needs as they all relate well. LePine et al. (2002) explain that, especially, the Organ (1988) ones are strongly related ( $r_c = 0.67$ ) (Hoffman et al., 2007). Figure 4 shows the relationship between the dimensions used in multiple studies. The more times they are used together, the more substantial the relation is.

3.3. Construct, the outlaw: No rules allowed

Although the research on the dimensions generated exciting and relevant findings, there are still many facts underlying OCB operationalization concerning the most appropriate (Organ and Lingl, 1995). It is possible to find in the literature that a significant part of the researchers sees OCB as a multidimensional construct composed of one or more distinct dimensions. Despite that, some authors argued OCB as a unidimensional or an overall construct (Hoffman et al., 2007; LePine et al., 2002).

This division on conceptions started in the preliminary stages of the OCB definition, with Bateman and Organ (1983) that seen OCB as a unidimensional construct. By contrast, Smith et al. (1983) seen OCB as a multidimensional construct based on two dimensions: altruism and generalized compliance. Motowidlo (2000) did an interesting analysis of this conceptualization, suggesting that OCB as a unidimensional construct is like a trait that causes the behaviors reflected in the dimensions. Nevertheless, as a multidimensional construct, OCB is a valuable label for sets of behaviors that belong together conceptually (LePine et al., 2002).

In this study, 74 distinct constructs were found. Plus, it is possible to see that they were motivated by the discipline or context where they were applied, confirming Organ (2015) argument when he says that OCB's conceptualization changes with the context where it is applied.

<sup>3</sup> The year 2020 values correspond only to the beginning of the 3rd quarter of the year when the SLR was performed.

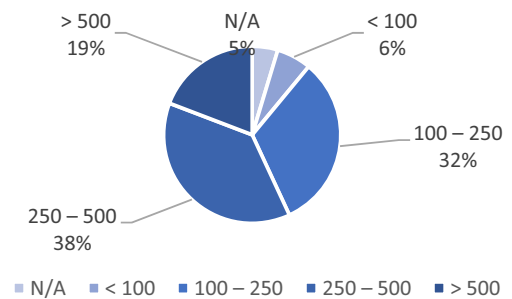


Figure 3. Samples sizes.

The top ten constructs and the number of times they were used can be seen in Table 4 as well as their applicability and use.

As explained before, these constructs are measurement models, traditionally composed of a set of questions referring to one or more dimensions. Those dimensions can be used as a whole, only part of them, or it is even possible to use different dimensions from different constructs together. As long as they respond to the same purpose, there is no defined standard for its use. Many scholars have taken this last step and combined measurements obtained from behavioral dimensions scores into a composite OCB score (Allison et al., 2001; Cohen, 2006; Cohen and Keren, 2010; Ferreira et al., 2013). Figure 5 resumes this previous contextualization, showing the principal dimensions' usage over the top 10 OCB constructs' lens.

3.4. The OCB path: its domains, disciplines, and new trends to come

Researchers drove their studies believing in the existence of a significant relationship between the discipline they were studying and OCB. Supported by Organ (1988) outcome of OCB "in the aggregate promotes the efficient and effective functioning of the organization," these relationships can be validated by the usage of distinct constructs and dimensions and enhanced by an all bunch of different predictors, antecedents, motivators, and moderators (Boiral, 2009; Braun et al., 2012; Daily et al., 2009; Somech & Drach-zahavy, 2000). Figure 6 shows the top 15 domains and disciplines related to OCB that were found in the literature. The most used are ordered from the left to the right by the larger rectangle and rich color.

As can be seen in Figure 7 (Top 10 domains and disciplines evolution), the top two disciplines related to OCB are organizational characteristics that stand out for the attention they take from the researchers. In leadership, for example, distinct disciplines such as supportive leader behavior, leader role clarification, and leader-member exchange have a positive relationship with every or almost every dimension of OCB (Podsakoff et al., 2000), influencing the tendency of employees to highlight OCBs through communication from top management (Haigh and Pfau, 2006) and culture (Turnipseed and Turnipseed, 2013).

Employees relation with the task characteristics (feedback, routinization, and task satisfaction) is also relevant for organizations (Podsakoff

**Table 3.** Top 20 OCB dimensions.

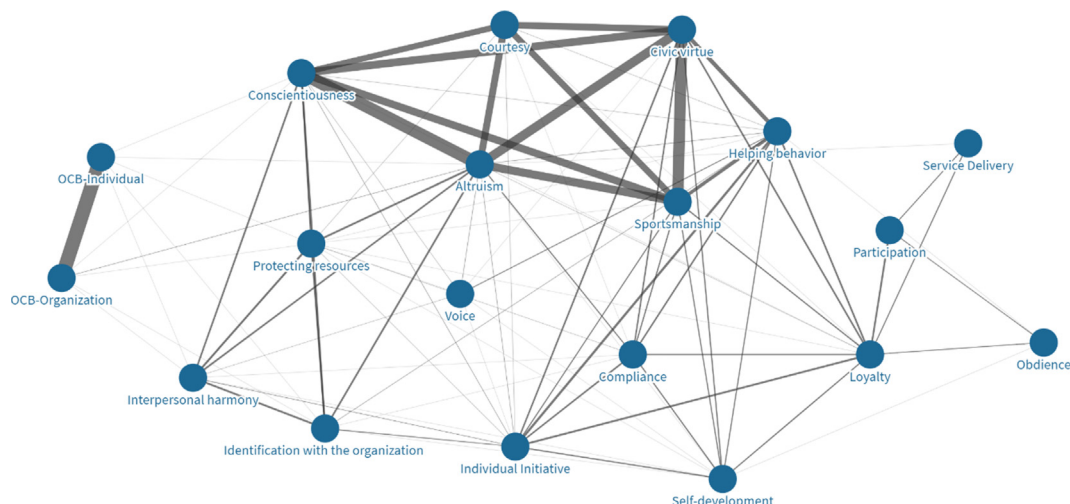
	Definition	Total	%
Altruism	Voluntary actions that help others with a work problem.	140	12,18%
OCB-Organization	Group of behaviors that benefit the organization in general.	137	11,92%
OCB-Individual	Group of behaviors that immediately benefit specific individuals and indirectly contribute to the organization.	123	10,70%
Civic virtue	Behaviors refer to the individual involved or concerned about the company's life.	110	9,57%
Conscientiousness	An excellent posture of going well beyond minimally required levels of attendance, punctuality, housekeeping, conserving resources, and internal maintenance issues.	105	9,14%
Sportsmanship	Good behavior of the individual who tolerates the inevitable inconveniences and demands of work without complaint.	95	8,27%
Courtesy	Individuals' discretionary behavior aims to prevent work-related problems from happening.	62	5,40%
Helping behavior	Focuses on helping coworkers in their jobs when such help is needed.	59	5,13%
Loyalty	Identification and loyalty to organizational leaders and the organization transcend individuals, workgroups, and departments' local interests.	33	2,87%
Individual initiative	Refers to a proactive and spontaneous search to solve problems and improve individual and group performance.	29	2,52%
Compliance	The acceptance and respect for rules and procedures in the organization.	25	2,18%
OCB-Environment	Group of behaviors directed towards environmental improvement.	20	1,74%
Identification with the organization	The dimension shows how the individual seeks to defend the organization's image from people outside the organization.	19	1,65%
Interpersonal harmony	Includes gentle and respectful behaviors towards others and a positive attitude concerning work displeasures.	19	1,65%
Protecting resources	An employee's discretionary behavior avoids negative behaviors that abuse company policies and resources for personal use.	17	1,48%
Voice	It makes innovative suggestions for improvement or modifications of existing practices and procedures.	13	1,13%
Participation	Interest in organizational matters guided by ideal standards of virtue is confirmed by being informed and expressed through responsible and total organizational governance involvement.	15	1,31%
Self-development	It seeks voluntarily to improve its knowledge, skills, and aptitudes.	10	0,87%
Service delivery	Conscientious, responsive, flexible, and attentive customer service behaviors of employees.	10	0,87%
Obedience	An orientation toward organizational structure, job descriptions, and personnel policies.	8	0,70%
Others	N/A	100	8,70%
		<b>1149</b>	<b>100,00%</b>

et al., 1993; Podsakoff and Mackenzie, 1995), in addition to the fact that they relate with OCBs, its perception and execution are intrinsically linked to task performance and, consequently, organizational performance (Borman and Motowidlo, 1997). Nielsen et al. (2009) go beyond this interest in performance and OCB, arguing that "employees who are more helpful and cooperative will perform better and be perceived as performing better by their managers."

There are still other domains and disciplines in the organizational field equally important but less attended, like human resources management (Gavino et al., 2012), organizational support (Lin et al., 2016), organizational formalization (Fisher et al., 2010), and organizational culture (Liu and Fellows, 2008). They all relate well to one or more dimensions of OCB. The organizations aware of this are trying to make an effort to improve it. For example, in the case of organizational culture,

organizations are forcing their change to encourage employees to display creativity, self-discipline, and loyalty (Agarwal, 2016).

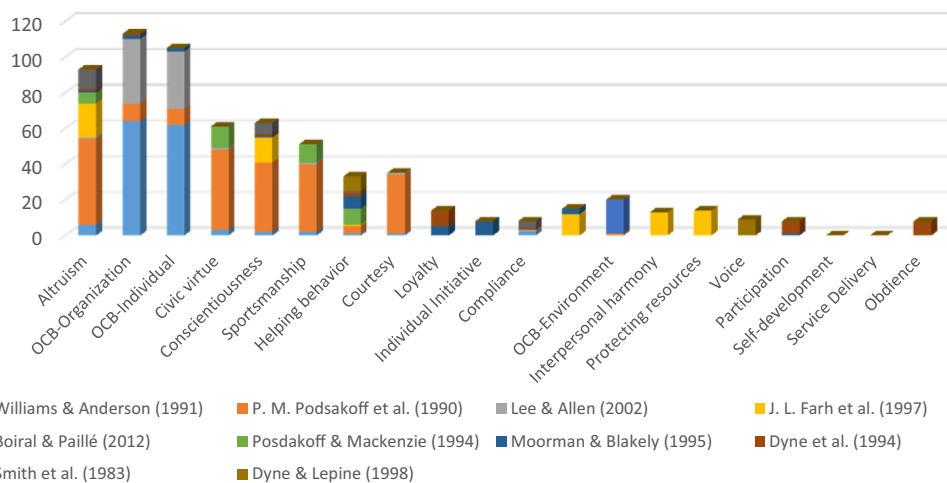
Given its success, many authors tried to redefine OCB's idea and its outcomes, following the changes in the nature of work and current trends (Dekas et al., 2013). As evidenced in Figure 7, it is possible to find a yellow line in the fourth place, referring to environmental research studies' evolution. This domain has attracted significant attention in recent years, considering that 18 of the 21 environmental studies were carried out in the last five years, representing almost 10% of the total studies in these years, becoming a global trend. This research-based definition of OCB is directed towards the environment (OCBE). It is defined by the employees' discretionary behaviors toward the organization that is not required or rewarded, directed toward environmental improvement (Daily et al., 2009). This current concern and focus on



**Figure 4.** Top 20 OCB dimensions relationships.

**Table 4.** Top 10 OCB constructs.

Authors	OCB construct dimensions	Usage	Total
Williams and Anderson (1991)	OCB-Individual, OCB-Organization	Using two groups of dimensions, a set of 14 questions was conceptualized to distinguish OCB's extra-role behaviors from intra-role behaviors, showing distinct behaviors with different performances.	76
Podsakoff et al. (1990)	Conscientiousness, Civic virtue, Sportsmanship, Altruism, Courtesy	A set of 24 questions based on Organ (1988) dimensionality of OCB test the effects of transformational leadership, trust, and satisfaction on OCBs.	71
Lee and Allen (2002)	OCB-Individual, OCB-Organization	A set of 16 questions was created to tap behaviors that are beneficial to individuals and the organization and avoid a overlap with other behaviors, in this case, the work deviance behaviors that they focus on in their study.	46
Farh et al. (1997)	Conscientiousness, Altruism, Identification with the organization, Protecting resources, Interpersonal harmony	Based on Podsakoff et al. (1990) construct, described as a "Western OCB scale," 20 questions were created regarding a five-dimensional construct chosen based on Chinese society and culture, which authors called Chinese Citizenship Behaviors.	23
Boiral and Paillé (2012)	OCB-Environment	List of 13 questions concerning environmental research.	19
Podsakoff and Mackenzie (1994)	Helping behavior, Civic virtue, sportsmanship	Construct built with three dimensions and 11 questions based on the insurance sales context.	14
Moorman and Blakely (1995)	Interpersonal helping, Individual initiative, Personal industry, Loyal boosterism	The authors adapted the Dyne et al. (1994) construct that corresponds closely to political science theory on social citizenship, and they incorporated it with Organ (1988) dimensionality, generically used in other OCB's research.	14
Dyne et al. (1994)	Loyalty, obedience, participation	Based on three dimensions that were substantively suggested by political philosophy, the authors made 34 questions to measure citizenship behavior generically.	13
Smith et al. (1983)	Compliance, altruism	This set of 16 questions based on a list of desirable job behaviors is the first OCB construct ever created to the best of our knowledge.	13
Dyne and Lepine (1998)	Helping behavior, Voice	A set of 12 questions was created based on earlier research but focusing on Work in Group, stepping aside from the individual behavior or nonwork behavior.	13



**Figure 5.** OCB Dimensions usage.



**Figure 6.** - Top 15 domains and disciplines.

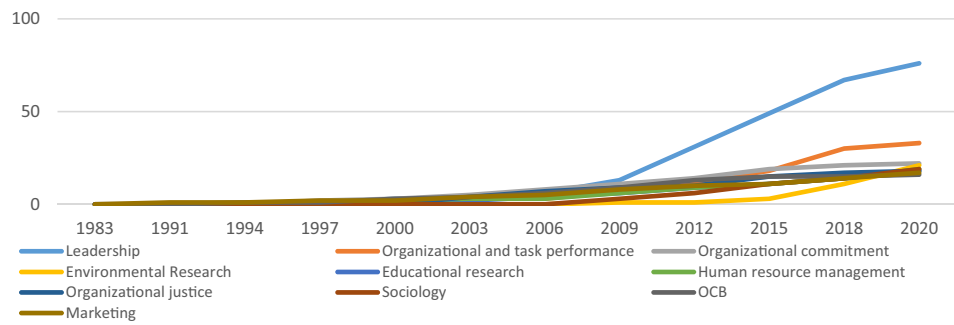


Figure 7. Top 10 domains and disciplines evolution.

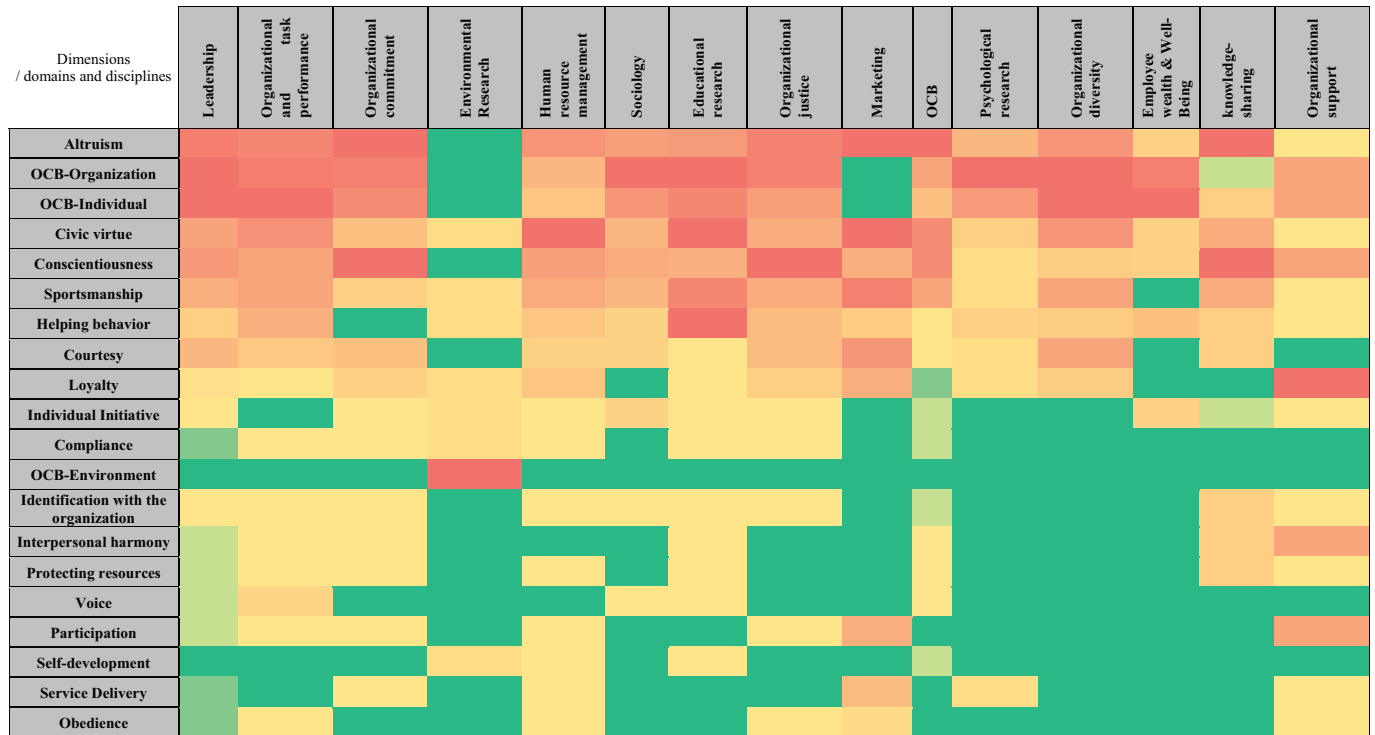


Figure 8. Dimensions with domains & disciplines<sup>4</sup>.

environmental research have already occurred systematically over the years in other domains and disciplines. For example, in marketing research, customer citizenship behaviors (CCB) appeared as the discretionary behaviors that help the overall organization service (Groth, 2005). In the educational field, it is possible to find over the years groups of behaviors and outputs directed towards the student (Blondheim and Somech, 2019), the teacher (Somech & Drach-zahavy, 2000), and the class (Oplatka, 2006).

Therefore, the misconception that any domain or discipline may have a relevant interest in its relationship with the OCB can arise. It is not easy to predict or suggest future trends, as they may end up not having the expected attention. For example, project citizenship behavior (Braun et al., 2012), which is quite relevant, only has six studies, showing that it did not get the researchers' widespread attention. Even so, some authors, such as Dekas et al. (2013), take the risk of suggesting that "trends in the technology industry may forecast future trends in the broader workforce, and also in the nature of OCB."

In conclusion, it is wrong to assume that all these domains and disciplines will generally relate well to OCB because some have an adverse effect. A few authors, aware of this, dedicated their work to perceive the main characteristics that are negatively related to OCB. Podsakoff et al. (2000), for example, demonstrates in his study how some dimensions of OCB are negatively affected by role ambiguity, role conflict, indifference

to rewards, task routinization, and rewards outside the leaders' control. Furthermore, it is essential to note that these discretionary behaviors should be encouraged and not required by the organization. Vigoda-Gadot and Angert (2007) argue that OCBs that are mandatory by the organizations should be named as compulsory citizenship behaviors, deeply connected to the adverse outcomes of OCB as job stress, negligent behaviors, and intentions to quit (Bolino et al., 2013). Figure 8 details how the main domains and disciplines and the top dimensions are related, giving an overview of which behaviors are mainly studied in some domains and disciplines.

### 3.5. Constructs are (careful) breaking culture borders

The number of different dimensions and constructs found indicate that OCB has been broadly studied over the years. Even so, it is common to find in the literature references to OCB measurement, primarily based on samples collected in Western countries, particularly in the United States, receiving relatively limited attention in other international contexts (Farh et al., 2004; Lievens and Anseel, 2004). Figure 9 shows that

<sup>4</sup> The red color represents the most used dimensions per domain or discipline, in contrast, the green ones present the less used.

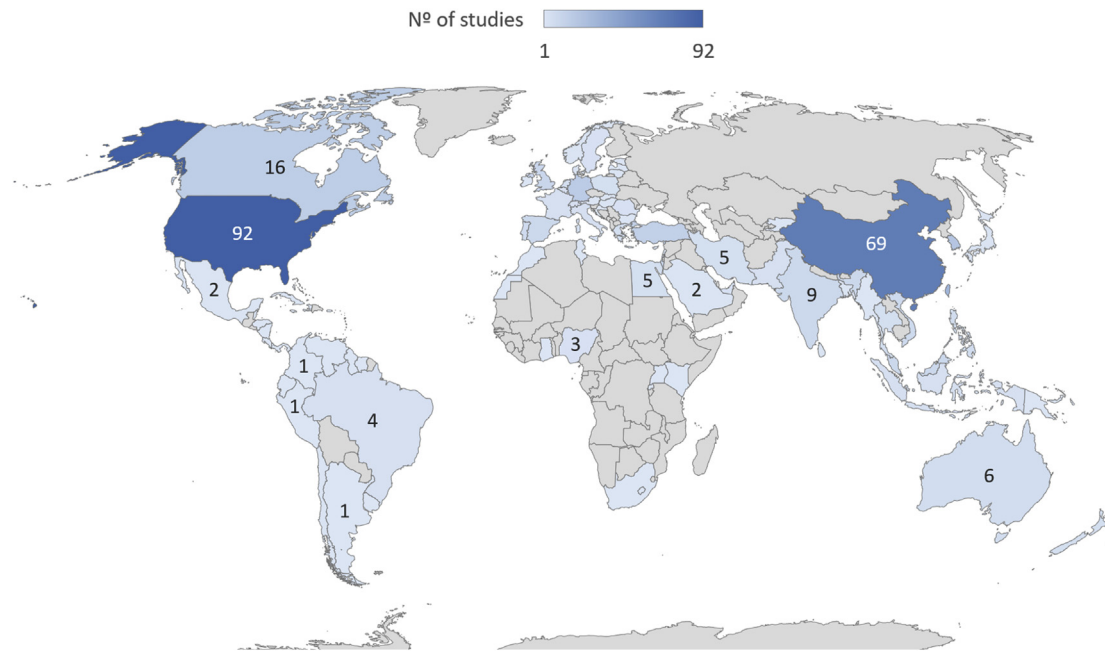


Figure 9. OCB studies region.

most of the studies were made in the United States (92) and China (69), having their regions 39% and 25% of all studies done, respectively. On the opposite side are Africa, Latin America, the Caribbean, and Oceania, having each one 2% of the total studies. Moreover, it is possible to confirm the statements of Kowal et al. (2019) and Rego et al. (2010) when they define some contexts as "under-studied," arguing that most of the studies were made in the USA, Asia, and Northern Europe.

Hofstede (1980) developed a well-established cultural index with several dimensions. Paine and Organ (2000) argue that these cultural dimensions influence the form of how OCB is perceived and how employees demonstrate it, showing that in collectivistic cultures, employees may enhance behaviors that benefit the organization, instead of behaviors that benefit themselves, which happens in the individualistic cultures (Moorman and Blakely, 1995). Plus, in cultures with high Power Distance, some kinds of OCB are not well received, as they go beyond instructions and represent a risk for the employee (Organ, 2015).

These constraints do not exclude the fact that OCB can transcend cultures. For example, Lievens and Anseel (2004) used Konovsky and Organ (1996) construct based on the five dimensions (Altruism, conscientiousness, sportsmanship, civic virtue, and courtesy), defined by Organ (1988), in a Dutch-speaking context. They concluded that these dimensions, predominantly studied in the US, seem to hold relatively well in that context, although there were some differences. Comparing both cultures, through Hofstede's measure, those differences can be justified as they are individualistic countries. However, this cannot be the rule, as the authors refer that "the dimensionality of an OCB measure used in different cultural contexts should not be taken for granted."

Some authors like Hui et al. (2004) argue in favor of using western measures everywhere, as long as applicable, writing that "there appears to be reasonable evidence that this OCB measure (Podsakoff et al., 1990) is acceptable in Chinese contexts and can facilitate comparative OCB research." In contrast with this, but consistent with the literature, Zhao et al. (2012) argue that this kind of study does not intend to explore the cultural context where it is focused and cannot fully enhance its potential.

Nonetheless, it is essential to mention that western dimensions studied in individualistic countries do not do well in a collectivist culture, like China, where organizational employees relate more to a group based on family, place of origin, rather than the organization. For example, in the US, where there is a great emphasis on individualism, a certain amount of conflict is tolerated and celebrated. By contrast, in China,

behaviors that challenge the status quo may not be viewed as OCB and raise tensions and disagreements between two groups. Considering these assumptions, Farh et al. (1997) developed a five dimension construct called 'Chinese citizenship behavior.' The dimensions identified are divided into two groups. In one group, the 'etic' dimensions (identification with the organization, altruism, and conscientiousness) transversal to any culture and are easily identified in western OCB research. On the other group, the 'emic' dimensions (interpersonal harmony and protecting company resources), unique in a familistic collectivist society as the Chinese.

Figure 10 shows us a heatmap where one can see an overview of the OCB Dimensions' applicability over the different regions worldwide. Reinforcing literature, we can confirm the emic dimensions usability created by Farh et al. (1997) for the Chinese context. They are mainly used in Asia and poorly used elsewhere. It can be concluded as well that altruistic behaviors are well seen worldwide.

#### 4. Results

This study's objective was to synthesize and clarify both the fields of application and the existent OCB dimensions spectrum. A thorough SLR was conducted to review the existing literature and show the dimensions and constructs used in each domain, discipline or national context, and relationships.

First, it is possible to acknowledge that OCB studies are growing exponentially over the years, with an average annual growth rate of 3.13%. Interestingly, more than 90% of the studies were made at the turn of the 21st century, and nearly half of them in the last five years. It confirms the growing interest in the matter and a significant impact on the field, its interests, and its related concepts. Quantitative research has been a driver through the years, standing for 95% of the cases, giving lots of data to the playground that others can use. Furthermore, this shows us that the literature interest focuses on understanding the relationships between organizational citizenship and other domains and disciplines rather than defining the nature of citizenship behavior (Podsakoff et al., 2000).

This work confirms and reinforces the Organ's theory (2015), which states that OCB's conceptualization changes with its application. This statement is validated in this SLR, where 96 different dimensions were found in 74 different constructs. In the future, it is expected that these



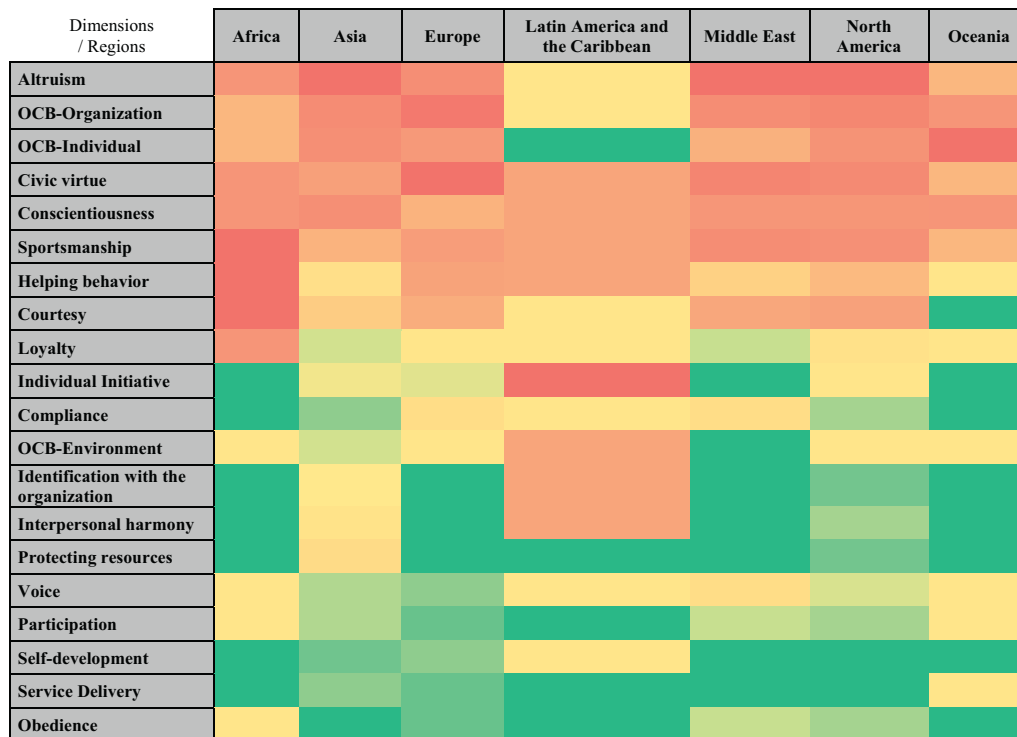


Figure 10. Dimensions & regions<sup>5</sup>.

numbers go more extensive when some "under-studied" contexts in Africa, Latin America, the Caribbean, and Oceania start being studied, and new trends appear in the spectrum of the many different domains and disciplines related to OCB.

Many questions have been made through the conception, relationship, and usability of the OCB dimensions. However, there is one that we cannot fail to mention. It has appeared in the most recent literature, which is the need to carry out a thorough review of the existing dimensions, trying to understand, unitedly with the changes in the nature of the work, whether these dimensions still apply as discretionary and if they do not apply, how new ones can replace them. In the meantime, most researchers use the OCB dimensions that better serve their needs, showing no rules on their usage. They only have to fulfill the author's needs as they all relate well.

The approach chosen for this study coincides with the ones that many scholars have taken, viewing OCB as a multidimensional construct in which various dimensions can be added or combined. This study provides theoretical validity for authors who wish to study different constructs' dimensions since this approach is demonstrated here.

One of the most exciting facts provided by this study is that Organizational Commitment has been in the first and second place and now is in third place, with a perspective of being suppressed by the organizational environment in the following years. Even so, it is possible to find references of organizational commitment as a significant and robust predictor of OCB. Still, the range of new knowledge provided by this discipline can be limited by the high number of studies already done. Plus, most of the OCB contextualization is connected to its domains and disciplines. Further research must explore the ones that raised attention in recent years and extend the newest socio-cultural trends as environmental research, which is the most OCB-related trending research at the moment.

Finally, there is a deep connection between Hofstede (1980) cultural dimensions and OCB, particularly between the Individualism–Collectivism and PD dimensions and OCB. These dimensions show

us how the individual sees the group and recognizes that power is unevenly divided across the organization, affecting how organizations and individuals interpret OCBs. Thus, the OCB dimensions can perform better if they are adapted to the culture under study, or on the contrary, if they are not adjusted, they can be seen as unfavorable.

#### 4.1. An advice for future researchers: study discretionary behaviors!

The first sentence of these SLR declares that forty years have passed since the term OCB was first coined, and now, it is predictable that forty more are here to come for OCB. Many changes are expected over time, and the OCB conception and dimensions must adapt to current trends, changes in the nature of work, and changes in organizations' philosophy. These changes, especially in the relationship between the organization and the employee, are already beginning to be visible in the OCB literature, where some authors have started to question whether some of the older dimensions and behaviors are still discretionary and not part of the job description, as mandatory job responsibilities (Agarwal, 2016; Kim et al., 2013). Paillé (2009) argues in favor of abandoning some behaviors as conscientiousness, writing that "which could no longer be considered discretionary behavior—because their results demonstrated that as far as managers were concerned, conscientiousness was part of the behavior expected at work."

This research provides helpful information to avoid future researchers' proverbial "reinvention of the wheel," in other words, the analysis of this work will help understand trends and guide efforts in new directions. Researchers should feel more motivated considering that OCB-related researches continue to grow year after year. They must pay attention to the region where the study will be carried out and understand how they are located when choosing the dimensions and constructs since equal dimensions can affect individuals from different countries differently, which is not necessarily positive.

Moreover, researchers must not ignore that Hofstede's cultural dimensions significantly influence OCB's performance by managing to predict their dimensionality. They should also explore new trends and pay attention to the context in which they find themselves if they want their studies to be as relevant as the previous research on the relationship between OCB and the environment. Besides being a new trend, it is

<sup>5</sup> The red color represents the most used dimensions per region, in contrast, the green ones present the less used.

expected that its outcome is related to the original OCB definition, remembering that these behaviors should be encouraged and not obliged. Lastly, they must freely choose the dimensions and constructs they want to use or adapt to meet their needs and their research needs since there is no written rule about their use, only the care to be taken with the context and discipline they are studying.

#### 4.2. Limitations

Although this SLR was conducted in a disciplined manner, potential limitations must be acknowledged:

- A limited number of databases were used, limiting the number of researches analyzed, holding some of them out of this study.
- The fact that there are many databases means that the articles are published in dispersed systems.

For this reason, some essential articles for theoretical bases and scientific validity to our conclusions were not in the databases chosen to carry out our SLR. Still, they were related to references found in studies of our SLR.

#### 4.3. Future work

It is possible to get many inputs from this work regarding future work. As justified before, there is a lack of literature in some countries and regions classified as "under-studied" contexts regarding OCB. With so many different national cultures to study, researchers must find a way to conduct cross-national studies on OCB with distinct dimensions and comparable information. Plus, there is an opportunity to investigate and find more OCB-related trending disciplines and a need to review the existing dimensions to ensure their current application.

Besides the gaps and opportunities found, there is a door for more investigation with the collected data. The data analysis shows that there is still work to be done, and no researcher has yet attempted to study the moderating relationship between different national contexts, disciplines, and OCB. This tripartite relationship must be considered to understand what pertinent conclusions can be drawn.

Finally, this research can be used as a reference point for researchers who intend to proceed with a study using OCB dimensions, helping them to understand in which domains they were best applied. We also encourage the authors to extend the OCB domain and create their propositional frameworks based on some less studied regions like Africa, Latin America, the Caribbean, and Oceania and in new and less explored dimensions such as social participation and personal sustainability, which can create propositions on OCB future direction.

#### Declarations

##### Author contribution statement

Pedro Fernandes, Rúben Pereira, Guilherme Wiedenhöft and Patricia Costa: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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##### Data availability statement

Data included in article.

#### Declaration of interests statement

The authors declare no conflict of interest.

#### Additional information

No additional information is available for this paper.

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