



## Research Article

# Can servant leadership prevent hotel employee depression during the COVID-19 pandemic? A mediating and multigroup analysis

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## ABSTRACT

The hospitality industry has been severely hit by the COVID-19 pandemic, with changes that have harmed employees' psychological well-being. However, having supervisors who are servant may make a difference. With a focus on serving others and the care taken to ensure their employees' highest priority needs are served, these leaders could help employees feel less depressed in these complicated times. By instilling servant behaviors in followers that help them become people that others can trust or with whom they can develop friendships, leaders could help these employees earn greater levels of personal social capital (PSC) through which to more successfully address pandemic times, especially if furloughed. Using structural equation modeling to analyze a sample of 205 hotel employees in Spain, we found that servant leadership directly decreases depression, and that PSC mediates this relationship. Our multigroup analyses (MGA) findings also reveal that when these employees are furloughed, the negative effect of PSC and the mediating role of PSC in this relationship is stronger. New light is thus shed on how servant leadership is effective in reducing employee depressive symptoms in times of severe changes such as those produced by the COVID-19 pandemic.

## 1. Introduction

Hospitality is one of the industries most negatively affected by the COVID-19 pandemic (Gursoy and Chi, 2020; Skare et al., 2021). The severe changes this pandemic has produced have led to a drastic decline in sales (Sobieralski, 2020) and resulted in a rise in unemployment and furloughed employees (cf., Škare et al., 2021). The great uncertainty of employment in this industry today is a negative factor for the psychological health of employees who sense their jobs are in danger. Employment stability for all employees is far from guaranteed (Etehad and Karatepe, 2019), and the subjective and unconscious perception of losing a job (Jung et al., 2021) may lead to depression that could further undermine productivity in the industry after this crisis (Aguiar-Quintana et al., 2021). Defined as a neurodegenerative disorder that disrupts the structure and function of brain cells, depression may ultimately destroy nerve cell connections and may kill certain brain cells that precipitate cognitive decline (Paul, 2003:31). Depression among hotel

employees can therefore involve indirect and long-term costs for the hotels. It not only directly decreases worker productivity but may also involve other significant consequences (e.g., cognitive decline, low motivation and loss of interest and goal focus) that can affect employees and their productivity in the long term. Thus, the design of strategies to reduce depression among hotel employees is crucial in today's pandemic times but can also help hotel managers address other uncertain changes this industry currently faces or will face in the future (i.e., organizational restructuring, scale-downs, Niesen et al., 2018).

Supervisors' leadership style may play a significant role in helping reduce depressive symptoms among employees. The close daily contact of these supervisors with employees makes their behavior impactful on employees' lives (Yáñez-Araque et al., 2021). For example, the care these supervisors provide their employees can be a resource to be leveraged to face the uncertain demands of the COVID-19 pandemic. Depression more frequently occurs when uncertain changes and demands must be faced (Paul, 2003), while having access to resources to

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overcome such difficulties is critical to staying well, according to the job demands-resources (JD-R) theory (cf., Bakker and Demerouti, 2017, 2018) and to avoid suffering from depression. Having supervisors who are servant in these times may therefore make a difference, as they could be a source of resources or useful help for employees in building resources with which to tackle such complex times of change. Indeed, drawing on Hobfoll's (1989) conservation of resources (COR) theory, employees may perceive the job conditions as psychosocial resources (e. g., fair treatment, contract type, union presence, social bonds) they do not want to lose. As such, in times of change such as those caused by the COVID-19 pandemic, employees may perceive a threat of losing these resources, which may lead them worry, stress and even depression. The fair treatment and care given by servant supervisors (Eva et al., 2019) could counter such a situation (cf. Ruiz-Palomino et al., 2020); these leaders could be perceived as a source of resources, or themselves a valuable resource, with which to face adverse conditions.

Indeed, with its focus on serving others, servant leadership offers a unique, valuable resource that could reduce depressive symptoms among hotel employees in these difficult times. Although these leaders are believed to provide resources to employees (Eva et al., 2019), the linking mechanisms that underlie the negative effect of this type of leadership on employee depression is rarely explored. Previous research has demonstrated that hotel employees who deal with supervisors who are servant are more likely to build strong social interactions and therefore close contacts (both inside and outside the firm), which can lead to them having access to resources through social ties and connections; in other words, this can lead an employee to high levels of personal social capital (PSC). Defined as the "sum of the resources, actual or virtual, that accrue to an individual by virtue of possessing a durable network of relationships of mutual acquaintance and recognition" (Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019: 3193), the positive effects of this linking mechanism, which is more tangible and more immediate than simply having a servant supervisor, may not, however, be free of boundary conditions. The job status (active vs. furloughed) may or may not be key for an employee to need access to the resources that help one avoid falling into depression. For example, the resources these leaders help foster can be more important for those employees dealing with strong demands such as being furloughed. Considering the above, the following research questions are formulated: 1) What role does servant leadership play in reducing the level of depression among hotel employees in times of change such as those caused by the COVID-19 pandemic? 2) How does servant leadership decrease the level of depression among hotel staff, and for which employees is its beneficial role stronger?

Answering these research questions will contribute to an existing body of literature on the subject, delving more deeply into the mechanisms that underlie the negative relationship between servant leadership and employee depression; this study will also help identify strategies that may minimize employee depression in difficult times of change. Specifically, we will develop and test a mediation and multigroup model that encompasses employee PSC as a mediator and employment status (active/furloughed) as a moderator. As we will explain, the model suggests: a) servant leadership is positive for employees' PSC and in turn, negative for their depression level, and b) the negative relationship between servant leadership and employee depression via PSC can be significantly strengthened for furloughed employees. Thus, we will test whether servant leadership is a source of resources for employees through which they can more easily build their PSC (cf., Bakker and Demerouti, 2017, 2018), helping them avoid falling into depression, especially when strong demands, such as being furloughed, are faced. Our model advances the literature by examining ways and strategies (e. g., hiring servant leaders in managerial job positions) to lessen the probabilities of depression among employees in difficult times of change involving high demands on employees. With a few exceptions (e.g., Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019), previous studies linking servant leadership to employee PSC are practically non-existent.

Additionally, no studies have evaluated the beneficial role of this leadership strategy in lessening the negative psychological effects of highly demanding times of change. Finally, the mechanisms and the contingencies of this probable relationship have been the subject of even fewer studies.

Following this introduction, the theoretical background and hypotheses are presented. The method and findings of the study are then described. The final section of the paper presents the discussion and conclusions, including limitations and future research opportunities.

## 2. Theoretical framework and hypotheses

### 2.1. Reducing depression in COVID-19 pandemic times: the role of servant leaders and PSC

Depression is a neurodegenerative disorder that may negatively affect employees' mental health (Paul, 2003). It is a mental disorder that many managers believe is not their concern (Martin and Fisher, 2014). However, the cognitive decline that depressed employees may experience (Paul, 2003) can negatively affect their work engagement (cf., Khan, 2021). The occurrence of this mental health disorder within a team may lead to reduced levels of team performance, as the affected individuals may experience low concentration and motivation, as well as irritation, fatigue and an impaired capacity to make decisions (Kessler et al., 2008).

Leadership is beginning to attract increasing attention in the literature on understanding how depression among employees can be diminished (Arnold et al., 2007; Inceoglu et al., 2018; Munir et al., 2010; F. 2012; Rivkin et al., 2014). While its impact on the behavior and performance of employees has been widely studied, it is only now that leadership behavior is becoming a focus of attention concerning its impact on the health and well-being of employees (Grant et al., 2007). A moral-grounded leadership style such as transformational leadership (Hoch et al., 2018) has been found to reduce depressive symptoms among employees (Munir et al., 2010; F. 2012; Liu et al., 2010), and health-oriented leadership has also been found to be negatively related to levels of burnout and depression (Santa Maria et al., 2019). These findings suggest that morally/socially responsible behavior oriented towards meeting employees' needs could significantly improve employees' psychological health (Rivkin et al., 2014), with servant leadership being a style that fulfills this criterion to the maximum level (Eva et al., 2019).

Servant leadership focuses on leaders serving followers even above their self-interests and needs (Hale and Fields, 2007; Ruiz-Palomino and Zoghbi-Manrique-de-Lara, 2020). Indeed, servant leaders are characterized by focusing on employees' needs and by creating work environments that support these needs (Eva et al., 2019). These leaders focus on the personal growth and development of their followers, so that they may encourage them to develop self-efficacy beliefs (Eva et al., 2019). This, according to the COR theory (Hobfoll, 1989; Hobfoll et al., 2018), can be seen as a personal resource that may lead to high levels of resiliency (Hobfoll et al., 2003). Therefore, servant leaders are likely to be perceived as psychological resources that employees can use to face job or contextual demands. In this way, the psychological health of employees whose leaders are servant may be less damaged by any confrontations faced with job or contextual demands, and they may in turn suffer far less from depressive symptoms (Kuoppala et al., 2008; Rivkin et al., 2014). This is not surprising, as psychological health arises from a) a proper fit between employees' needs and the firm's feedback (need-supply fit), and b) from feelings of trust, support and belonging, all of which are more likely to occur under the supervision of servant leaders (Haslam et al., 2009). Thus, with servant leaders as supervisors, limited freedom in decision-making, poor work-life balance or job insecurity may not be perceived by employees (cf., Eva et al., 2019), and employees are, in turn, less likely to fall into depression (Bonde, 2008; Netterfrom et al., 2008).

Overall, drawing on COR theory (Hobfoll, 1989; Hobfoll et al., 2018), supervisors who are servant will lead individuals to gain resources (e.g., social support) to protect themselves against resource loss and the negative outcomes derived from such a loss (e.g., mental illness). In this sense, previous studies demonstrate that supervisor support has a highly beneficial effect on employee health outcomes, particularly in reducing depression (Dorman and Zapf, 1996; Netterström et al., 2008). Thus, we predict that servant leadership will help reduce depression among hotel employees, as suggested by the previous literature (Rivkin et al., 2014). Accordingly,

*H1. A supervisor who is servant has a negative effect on employee depression.*

Having social ties or connections to other people or agents can also help improve mental health to a great extent (Brooks et al., 2016). By having such social ties, one may gain access to the resources embedded in these social ties (e.g., advice, assistance, information, ideas, opportunities, power, emotional support, Li et al., 2019), and having access to such resources may signal one has a reserve of resources to be drawn on in times of need. This can improve their sense of meaning, sense of purpose and hope (Feng and Yin, 2021), which may ultimately be positive for mental health (cf., Marroquín et al., 2020; Thoits, 2011). This set of resources to which individuals have access, thanks to their social ties and connections with others, is defined in the existing literature as personal social capital (PSC; King and Lee, 2016).

Although social capital has mainly been studied as a collective asset, PSC is also of interest in this specific field (Li et al., 2019). The fact that social capital can also be an attribute of an individual has been actively debated among researchers (Chen et al., 2009; Wang et al., 2014), and consensus has emerged that individual-level connections of an individual with other entities (e.g., persons, groups, communities) creates personally owned social capital (Astone et al., 1999; Poortinga, 2005), which may provide the individual with great benefits (Sha et al., 2018). Indeed, PSC is an intangible asset through which an individual may achieve worthy resources that lead them to find a better job, acquiring valuable learning and information, or even improving the current personal social network (Li et al., 2019). When the connections that facilitate access to these resources are produced among individuals who are similar (e.g., in a network within the same work group), we refer to bonding PSC. Instead, when these connections exist with individuals who are not similar (e.g., outside the organization), we refer to bridging PSC, which also includes linking PSC (vertical connections, Villalonga-Olives et al., 2016). Either way, PSC requires the development of social interactions before it can be built (King and Lee, 2016), and given that servant leaders have been found to foster abilities among employees to socially interact with others, both close and not-so-close individuals (Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019), we believe these leaders can help individuals build high levels of PSC.

On the one hand, servant leaders can help individuals build bonding PSC. Insofar as servant leaders focus on inspiring employees to embrace the purpose of the organization and foster the idea that leadership is a group process (Wong et al., 2007), these leaders may foster relationship building in their immediate environments (Coetzer et al., 2017). Furthermore, because one priority of servant leaders is to groom their followers to become servant leaders themselves (Greenleaf, 1977; Liden et al., 2014), employees under the supervision of these leaders are likely to experience similarity, equality and unity in their group, thus leading to their supervisees to have more frequent and personal interactions (Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019).

On the other hand, bridging PSC can also be built thanks to the influence of supervisors who are servant leaders. Because of social learning motives (Bandura, 1977), these employees, under supervisors who are servant, would learn to be more empathetic (Elche et al., 2021) and servant (Ruiz-Palomino and Zoghbi-Manrique-de-Lara, 2020), which is important to establishing social relationships with others (Anderson and Keltner, 2002). Additionally, these employees are more likely to internalize a sense of building community with close or distant

others (Hunter et al., 2013), which is likely to drive them to have more frequent social interactions with others.

Overall, under servant supervisors, employees are likely to have more social interactions with others both inside and outside their organization, which helps them build both bonding ties and bridges of connectedness (PSC). Thus, we propose the following hypothesis:

*H2a. A supervisor who is servant has a positive effect on employees' PSC.*

PSC is an intangible (Vigoda-Gadot et al., 2011) that arises from interactions with others (Ben Hador, 2016; Ben Hador, 2017) and is composed of personal ties both within and outside organizations (Ben Hador and Eckhaus, 2018; Ben Hador and Eckhaus, 2019). This concept links social interaction and the benefits perceived as a result of these connections (Ben Hador and Eckhaus, 2018; Ben Hador and Eckhaus, 2019), including trust, networks and norms that help individuals coordinate their actions with others (Putnam et al., 1993).

Following Putnam (1995), social capital is an asset that facilitates better mental health. Numerous studies have shown that lack of social capital is associated with a variety of health outcomes, such as mortality, behavioral and other self-rated health problems (i.e., Fujisawa et al., 2009; Harpham et al., 2004; Song, 2011; Murayama et al., 2013). In fact, the more integrated individuals are in their community, the less likely they are to experience health problems such as depression (Putnam, 2000). As such, it is not surprising that with higher levels of social capital at the personal level, employee psychological health improves (McKenzie et al., 2002; Mitchell and LaGory, 2002; Gao et al., 2014). Gao et al. (2014) recently found links between social capital and the mental health status of 2796 employees in China. Similarly, a study by Kouvonen et al. (2008) that analyzed 33,577 public sector employees in Finland found a significant negative association between social life in the workplace and employee depression.

Overall, there are many benefits to having high levels of PSC (i.e., improved status, more knowledge, more personal power and better promotion both within and between organizations, Vigoda-Gadot et al., 2011; Yu and Junshu, 2013). Having this intangible asset improves an individual's personal relationships with others, thus improving his or her working life (Mahaja and Benson, 2013; Ben Hador, 2016; Ben Hador, 2017) and subjective well-being (Ben Hador and Eckhaus, 2018; Ben Hador and Eckhaus, 2019). Thus, with a stronger PSC, employees are less likely to fall into depression. Accordingly, we propose the following:

*H2b. PSC has a negative effect on employee depression.*

The above arguments suggest that supervisor servant leadership may reduce the likelihood of employees suffering depression by enhancing their PSC. Indeed, under the supervision of servant leaders, employees may see the need to create a sense of community with others, either inside or outside the organization in which they work (Hunter et al., 2013). As a result, employees are more likely to socially interact, which together with their display of similar, attractive characteristics to those of their leaders (i.e., humility, servanthood, empathy, Sun, 2013) makes it easier for them to build close, social connections with others, either inside or outside their hotel (PSC). PSC is a resource that employees can deploy to grow, develop and successfully deal with their problems, which is key under stressful situations that may lead to depression. The resources or access to personal resources gained through PSC can be critical to avoiding depression in uncertain, difficult times (cf., Paul, 2003). We thus contend that in hotels where the supervisor develops servant leadership behaviors, PSC mediates the relationship between supervisor servant leadership and employee depression. This is consistent with COR (Hobfoll, 1989; Hobfoll et al., 2018) and JD-R theories (Bakker and Demerouti, 2017, 2018) in that the possession of resources is expected to protect against debilitating behaviors such as depression. Thus,

*H3. PSC mediates the relationship between supervisor servant leadership and employee depression.*



## 2.2. The moderating role of the employment situation (furloughed vs. active)

Although the above hypotheses indicate that in most contexts, all these previously described relationships are valid, the intensity of these relationships may differ according to the specific situation of employees. For example, given that “being employed” is a psychological resource one does not want to lose (cf., Ruiz-Palomino et al., 2020), we believe that the previously mentioned relationships may differ according to whether or not the individual has been furloughed. Since the beginning of the COVID-19 pandemic in March 2020, furlough schemes—Spain’s record of temporary employment regulation—which involve Social Security exemptions and certain unemployment benefits (Izquierdo et al., 2021) have been widely used by Spanish companies, especially in the hospitality industry (García-Muñoz Alhambra, 2020). NH, Riu and Barceló hotels are only a few of a long list of hotel firms that have furloughed staff, thus temporarily suspending many employees from employment. Although furlough schemes offer labor benefits that other options do not (i.e., access to unemployment benefits, acquired rights not undermined, García-Muñoz Alhambra, 2020), this employment situation is still perceived as highly stressful, as it indicates potential job loss.

According to the COR theory (Hobfoll, 1989), stress may come when one’s central resources are seriously threatened with loss. “Being furloughed” may lead one to perceive that an important resource such as “being employed” may be definitively lost. Other situations such as those entailing an organizational change (e.g., downsizing, outsourcing, restructuring) may also lead employees to perceive a potential loss of their current resources (cf., Ashford, 1988; Begley and Czajka, 1993; Ferrie et al., 1998; Schmidt et al., 2014). In COVID-19 times, this is even more likely to happen as the requirement to minimize physical contact may lead to new technologies in service delivery replacing the human role in serving customers (e.g., contactless payment, digital menus via QR codes, service robotics technology; Gursoy and Chi, 2020). As a result, it is no surprise that furloughed employees, who may contemplate resource losses, strive to retain, foster and protect these resources (Hobfoll et al., 2018). In this situation, employees may make the most of having servant leaders as supervisors, so the benefits of having such supervisors may be stronger in these employees than in those who continue to work for the organization. According to Greenleaf (1977), a servant leader is a person who is conscious of the most vulnerable, who seeks to make decisions and develops actions focused on benefitting their followers, especially those least privileged in the society. Accordingly, although servant leaders are expected to form high-quality relationships with all followers (Eva et al., 2019), these leaders will likely attend (to a greater extent) to the physical and emotional demands of employees who are more in need (furloughed workers). The great deal of time and energy that servant leaders typically devote to their employees (Eva et al., 2019), and especially to those who are more in need of such resources (furloughed workers), may have implications in the intensity of the relationships previously mentioned. For example, furloughed employees may see the support of their servant leaders as more helpful and more fulfilling, which should lead to less likelihood of falling into depression. Additionally, the greater efforts and dedication these leaders may devote to furloughed employees may lead the latter to have higher levels of resources, including PSC. Furthermore, as PSC is a resource that can help one have more opportunities to be helped by others both inside and outside the hotel, PSC will more greatly decrease the likelihood of furloughed employees falling into depression. Unemployment is typically linked to greater possibilities of depression (Bartelink et al., 2020; Mokona et al., 2020). Thus, the help one can see in others (e.g., by possessing PSC) to face such a problem could be more impactful on furloughed employees (Berry and Rickwood, 2000). Adequate social support is very helpful to alleviating the etiology of mental disorders and depression (Jean-Baptiste et al., 2020), so the social support that can be gained (for example, by having PSC) can help reduce depression in

unemployed adults (Rey et al., 2016). With all of this in mind, we propose the following set of hypotheses:

H4a. *The strength of the positive effect of supervisor servant leadership on employee PSC will be stronger among furloughed employees compared to active employees.*

H4b. *The strength of the negative effect of PSC on employee depression will be stronger among furloughed employees compared to active employees.*

H4c. *The strength of the negative effect of supervisor servant leadership on employees’ depression will be stronger among furloughed employees compared to active employees.*

The above hypotheses together suggest that the role of PSC in the relationship between servant leadership of supervisors and employee depression will be stronger. In particular, the mediating role of PSC in that relationship will be stronger among furloughed employees. Thus,

H5. *The mediation effect of PSC between supervisor servant leadership and employee depression will be stronger among furloughed employees compared to active employees.*

In short, this paper first hypothesizes that servant leadership is negatively related to employee depression (H1). Next, it predicts a positive link between servant leadership to employee PSC (H2a) which in turn helps decrease employee depression (H2b). The model thus proposes that the significant link between servant leadership and employee depression is mediated by employee PSC (H3). Finally, the research model predicts that the strength of the effects described above will be stronger among furloughed employees (H4a, H4b, H4c), including the mediating effect of PSC (H5). Fig. 1 shows the research model tested in this study.

## 3. Methodology

### 3.1. Sample and data collection

The data for this study were gathered using questionnaires distributed to employees of Spanish hotels. Because the scales used were originally in English, Brislin’s (1980) back-translation procedure was used so they could be read in Spanish. A bilingual professional translated the items from English to Spanish, and they were translated back into English by another professional to ensure semantic equivalence. The questionnaire was then pilot tested with five Spanish hotel managers, four union representatives and six hotel employees using the focus group method to evaluate the clarity and suitability of the items to the particular context we studied (Choi et al., 2014). This process only resulted in minor adaptations, and the items remained practically unaltered.

The data were collected between August and October 2020, using a survey through LimeSurvey platform, which was distributed among the associate members of one of the main national unions in Spain. We selected these dates for data collection as this period is when hotel occupancy is usually at its highest rate, and when, with the COVID-19 pandemic, the hotel sector was believed to have more demand from customers and therefore needed more workers. All the workers surveyed belonged to the hotel sector. In total, 205 employees completed the questionnaire. This sample size was large enough to obtain a sampling error below the threshold of  $\pm 7.0$  (Aaker and Day 1990), considering a population of 1486,000 workers in the hospitality sector in the third quarter of 2020 in Spain (Spanish National Institute of Statistics, 2021). The sampling error for 205 workers is 6.78% (confidence level of 95%,  $p = q = 0.5$ ), which ensures that the sample size is sufficiently representative of the entire hospitality worker population in Spain. As in other studies (Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019), because the length of employment at a hotel is important to be familiar with variables of the hotel, such as supervisor servant leadership, respondents who had been with their hotel for fewer than six months were excluded. In addition, questionnaires that entailed a large percentage of missing responses were deleted.

In terms of demographics, Table 1 shows that approximately 58.2%

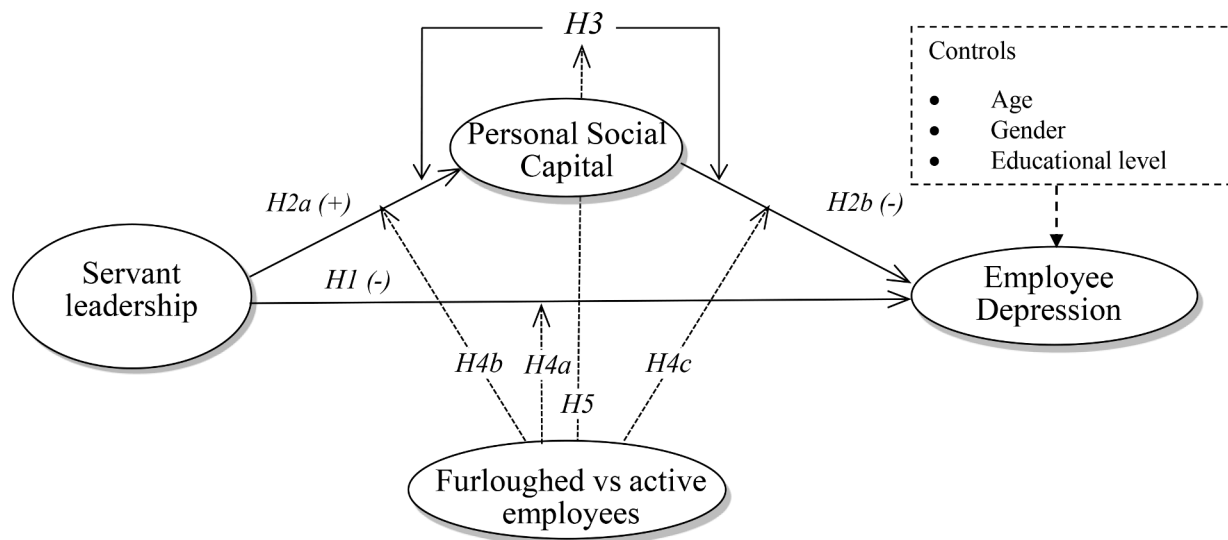


Fig. 1. Research model and hypotheses (furloughed vs. active employees).

Table 1 Sociodemographic profile. Furloughed vs. active employees.

Variable		Total sample (% of Total) n = 205	Furloughed employees-sample (% of Total) n = 75	Active employees-sample (% of Total) n = 130
Gender	Male	40.8%	42.9%	40%
	Female	58.2%	57.1%	60%
Education level	Primary studies	17.3%	18.9%	14.3%
	Secondary studies	29.9%	29.1%	31.4%
	Intermediate vocational training	19.3%	18.9%	20%
	Advanced vocational training	20.3%	17.3%	25.7%
	Graduate	10.7%	11.8%	8.6%
Age	Postgraduate degree	2.5%	3.9%	0%
	20–25 years old	2.10%	3.2%	0%
	26–35 years old	19.60%	21%	17.1%
	36–45 years old	21.10%	24.2%	15.7%
	46–55 years old	32.5%	29%	38.6%
	Over 55 years old	24.7%	22.6%	28.6%
length of service with the hotel	Six months-one year	2.80%	3.1%	1.5%
	One-five years	20.8%	26.5%	10.8%
	Six-10 years	11.2%	8%	16.9%
	11–15 years	19.1%	20.4%	16.9%
	16–20 years	17.4%	17.7%	16.9%
Hotel department	Over 20 years	28.7%	23.9%	36.9%
	Restaurant	34.1%	30.0%	41.3%
	Kitchen	19%	23.1%	12%
	Reception	28.3%	28.5%	28%
	Cleaning services	15.1%	14.6%	16%
	Maintenance	2.4%	2.3%	2.7%
	Entertainment	1.0%	1.5%	0%

of respondents were female and more than half of the respondents (53%) had earned higher than a secondary education, with approximately 52% holding either a professional qualification or a university degree. Only 2.10% of respondents were under the age of 26, and more than 57% were over the age of 45. Regarding years of service, 76.4% of respondents reported sustained service periods, having been employed by the same hotel for at least six years. Only a residual percentage (2.80%) indicated shorter service periods of between six months and one year. Finally, our sample represented a large variety of departments (restaurant, kitchen, reception, cleaning, maintenance, entertainment), although maintenance and entertainment only represented 2.4% and 1%, respectively.

### 3.2. Measures

All variables were Mode A composites formed through linear combinations of their reflective indicators, where arrows point from the construct to its respective indicators to indicate that such indicators are highly correlated and caused by the construct they intend to measure (Hair et al., 2017). As described below, the scales all used five-point Likert response formats and were adopted from previous studies (see Table 2 for items descriptions).

**Supervisor servant leadership.** This leadership style was measured using the reliable 10-item scale developed by Winston and Fields (2015) to rate immediate supervisors. This scale has widely shown its validity and reliability in previous research (e.g., Linuesa-Langreo et al., 2018), which together with its reduced dimension compared to other scales (e.g., Ehrhart, 2014; Liden et al., 2008; van Dierendonck and Nuijten,

**Table 2**  
Item loadings, construct reliability and convergent validity across the total, furloughed and active samples.

Composite/ Items	Loading Total/ furloughed/ active	Cronbach's $\alpha$ Total/ furloughed/ active	Composite reliability $\rho$ Total/ furloughed/ active	AVE Total/ furloughed/ active
Servant leadership (SL)...my immediate supervisor [...]		0.95/0.95/ 0.96	0.96/0.97/ 0.96	0.70/0.73/ 0.68
SL1. Practices what he/she preaches	0.79/0.76/ 0.81			
SL2.Serves people without regard to their nationality, gender, or race.	0.75/0.82/ 0.71			
SL3.Sees serving as a mission of responsibility to others	0.80/0.81/ 0.79			
SL4.Genuinely interested in employees as people	0.90/0.90/ 0.89			
SL5.Understands that serving others is most important	0.85/0.90/ 0.82			
SL6.Is willing to make sacrifices to help others	0.90/0.91/ 0.90			
SL7.Seeks to instill trust rather than fear or insecurity	0.87/0.86/ 0.87			
SL8.Is always honest	0.89/0.93/ 0.88			
SL9.Is driven by a sense of higher calling	0.88/0.93/ 0.84			
SL10. Promotes values that transcend self-interest and material success	0.75/0.78/ 0.74			
Employee Personal social capital (PSC)		0.63/0.54/ 0.68	0.83/0.80/ 0.85	0.72/0.67/ 0.74
Bonding... Among peers inside your hotel [...]	0.75/0.75/ 0.78	0.84/0.87/ 0.82	0.89/0.91/ 0.88	0.67/0.71/ 0.65
BON1.How do you rate the number of friends you have?	0.84/0.87/ 0.83			
BON2.With how many do you have routine contact?	0.77/0.79/ 0.78			
BON3.How many can you trust?	0.84/0.86/ 0.83			
BON4.How many will	0.83/0.85/ 0.77			

**Table 2 (continued)**

Composite/ Items	Loading Total/ furloughed/ active	Cronbach's $\alpha$ Total/ furloughed/ active	Composite reliability $\rho$ Total/ furloughed/ active	AVE Total/ furloughed/ active
definitely help you if you ask?				
Bridging ... Among others outside your hotel (suppliers, customers, firms...) [...]	0.93/0.88/ 0.94	0.80/0.76/ 0.82	0.88/0.85/ 0.89	0.72/0.66/ 0.74
BRI1.How do you rate the number of people with whom you have routine contact?	0.86/0.80/ 0.90			
BRI2.How many have great social influence, broad connections, or significant power for decision-making?	0.83/0.75/ 0.84			
BRI3.How many of these people will definitely help you if you ask?	0.84/0.88/ 0.84			
Employee depression		0.85/0.86/ 0.84	0.89/0.90/ 0.88	0.62/0.64/ 0.60
DEP1. I feel depressed	0.81/0.86/ 0.76			
DEP2. My sleep is restless	0.64/0.67/ 0.70			
DEP3. I feel lonely	0.75/0.77/ 0.70			
DEP4. I have crying spells	0.84/0.80/ 0.86			
DEP5. I cannot get going	0.87/0.89/ 0.87			

2011) justified its use in this study. Specifically, respondents were required to rate, from 1 to 5, the extent to which they agreed (1 = “strongly disagree,” 5 = “strongly agree”) about whether their supervisors engaged in behaviors that reflected a servant leadership style. A sample item was, “My supervisor understands that serving others is most important,” such that higher scores on this variable indicated stronger servant leadership of the supervisors.

**Employee PSC.** Seven items from Zoghbi-Manrique-de-Lara and Ruiz-Palomino (2019) were used to measure the PSC of the employees. Compared with other longer scales such as the 42-item scale designed by Chen et al. (2009), the scale created by Zoghbi-Manrique-de-Lara and Ruiz-Palomino (2019) involves a shorter format without detriment to its psychometric properties. In addition, it is one of the few, if not the only, that has been satisfactorily used in business settings, thus confirming the suitability of the use of this scale in the current investigation. Four items measured the bonding dimension, and three items measured the bridging dimension. For bonding, the items referred to PSC with peers inside their hotel (i.e., “With how many do you have routine contact?”). For bridging, the items did not distinguish between horizontal and

vertical ties and included the content on linking capital. In particular, bridging referred to PSC with other agents outside their hotel, including suppliers, customers, companies, government, associations or NGOs (i. e., “How many of these people will definitely help you if you ask?”). Responses to all these questions were given on a five-point Likert response format (1 = “none,” 5 = “many”). The two dimensions (bonding and bridging) establish the Mode A second-order construct of PSC, such that higher scores indicated a stronger PSC.

**Employee depression.** The level of employee depression was measured by using the five-item short scale designed by Bohannon et al. (2003). The good psychometric properties shown by this scale in workplace scenarios in the recent past (e.g., Wright et al., 2017), and its reduced length and easy readability (see Table 2), justified its use in this study. Using a five-point Likert response format (1 = “not at all,” 5 = “all the time”), this scale measured the frequency with which respondents experienced aspects that indicate a person is suffering from depression. Thus, by following the same procedure used by Bohannon et al. (2003), we asked participants to indicate how frequently they had felt such aspects during the previous week. A higher score on the scale represented greater depression.

We used three control variables that have been used in previous research as antecedents of depression to show that our hypothesized links to employee depression have explanatory power beyond those control variables. In particular, we used gender as a control. Due to a tendency with which women dwell on problems, they may have more mental distress (Kessler, 2003), which can make them more likely to suffer depression (Akhtar-Danesh and Landeen, 2007), especially during the COVID-19 pandemic (Özdin and Özdin, 2020). We also controlled for age, because older people may experience more stressors over time and may develop stronger resilience to difficult situations, which may help them avoid falling into depression (Akhtar-Danesh and Landeen, 2007), even under difficult situations such as that provoked by the COVID-19 pandemic (Solomou and Constantinidou, 2020). Finally, the educational level of respondents was also controlled for, as education is a personal asset that enables one to succeed in life and can thus reduce the prevalence of depression (Bjelland et al., 2008). A dummy variable was created for gender (0 = male, 1 = female) and ordinal scales were used for both age (1 = younger, 6 = older) and educational level (1 = primary studies, 2 = secondary studies, 3 = intermediate vocational training, 4 = advanced vocational training, 5 = graduate, 6 = postgraduate).

Because our research design was cross-sectional and used self-reported measures, common method variance (CMV), evaluation apprehension and social desirability bias (SDB) represented potential concerns (Podsakoff et al., 2003; P.M. 2012). Accordingly, we designed the questionnaire using procedural remedies to mitigate these issues (i. e., Podsakoff et al., 2003; P.M. 2012). For example, we strongly emphasized that there were no right or wrong answers and that honest responses were greatly appreciated, all of which should reduce SDB and evaluation apprehension (Podsakoff et al., 2003). We also guaranteed anonymity individually (specifically, respondents were not required to reveal their names), which additionally helped further reduce SDB. Finally, we used three remedies to mitigate CMV (Podsakoff et al., 2003; P.M. 2012). First, we ensured both physical and psychological separation between the predictor and criterion variables in the questionnaire to make them appear unrelated and part of different general topic areas. Second, various contextual variables appeared in the questionnaire to serve as distractors. Third, we included simple, specific and concise items, thus keeping the questionnaire short. Finally, we conducted a Harman’s single-factor test (using SPSS v. 22.0) to assess whether CMV was a serious problem. Because the exploratory factor analysis of all the variables in our model did not yield a single factor (up to five factors emerged) and the first factor did not account for the majority of covariance between the variables (only 33%, less than half the total variance), CMV did not appear to be a serious concern (Podsakoff et al., 2003). In addition, we followed the example of others (Lu et al., 2016;

Khosravi et al., 2020) and used the marker variable approach adapted by Rönkkö and Ylitalo (2011) to test whether CMV was a problem. One marker item (i. e., seeking information from other consumers online by accident), which is not theoretically related to any of the constructs in the research model, was included in the questionnaire. Our analyses revealed that the mean correlation coefficient value for the marker item with the items of any of the study variables was 0.021, far below the 0.05 threshold (Rönkkö and Jukka, 2011). Moreover, all parameter estimates that proved significant in our research model experienced no significant change in a model where the marker item was related to each of the study variables. Thus, CMV likely had an insignificant effect on our data.

### 3.3. Data analysis

To generate descriptive statistics of our sample (see Table 1), we used SPSS v.22.0. To test our hypotheses, we relied on structural equation modeling (SEM) and in particular on partial least squares (PLS) using Smart PLS 3.2.8 (Ringle et al., 2015). PLS-SEM is a powerful, robust statistical procedure (Henseler et al., 2009) that does not require demanding assumptions about the distribution of the variables and is suitable to test mediation and multigroup analyses (MGA, Hair et al., 2017). The power analysis developed with G\*Power 3 (Faul et al., 2007) for the regression with the greatest number of independent variables in our model (five independent variables) resulted in a power of 99.99%. Thus, the number of informants by each subsample (total, furloughed employees, active employees) was large enough to test our relationships and detect medium effect sizes (Cohen, 1988) without incurring Type II errors, meaning that the  $R^2$  and significant path coefficients we obtained from our analyses clearly differed from zero. As recommended (Hair et al., 2017), our PLS analysis used 5000 subsamples to generate standard errors and bootstrap t-statistics with  $n - 1$  degrees of freedom (where  $n$  is the number of subsamples) to evaluate the statistical significance of the path coefficients.

## 4. Results

In analyzing our model and testing the hypotheses with PLS, we first needed to evaluate the adequacy of the measurement model to ensure the appropriateness of the research instrument. Our research model involved the implementation of a multigroup analysis (MGA), a statistical analysis that enables testing for significant differences in the parameter estimates (e.g., path coefficients) across pre-defined data groups (e.g., furloughed vs. active employees). Because MGA was involved in our research, the adequacy of the variables to do this analysis was tested (invariance of measurement across the two samples, furloughed vs. active employees) using the MICOM procedure (measurement invariance of composite models, Henseler et al., 2016), prior to analyzing the existence of differences in the paths predicted across the two samples.

### 4.1. Measurement model evaluation

Our analyses revealed that the measures used in our research model were reliable and valid across the two samples (furloughed employees vs. active employees). For example, for item reliability, the results revealed no serious problems across the three samples: the total sample, the sample of furloughed employees and the sample of active employees. This is because most items exceed the recommended 0.707 level (Hair et al., 2017) and only one item (DEP2, Table 2) shows a loading lower than 0.7, but always superior to the still acceptable 0.6 threshold (Hulland, 1999; Hair et al., 2017; Table 2), across the three samples. Regarding the composite’s internal consistency, composite reliability indexes were all higher than the 0.70 cut-off (Hair et al., 2017). The Cronbach’s alphas were also higher than the 0.70 cut-off in almost all the cases. Only for the PSC composite were these values lower than 0.70, but higher than 0.63 in two of the three samples, and 0.54 for the



furloughed employees model/sample. These values are unsurprising given that Cronbach’s alpha tends to report lower bound estimates of reliability, especially if, as happens here, the number of items is low (two items, one for bonding and another for bridging, cf., Peterson and Kim, 2013; Graham, 2006); however, these values are still acceptable for research (Bowling, 2002; Nunnally, 1967). Thus, there appear to be no problems of internal consistency for the constructs used in our research model. In support of convergent validity, the average variance extracted (AVE) for all the constructs across the three samples/models was also higher than 0.5 (Hair et al., 2017), thus supporting the convergent validity of the composite scales across the three samples/models. Finally, regarding discriminant validity, all the mode A composites differed from one another. Not only did the AVE exceed the square correlations between the composites (Hair et al., 2017; Table 3) but the HTMT indexes (the average of the heterotrait–heteromethod correlations relative to the average monotrait–heteromethod correlations) were also less than 0.85, as recommended (Henseler et al., 2015; Table 3). Thus, discriminant validity for all the constructs across the three samples (total, furloughed employees, active employees) was confirmed.

4.2. Structural model evaluation

Of the demographic variables included as controls (i.e., gender, age, education), our PLS-SEM model results in the model for the total sample revealed that only gender had a significant effect on employee depression. In particular, the results revealed that the female gender was more positively related to depression ( $\beta = 0.201, p < 0.01$ ), in line with previous literature that supports this finding both generally (Akhtar–Danesh and Landeen, 2007) and in COVID-19 pandemic times (Özdin and Özdin, 2020). However, neither age ( $\beta = -0.024, ns$ ) nor education ( $\beta = -0.11, ns$ ) exerted a significant effect on the prevalence of depression among the employees surveyed.

The results of the structural model on the total sample in Fig. 2 show that all the path coefficients are significant and in line with our predictions. In particular, our results revealed that hotel employees whose immediate supervisor was a servant leader were less likely to report depression in COVID-19 pandemic times ( $\beta = -0.194, p < 0.01$ ), in support of H1. Additionally, servant leadership of supervisors had a positive effect on employee PSC ( $\beta = 0.276, p < 0.001$ ), and PSC had a negative effect on the prevalence of depression among the employees ( $\beta = -0.179, p < 0.01$ ), in clear support of H2a and H2b, respectively. These results suggest the possibility of the mediation of employee PSC in the negative relationship between supervisor servant leadership and employee depression. Indeed, the indirect negative effect of servant leadership on employee depression is significant via employee PSC (indirect effect =  $-0.05, p < 0.05$ ), thus confirming H3—namely that employee PSC mediates the negative effect of servant leadership on employee depression.

In terms of the quality of the model tested in our study for the total sample, our results revealed an R<sup>2</sup> value of around 0.150 for employee depression and around 0.08 for PSC, higher than, and very close to, the 0.10 threshold (Falk and Miller, 1992), respectively (Fig. 2). Moreover,

the Stone-Geisser blindfolding sample reuse analysis reveals Q<sup>2</sup> values greater than 0, which means that employee PSC (Q<sup>2</sup> = 0.05) and depression (Q<sup>2</sup> = 0.08) are effectively predicted by our research model (Hair et al., 2017). Finally, regarding the out-of-sample predictive power of the research model tested in this study for the total sample, with k-folds = 10 and 10 repetitions, as recommended (Shmueli et al., 2016), the results reveal positive Q<sup>2</sup> values for both the mediator (Q<sup>2</sup> = 0.063) and employee depression (Q<sup>2</sup> = 0.077), indicating that the error in predicting the results in PLS-SEM was lower than the prediction error of the model using only the mean values. Furthermore, the research model using PLS revealed prediction errors (root mean square error, RMSE, mean absolute error, MAE) lower than those reported using linear regression modeling, which reconfirms that our PLS-SEM model has a good predictive performance (Shmueli et al., 2016). Finally, the research model tested for the total sample revealed a standardized root mean square residual (SRMR) value of 0.055, which is far below the 0.08 cut-off; furthermore, its 95% bootstrap quantile is 0.057, higher than the SRMR value, which indicates that the overall model fit was good (Hair et al., 2017).

4.2.1. Multigroup analysis (MGA) and hypothesis testing

In testing our multigroup or moderating hypotheses (H4a, H4b, H4c, H5), we used MGA. MGA considered the respondent’s employment status with their hotel (furloughed vs. active) as a moderator in the relationships above described, so it entailed dividing the sample into two groups/samples: furloughed employees (n = 75) and active employees (n = 130). Prior to performing the MGA, we ensured that measurement invariance was supported as a prerequisite for comparing the path coefficients across the two samples (furloughed, active) (Henseler et al., 2016). Using the MICOM procedure, which involves a three-step process (configural invariance, compositional invariance, equal means and variances across groups), allowed us to see whether measurement invariance was present, so that the potential variations in path coefficients across the two samples were a result of the moderating variable (furloughed vs. active employees) and not because there were potential differences in the measurement models of each group/sample. Table 4 shows the MICOM procedure revealed full measurement invariance. The first step was fulfilled because the research model (same composites, items and estimation method) was the same across the two groups (furloughed vs. active employees, Henseler et al., 2016). The MICOM procedure results also revealed that the second step was fulfilled; the 95% permutation-based confidence interval (using 5000 permutations, as recommended, Ringle et al., 2015) showed that composites have a correlation in both samples that is not significantly lower than one (Table 4), thus reflecting that composites do not differ much between both samples. Because the c values in the original data are within the confidence interval, the null hypothesis cannot be rejected, so c is not significantly different from 1 and compositional invariance of our research model is assumed. Finally, Step 3, which evaluates whether variances and mean values differ across groups in the composites used in our research model, was also fulfilled. This analysis tests the null hypothesis that differences between the mean values and the variances of

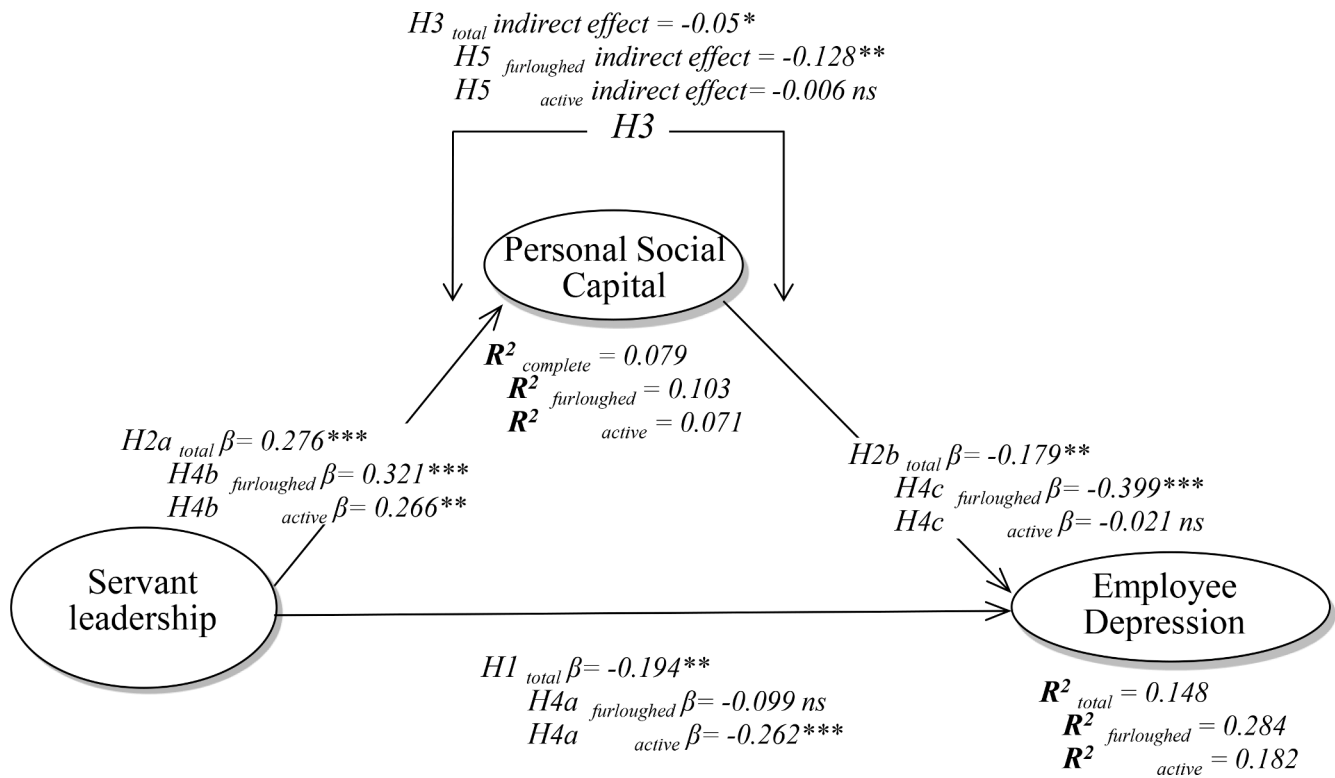
Table 3  
Descriptive statistics, correlation matrix and discriminant validity (total sample).

Constructs	Mean	SD	1	2	3	4	5	6
1. SL	2.97	1.20	<b>0.84</b>	<i>0.33</i>	<i>0.29</i>	<i>0.17</i>	<i>0.08</i>	<i>0.06</i>
2. Employee PSC	2.71	0.80	<i>0.27*</i>	<b>0.85</b>	<i>0.28</i>	<i>0.01</i>	<i>0.08</i>	<i>0.07</i>
3. Employee Depression	2.51	0.95	<i>-0.27*</i>	<i>-0.22*</i>	<b>0.79</b>	<i>0.22</i>	<i>0.06</i>	<i>0.07</i>
4. Gender	—	—	<i>-0.17*</i>	<i>0.01</i>	<i>0.22*</i>	—	<i>0.18</i>	<i>0.12</i>
5. Age	4.58	1.12	<i>0.08</i>	<i>0.06</i>	<i>-0.06</i>	<i>-0.18*</i>	—	<i>0.24</i>
6. Education	2.85	1.35	<i>-0.05</i>	<i>-0.07</i>	<i>-0.06</i>	<i>0.13</i>	<i>-0.25*</i>	—

Notes: \* p < 0.05 or better (two-tailed test). SD = standard deviation.

Bold values on the diagonal are the square roots of the AVE. Off-diagonal elements below the diagonal are correlations between the constructs. Off-diagonal elements in italics and above the diagonal are the HTMTs. Gender (0 = male, 1 = female), Age (1 = 20–25 years, 5 = Over 56 years), Education (1 = primary, 6 = Postgraduate). SL = Servant Leadership, Employee PSC = Employee Personal Social Capital.





**Fig. 2.** Hypothesis testing (furloughed vs. active employees). Notes: \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , ns = non-significant. In an unmediated model, H1 complete  $\beta = 0.252^{***}$ , H1 furloughed  $\beta = -0.244^*$ , H1 active =  $-0.282^{***}$ .

**Table 4**  
MICOM results for testing measurement invariance of the composites.

Composite (Step 2)	c-value (=1)	95% confidence interval	Compositional invariance?
Servant leadership	0.995	[0.994,1.000]	Yes
Employee PSC	0.997	[0.901,1.000]	Yes
Employee depression	0.995	[0.974,1.000]	Yes
Composite (Step 3a)	Logarithm of the composite's variances ratio (= 0)	95% confidence interval	Equal variances?
Servant leadership	-0.141	[-0.218,0.261]	Yes
Employee PSC	0.138	[-0.313,0.327]	Yes
Employee depression	-0.029	[-0.312,0.348]	Yes
Composite (Step 3b)	Difference in the composite's mean value (= 0)	95% confidence interval	Equal means?
Servant leadership	0.112	[-0.291,0.277]	Yes
Employee PSC	-0.211	[-0.294,0.287]	Yes
Employee depression	-0.053	[-0.269,0.293]	Yes

**Notes.** Because all conditions were fulfilled, full measurement invariance can be supported (Hair et al., 2018).

the composites across the two groups are 0. As shown in Table 4 (Steps 3a and 3b), the null hypothesis cannot be rejected, since the mean values and the variances of the composites in the sample of *furloughed employees* do not show significant differences compared to those of the sample of *active employees*. As seen in Table 4, the logarithm of the composite's variance ratio and the difference of the composite's mean value were

within their corresponding 95% confidence intervals, in support of equal variances and means for the composites across the two groups/samples. Overall, then, the results obtained in the MICOM analysis supported "full measurement invariance" for the two groups/samples, such that we can compare the path coefficients using MGA (Hair et al., 2018).

Our MGA revealed mixed findings regarding our multigroup, moderating hypotheses (see Table 5). With regards to our hypothesis H4a, the MGA results did support this prediction. However, although there were no significant differences in the negative effect of servant leadership on employee depression across the two samples ( $\beta_{furloughed} = -0.099, ns$ ;  $\beta_{active} = -0.262, p < 0.001$ ; path difference =  $0.163, p_{PLS-MGA} = 0.123$ ), the results revealed that servant leaders did not have a direct, negative effect on the furloughed employees ( $\beta_{furloughed} = -0.099, ns$ ) whereas this effect did exist among active employees ( $\beta_{active} = -0.262, p < 0.001$ ). Regarding H4b, Fig. 2 and Table 5 reveal that this hypothesis cannot be accepted; the predicted positive effect of servant leadership on employee PSC is not significantly stronger among furloughed employees compared to active employees ( $\beta_{furloughed} = 0.321, p < 0.001, \beta_{active} = 0.260, ns$ , path difference =  $0.055, p_{PLS-MGA} = 0.339$ , Fig. 2, Table 5), and thus H4b was rejected. However, H4c could be supported. Fig. 2 and Table 5 revealed that, as predicted, employee PSC was negatively related to employee depression in a stronger manner among furloughed employees compared to active employees ( $\beta_{furloughed} = -0.399, p < 0.001, \beta_{active} = -0.021, ns$ , path difference =  $-0.378, p_{PLS-MGA} = 0.005$ ), thus allowing us to accept H4c.

Finally, our results revealed support for our H5, which predicted that the negative effect of supervisor servant leadership via employee PSC was stronger among furloughed employees compared to active employees. Our MGA results for H4a (Table 5, Fig. 2) already suggested this point, which was reconfirmed by evaluating the significance of the indirect effect across the two samples. As Table 5 and Fig. 2 reveal, the negative indirect effect of servant leadership via employee PSC was significant in the furloughed sample (indirect effect =  $-0.128, p < 0.01$ )

**Table 5**  
Multi-group analysis test results. Hypothesis testing of H4a-H4c and H5.

Relationship	Path coeff. (furloughed)	Path coeff. (active)	Diff. (furloughed vs. active)	t-parametric	Henseler p-value	Hypothesis support?
<b>Research Model</b>						
Servant leadership → Employee depression	-0.099	-0.262	0.163	1.120	0.123	H4a Rejected
Servant leadership → Employee PSC	0.321	0.260	0.055	0.388	0.339	H4b Rejected
Employee PSC → Employee depression	-0.399	-0.021	-0.378*	2.288	0.005	H4c Supported
	Indirect effect (furloughed employees)		Indirect effect (active employees)			Hypothesis support?
Servant leadership → PSC → Employee depression	-0.128 (p value = 0.010)		-0.006 (p value = 0.429)			H5 Supported

Notes. \*Significant at  $p < 0.05$ .

and was non-significant among active employees (indirect effect = -0.006, ns.), which confirmed that PSC had a stronger mediating effect among furloughed employees compared to active employees, as predicted in H5. Table 6 reveals that the variance accounted for employee depression was far stronger (almost double) among furloughed employees ( $R^2 = 0.29$ ) compared to active employees ( $R^2 = 0.18$ ), indicating a stronger mediating effect that was medium-sized ( $f^2 = 0.15$ , see Table 6).

### 5. Discussion

The strategies to mitigate the Covid-19 pandemic (i.e., lockdowns, travel restrictions, social distancing) have resulted in the temporary closure of many businesses, especially in the hospitality industry (Gursoy and Chi, 2020), resulting in a sharp decrease in hotel occupancies and revenues. The changes the industry is undertaking in terms of operations to return to normal activity are many (e.g., masks and gloves for the hotel staff, social distancing, cleaning of surfaces, etc.), which, together with the effects of the pandemic itself, may lead hotel staff to have psychological problems that could affect their productivity and performance. Servant leadership behavior has been found to yield many benefits for employees (Eva et al., 2019), which could be underlined as a great resource or source of resources with which the employees could face these difficult times more successfully and in turn avoid suffering from depression. Other positive leadership approaches (transformational leadership) have already been noted to reduce the level of depression in employees (Munir et al., 2010; F. 2012), yet the literature is limited concerning “whether” and “how” servant leadership practice can work as a valid leadership strategy to reduce such psychological impairment among employees. Additionally, whether this leadership behavior is more beneficial for employees who are active or employees who are furloughed has not yet been resolved. As a result, we explored the research questions: (1) What role does servant leadership play in reducing the level of depression among hotel employees in times of change, such as those caused by the COVID-19 pandemic? and, (2) How

**Table 6**  
Mediation effect size of PSC across the two samples (furloughed vs. active employees).

Indirect effect of servant leadership on employee depression via employee PSC	Variance explained			Size of the multigroup effect
	$R^2$ furloughed sample	$R^2$ active sample	$\Delta$ variance explained	( $f^2$ )
Servant leadership → PSC → Employee depression	0.29	0.18	0.11	0.15 (medium effect)

Notes:  $f^2 = (R^2 \text{ furloughed} - R^2 \text{ active}) / (1 - R^2 \text{ furloughed})$ ; effect sizes of  $f^2 \geq 0.02$ ,  $\geq 0.15$ , and  $\geq 0.35$  are small, medium, and large, respectively (Cohen, 1988).

does servant leadership decrease the level of depression among hotel staff, and for which employees is its beneficial role stronger? Our findings revealed that servant leadership was effective in reducing levels of depression among hotel employees. While this reduction was direct for the active hotel staff, it was indirect for furloughed employees; these employees were less likely to fall into depression, due mainly to the PSC their leaders helped them build. Finally, our findings revealed that the beneficial role of these leaders (i.e., through the PSC they helped build for their supervisees) was stronger for those more in need— that is, for those who were furloughed.

The contributions of this study to the literature are threefold. First, by demonstrating the strong negative effect of servant leadership on the likelihood of employees falling into depression, this study adds to the scant literature on this issue. While Rivkin et al., (2014) demonstrated that servant leadership reduces burnout, our study demonstrates its important role in reducing another well-being indicator (depression), which extends the findings of Rivkin et al., (2014).

Second, by identifying PSC with a mediating role in the relationship between servant leadership of supervisors and employee depression, we provide new, important insights into how servant leaders may help reduce levels of depression among hotel employees in times of change. Followers of servant leaders may experience a rich network of contacts both inside and outside the hotel that can help them access resources with which to face complicated times of change such as those provoked by the COVID-19 pandemic. Although this finding is new, it is in line with previous studies that demonstrate leaders influence employees’ psychological health or well-being by providing them with resources (e.g., self-efficacy, Nielsen and Munir, 2009; support, cf., Waldenström et al., 2008). This study is thus in line with the COR theory (Hobfoll, 1989) and the JD-R theory (Bakker and Demerouti, 2017, 2018) by identifying PSC (access to a network of relationships) as an asset that can help reduce the psychological harm that may result from perceiving strong demands at work, such as those derived from the COVID-19 pandemic.

Third, this study helps clarify for which employees servant leaders are most effective in reducing the level of depression. Our findings revealed that furloughed employees were the most benefited, as the reduction in their level of depression doubled that of active employees. This is in line with a central characteristic of servant leaders that many have overlooked: leaders are servant when they are aware and concerned about the least privileged in the society (Greenleaf, 1977). Our study demonstrates that the level of depression of all employees, both active and furloughed, is reduced under the supervision of servant leaders. The reduction of depression levels was direct among active employees, likely because servant leaders themselves, through prioritizing followers’ well-being and growth and through the care they typically provide to followers (Eva et al., 2019), are sufficient resources with which to tackle difficult times of change such as those caused by the COVID-19 pandemic. Importantly, however, for the literature, servant supervisors helped reduce depressive symptoms among furloughed employees only through the PSC they gained thanks to being in the presence of these leaders. This finding is reflective of “how” furloughed

employees, who have suddenly lost their jobs or are in serious danger of doing so, see more clearly (in a more tangible manner) how working under servant leaders can actually help them deal with such a dramatic situation, by accessing a network of relationships that can help them feel support, accompaniment, safety and opportunities to find alternative employment options in the case of being permanently laid off. Importantly, this finding comes to support and expand recent literature (González-Cruz et al., 2019) suggesting that the leadership style selected by managers depends on followers' circumstances. In their research, González-Cruz et al. (2019) found that followers' circumstances (e.g., high qualification, nonexistence of family responsibilities, intrinsic job satisfaction, a high customer contact job) were key for transformational leadership to be effective. Our findings come to support the reasoning behind these findings and help advance this recent literature by revealing that, compared with an active employment status, a furloughed status can make managers' servant leadership style become more effective in enhancing employees' psychological health. In all, this study helps provide a more comprehensive overview of "how" servant managers can alleviate hotel employees' depression caused by the changes they face due to the COVID-19 crisis. While the influential mechanism is likely direct among active employees, this mechanism is indirect, through helping their employees build a strong PSC.

The findings of this study also have managerial implications. First, in line with the guidelines of González-Cruz et al. (2019), team supervisors in hotels should pay attention to their employees' circumstances to display the most suitable leadership style. Specifically, our findings suggest that hotel managers should display features of servant leadership as an important measure to enhance the psychological health of their direct reports. As such, CEOs or human resource managers of hotels should encourage their senior or junior managers to enroll in training programs (either implemented onsite or outside the hotel) oriented towards enhancing their servant leadership abilities. *The Greenleaf Center for Servant Leadership*, for example, offers online training programs that will likely facilitate the enrollment of managers and their best use of such training programs.

Of interest is also the suggestion that special attention must be paid to the activation of HRM procedures and practices oriented towards fostering the creation of PSC among employees. For example, human resource managers could design the structure of the organization in a more flexible manner, as it would increase the social interactions needed to build PSC (Zoghbi-Manrique-de-Lara and Ruiz-Palomino, 2019). Furthermore, because social support, which plays a helpful role in facing demands at work (Hobfoll et al., 2018), is an implicit resource that employees may develop by having supervisors who are servant (Eva et al., 2019) or high levels of PSC (Rey et al., 2016), hotels could implement Employee Assistance Programs (financial, legal, psychological counseling) through which employees can be listened to, attended to and provided with social support.

## 6. Conclusions

Employees' poor psychological health can damage their productivity and performance in the long term (Paul, 2003). Times of change such as those produced by the COVID-19 crisis are potential triggers of a psychological disorder among employees. Yet, little research has discussed how to avoid the occurrence of a psychological disorder such as depression among employees. In this article, we investigated how, and for which employees, the servant leadership of supervisors was more positively impactful on employee health. Importantly, our research revealed that the PSC employees have been able to build is key for servant leaders to reduce the level of depression of their employees during the current complex times of change. Furthermore, this study revealed that the reduction generated by servant supervisors in the level of depression of their employees was significantly stronger for furloughed employees than for active employees. This study thus advances our understanding of strategies that can help managers avoid this

psychological disorder appearing among the hotel staff during these difficult times of change. Our findings may be extrapolated to other scenarios, such as anxiety-inducing experiences deriving in mental health problems that can be suffered by employees in multiple situations, both internal (e.g., internal changes in processes and technologies; Lingmont and Alexiou, 2020) and external to their organizations (e.g., economic crises, natural disasters, etc.; Brooks et al., 2019; Catalano et al., 2011; Esterwood and Saeed, 2020).

## 6.2. Limitations and further research directions

This study has certain limitations that can prompt future research lines. First, as with all cross-sectional designs, no strong causal inferences can be drawn (Yañez-Araque et al., 2017). Given the sensitive nature of the study (i.e., employee depression, servant leadership of supervisors), we believed that the assurance of absolute anonymity of respondents was necessary (Randall and Fernandes, 1991), which made it difficult for a longitudinal design to be implemented. We did, however, encourage future researchers to adapt the current study to a longitudinal design to look into the development of our study variables, so that stronger causal inferences can be drawn.

Second, data were collected on the same occasion from the same source, so CMV may be a threat to our findings (Podsakoff et al., 2003). Several procedural remedies were, however, used to minimize CMV. Furthermore, the post hoc tests we conducted (i.e., Harman's test, the marker test) suggested that our efforts were helpful and that CMV was less of a concern in our study. Nonetheless, more objective measures of the variables studied could be designed in future research. For example, the servant leadership of supervisors could be more objectively measured by relying on the consensus opinion of several direct reports. Moreover, in measuring the severity of depression, future research could collect more objective data (e.g., medical diagnosis).

In considering our limitations concerning mediation and MGA, a number of promising future research lines also lie ahead. Our investigation focused on PSC as a mediator of the servant leadership–employee depression relationship. However, we did not measure the various aspects that might underlie the explanations for this mediation. For example, high quality leader-member and team-member exchanges (e.g., LMX, TMX) are direct outcomes in groups led by servant leaders (Eva et al., 2019), which could leverage the creation of bonding PSC. Furthermore, the greater likelihood of the supervisees of these leaders becoming servant and empathetic (Ruiz-Palomino and Zoghbi-Manrique-de-Lara, 2020; Elche et al., 2020) would make them reliable enough to attract others who wish to build social relationships with them. Thus, future research could evaluate the extent to which LMX or TMX or changes in supervisee behavior (i.e., servant behavior, empathy, sense of building community) could drive them to become more active in initiating and holding social relationships with which to build PSC.

In terms of our MGA, various research opportunities emerge. We investigated how, compared with active employees, furloughed employees would further benefit from having servant supervisors or PSC. However, we did not evaluate the role of length of service in the leader-employee relationship or the relationships the employees had with others. These variables could make it easier for employees to build PSC or become less prone to fall into depression. Future research could thus consider these variables as potential moderators of the relationships we studied. Furthermore, employees may differ in terms of their personal resources and/or their propensity to suffer from various psychological health problems. Thus, considering these variables could qualify our MGA results. In particular, it could provide richer information on the types of employees that servant leaders can most likely assist in countering the possible negative effects on their psychological health of difficult times of change such as those caused by COVID-19.

## CRediT authorship contribution statement

**Pablo Ruiz-Palomino:** Conceptualization, Methodology, Software, Validation, Formal analysis, Writing – original draft, Writing – review & editing, Visualization, Project administration. **Benito Yáñez-Araque:** Conceptualization, Methodology, Software, Validation, Formal analysis, Writing – original draft, Writing – review & editing, Visualization, Project administration. **Pedro Jiménez-Estévez:** Conceptualization, Validation, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision. **Santiago Gutiérrez-Broncano:** Conceptualization, Validation, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision.

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