



# Article Loneliness in Leadership: A Study Applied to the Portuguese Banking Sector

Carla Marisa Magalhães <sup>1</sup>, Carolina Feliciana Machado <sup>2,\*</sup> and Célia Pinto Nunes <sup>3</sup>

- <sup>1</sup> Faculty of Economic, Social and Business Sciences, TRIE, Transdisciplinary Research Center of Innovation & Entrepreneurship Ecosystems, Lusófona University of Porto, 4000-098 Porto, Portugal
- <sup>2</sup> School of Economics and Management, University of Minho, CICS.NOVA.UMinho, 4710-057 Braga, Portugal
- <sup>3</sup> Department of Mathematics, University of Beira Interior, CMA/UBI, 6201-001 Covilhã, Portugal
- \* Correspondence: carolina@eeg.uminho.pt

Abstract: In this study, we analyzed the feeling of loneliness in leadership in the Portuguese banking sector, seeking to identify variables that may instigate this feeling, such as gender, age, academic qualifications, function/position, number of working hours per week, and years of work/seniority, and the consequences that it may have, namely in terms of the decision-making process and the motivation of leaders. For this study, a quantitative research tool was used in the form of a questionnaire, which was applied to a group of collaborators, with leadership responsibilities, of the financial institutions authorized to operate in Portugal. We concluded that while some variables influence the feeling of loneliness in leadership (years of work, position, and academic qualifications), others do not (gender, age, and hours of work per week). We also found a relationship between loneliness and demotivation and proved that the feeling of loneliness affects leadership but does not affect decision making. The results are relevant, especially for the banking sector, which has undergone major restructuring in the Portuguese economy and needs guidance to face the country's financial challenges.

Keywords: loneliness; leadership; Portuguese banking sector; decision-making; motivation

# 1. Introduction

We aimed to analyze loneliness in leadership in the Portuguese banking sector. Although studies on leadership are common in the literature, the association of leadership with loneliness, with a focus on the banking sector, has not been sufficiently explored. Thus, it is important that studies on this topic continue to be encouraged (Yukl 1988), especially when applied to more specific contexts, which can add value to the concept itself and help us understand it better.

In order to better understand this context, we endeavored to answer the following research question: Which variables most influence loneliness in leadership in the Portuguese banking sector?

The study of loneliness in leadership gains even more strength when faced with adverse circumstances, such as the current one created by the pandemic, which caused greater isolation and feelings of loneliness, which are particularly relevant in older leaders (Miller et al. 2020). In fact, the pandemic context (and the increase in remote working) promoted the feeling of loneliness in a general way (Andel et al. 2021; Charoensap-Kelly et al. 2021; Colak and Cetin 2021; Holt-Lunstad 2021).

It is indisputable that leadership skills are important for the effective management of people and organizations (Cooke 2013). Leadership has proven to be increasingly relevant for organizations because it leaders are able to anticipate essential changes and create a strong commitment and a highly suitable atmosphere for workers and teams, so that they understand and adopt the necessary changes successfully. This action by the leaders is decisive, not only for the effectiveness of the organization, but also for its survival



Citation: Magalhães, Carla Marisa, Carolina Feliciana Machado, and Célia Pinto Nunes. 2022. Loneliness in Leadership: A Study Applied to the Portuguese Banking Sector. *Administrative Sciences* 12: 130. https://doi.org/10.3390/admsci 12040130

Received: 13 September 2022 Accepted: 29 September 2022 Published: 4 October 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). (Burke and Cooper 2006). In this sense, it is pertinent to analyze leadership in a context of loneliness and the impact that this context has on the level of leadership itself.

#### 2. Literature Review and Hypotheses

What is leadership? The definitions of leadership are many (Alfarajat and Emeagwali 2021; Bass 1990; Bennis and Nanus 1985; Matos and Machado 2020; Rost 1991; Stogdill 1974). In order not to be exhaustive on a topic that already gathers a lot of information, we move forward with some definitions of this concept, which we consider important in terms of the state of the art. According to Vecchio (1987), leadership is the influence that a person has on others. Prentice (1961) relates leadership to the achievement of an objective. According to Lord and Hall (2005), a leader is someone with exceptional talent and who can develop his/her skills throughout his/her career. Ganta and Manukonda (2014) define leadership as a kind of power through which someone can influence or change the values, beliefs, behaviors, and attitudes of others. Katz and Kahn (1978) state that leadership is an influence that intends to go beyond compliance with the guidelines and the organization's routine Leadership can also be defined as a relationship in which some people persuade others to adopt new values, attitudes, and goals and to exert efforts on their behalf (Hogg 2005). Banai and Reisel (2007) define leadership as the process of providing guidance and influencing others. Leadership also implies seeing the overall objective within the context of change and taking responsibility to motivate others to work towards it (Dickmann et al. 2010). By applying his/her knowledge and skills, the leader develops what Jago (1982) calls the Process of Leadership. When our traits influence our actions, we are facing trait leadership, which makes us believe that leaders are already born leaders and are not made leaders (Jago 1982). However, there are theories that indicate that it is possible for people to become leaders, either through their personality or through the context from which events conducive to leadership can emerge (Bass 1990). Also in this segment, it is important to mention authentic leadership, a key mediator between authentic leadership and desirable employee outcomes (Lux et al. 2019), and transformational leadership, which focuses on the effect of the leader on his/her followers and on their attitudes to achieve this effect (Aryee et al. 2012; Yukl 2002) and on teams (Ayoko and Chua 2014). Transformational leadership is also positively related to performance (Charbonnier-Voirin et al. 2010; Wang et al. 2011). This leadership style is based on a model oriented to the motivation of individuals, leading them to exceed their expectations and to improve their performance with greater ease (Bass and Avolio 2004). Regarding transformational leadership and bridging the gap with the other topic of this study—loneliness—some authors suggest that loneliness is more emergent when leaders are either new to the leadership role or enact more "transformational", "transactional", or "authentic" leadership behaviors (Silard and Wright 2020). Thus, transformational leadership may have a role in explaining loneliness at work (Dussault et al. 2017).

Another kind of leadership that is important to mention is servant leadership, which may promote employee performance (Kaltiainen and Hakanen 2020). Studies show that organizations face better periods of turmoil and change when faced with a servant leader (Kaltiainen and Hakanen 2020; Keith 2008).

This is particularly relevant in the current pandemic context. In fact, this context has also been associated with increased loneliness, which is why this study becomes even more pertinent (Wickens et al. 2021).

Studies on loneliness at work are also recurrent (Anand and Mishra 2021; Firoz et al. 2020; Sîrbu and Dumbravă 2019; Wright et al. 2006; Silard and Wright 2020; Zhou 2018). That is why it is important to define what loneliness is. Long and Averil (2003) define loneliness as a state of relative "detachment", generally characterized by a decrease in social expectations. According to Hollenhorst and Jones (2001), loneliness is a psychological detachment from society, with the aim of cultivating our interior. Loneliness can also be seen as the general lack of a satisfactory personal, social, or community relationship. It is a lasting condition of emotional suffering that arises when a person feels distant,

misunderstood, or rejected by others or lacks adequate social partners for activities that provide social integration (Anderson 1998). Furthermore, it is also important to note that social isolation and loneliness affect well-being (Rubin 2019) and that workplace loneliness inhibits creativity (Peng et al. 2017).

It is also important to distinguish loneliness from solitude, as both concepts tend to be confused when, in fact, they are different. According to McPherson et al. (2006), loneliness is an emotional state in which the individual experiences a feeling of emptiness, of having been rejected, disconnected, or alienated from other people. At the same time, Carter (2000) argues that solitude is the state of being alone and separated from other people, and often, it is related to a conscious and desired choice to be alone—that is, solitude is something we cultivate. In this way, loneliness (seen as solitude) also has positive aspects, as there are studies that show that people who experience periods of loneliness can gain a new understanding of themselves and their priorities (Long 2000). Loneliness can also offer an opportunity to engage in activities selected by us and free from social expectations (Burger 1995; Larson 1990). It is also important to mention a study about the loneliness of migrant workers in China, which shows that lonely workers are the most satisfied with their work (Chan and Qiu 2011).

Loneliness has also been linked to the concept of mindfulness, which is relatively recent in organization theory (Weick and Sutcliffe 2006) and which defines the state of awareness of what is happening around us (Brown and Ryan 2003). Mindfulness can decrease when individuals behave compulsively or automatically, without real awareness of the behavior of others (Brown and Ryan 2003; Deci and Ryan 1980). It is possible that loneliness potentiates mindfulness, because when the levels of stimulation drop significantly below the ideal—as occurs in a state of loneliness—the person can begin to generate (or better perceive) certain internal stimuli, such as sensations, thoughts, and emotions; that is, in a state of loneliness, the mind may be more "conscious" (Suedfeld 1982). In this segment and because this study is based on leadership and loneliness—the concept of mindful leadership can be mentioned, which is described by Dickmann and Stanford-Blair (2009) as a complex process that can have several interpretations. The authors argue that leadership is associated with the nature and development of intelligence (namely emotional intelligence), which is related to conscious mental development. In this way, mindful leaders achieve greater effectiveness in leading and guiding their followers in reaching organizational goals, with a higher level of awareness and intelligence and sustainably. In this sense, we can say that holistic leadership will be essential in the future (Dickmann et al. 2008).

Linking leadership with loneliness, Gumpert and Boyd (1984) report that 52% of CEOs often feel alone. Although not all studies suggest that leaders are necessarily lonelier than their employees, many clearly indicate that leaders are at the top of the pyramid when talking about loneliness (Bell 1985; Bell et al. 1990; Hojat 1982). However, we cannot assume that all leaders feel lonely, because loneliness depends on the work environment in general and not only on the position in the organizational hierarchy (Wright 2012). However, if it is true that a leader must respond to the needs of his or her employees, there is not always someone who responds to the needs of leaders, which can generate loneliness (Kets de Vries 1989). Another factor that contributes to leaders' loneliness is their greater access to resources and power. Consequently, employees can get closer to having access to those same resources. When a leader perceives this, he/she avoids his/her employees, which perpetuates his/her feeling of loneliness (Mao 2006). Lam and Lau (2012) also mention that in the workplace, due to technology and the growing existence of virtual teams, face-to-face communication is becoming more limited, which enhances loneliness. There are also studies that report that there is a tendency for people to try less when they work in groups than if they work alone (Linden et al. 2004), which can stimulate a leader to look for a more solitary job. At the same time, when loneliness is perceived by peers, the surrounding feelings can increase even more (Hareli and Rafaeli 2008). In addition, the quality of the employees' interpersonal relationships (namely between them and the leaders) has a significant impact on the way they perceive and feel in their organizations

(Carmeli 2009). In this sense, (Ryan and Deci 2000; Deci and Ryan 2014) argue that people have a need for interpersonal relationships and suffer when those needs are not met, even within organizations or cultures that are not very collective. However, it is curious to associate loneliness with leadership when this concept is closely linked with others, such as a group or a team (Kaiser et al. 2008; Van Vugt et al. 2008). There are studies that show that leader workplace loneliness is positively related to team turnover intentions via the effects of team cognitive trust, rather than affective trust in leaders (Chen et al. 2021).

It is also important to note that loneliness in leadership may be associated with other variables, such as gender, age, academic qualifications, function/position, number of hours of work per week, and years of work/seniority, which are precisely the variables that we intend to analyze in this study (the sociodemographic variables). Regarding gender, in general, its influence on loneliness in the workplace among leaders has several results (Stoltzfus et al. 2011). However, there is a tendency to consider that loneliness is influenced by gender, being typically considered a female problem and even more undesirable for men in many cultures (Lau and Gruen 1992). Several studies indicate that women are more likely than men to admit that they are lonely (Borys and Perlman 1985; Kleinke et al. 1982; Liu et al. 2019). This situation has been attributed mainly to social expectations and to psychosocial variables (i.e., self-efficacy, body image, and self-esteem) (Allgood-Merten et al. 1990). In some studies, it was found that women reported higher rates of depression (Weissman and Klerman 1977), but other studies also indicate that depression and loneliness rates have increased among men, especially among those in leadership positions (Rokach 2014). Several studies use measures of loneliness in which the participants call themselves lonely (that is, they state: "I am a lonely person") and, in these cases, women usually report being lonelier than men. However, when the questions do not involve the word lonely, or the need for the person to have to label him/herself, there is little or no difference between genders (Borys and Perlman 1985; Radloff 1991). Finally, linking this topic to leadership, we can mention that there are studies showing that a leadership role is associated with greater loneliness for women, but not for men. In this case, Ong (2022) states that the greater loneliness for women is mediated by authenticity, since women experience less authenticity when they occupy leadership roles, but men do not. Ibarra et al. (2013) suggest that female leaders experience more loneliness in leadership positions due to subtle gender bias. Although many women work to eliminate gender from the equation and desire to be recognized only for their skills and talents as a leader, gender bias still exists. Robinson (2016) argues that many women with leading roles feel the need to function as "superwomen" to protect their image of being as competent as their male colleagues, which can promote loneliness (Rokach 2018). Another study conducted by Robinson and Shakeshaft (2015) suggests that female leaders have a greater sense of executive loneliness, related to a loss of friends and close work relationships.

Regarding function/position, Bell et al. (1990) found a small but negative correlation between the organizational level and loneliness, indicating that loneliness is more associated with those at the bottom of the hierarchy. This correlation is surprising, given that leaders with higher positions tend to work longer hours and spend less time with their families. As an explanation, the researchers argued that the social skills that drive these individuals up the hierarchical chain may also be responsible for their lower levels of loneliness. Page and Cole (1991) also suggest that functions with higher levels of management tend to experience less loneliness than those that imply lower levels. This conclusion goes against previous studies, already mentioned here, that report that top executives are more prone to being lonely due to the pressures of the role: increased social distance, lack of social support, and exhaustion related to the role (Zumaeta 2019). Another study, developed by Silard and Wright (2022), which involved 28 managers and 235 employees, concluded that although the results related to loneliness, in terms of the score obtained, do not vary much according to the hierarchical level, the loneliness predictors differ between both analyzed subjects (managers and employees), with emotional connection and mutuality predicting loneliness in employees but not in managers.

In the case of academic qualifications, Page and Cole's research argues that economic status influences loneliness, as lower income and lower academic qualifications are influential factors in reporting loneliness. Professionals who typically have a higher income and more advanced educational levels are, according to Page and Cole, less likely to be lonely due to their economic and social well-being, which leads to great power. In fact, low power can increase loneliness and high power can decrease loneliness (Waytz et al. 2015). Moreover, we can say that the association between power and solitude is no longer new, since it is a relationship already explored by other authors, such as Foucault (Magalhães et al. 2015).

Concerning the number of hours of work per week, according to Bell et al. (1990), there is a strong positive relationship between hours worked and loneliness, but only for those who felt that their work group was not cohesive. The authors argue that if the work environment is hostile, working long hours can contribute more to loneliness. Therefore, the number of hours worked is irrelevant to loneliness if the work environment is cohesive and the person feels satisfaction at work (Bell et al. 1990). However, linking this with leadership, the long working hours that are typical of senior-level positions impose time constraints on leaders in social interactions (Kark and Eagly 2009). As a result, leaders' attention must be split among many employees, limiting the time they can spend with each one of them, and thus the extent to which the leader can feel close to most of them (Magee and Smith 2013). In this way, the high number of working hours of a leader can lead to a greater feeling of loneliness.

Regarding the age factor, some studies have already tried to analyze the relationship between this variable and loneliness in leadership or in the decision-making process (Wright 2012). There is some evidence to suggest that younger leaders find it more difficult to adjust to the leadership role and can often experience so-called "command isolation". This may be due to the social impact of making difficult decisions (Longnecker et al. 2006), which implies some maturity and experience.

Finally, regarding the years of work/seniority, the literature indicates that the behaviors necessary to reach seniority in an organization usually include having a high level of social confidence, emotional maturity, self-awareness, and social aptitude (Goleman 2004; Yukl 1988). At the same time, the literature on loneliness suggests that people who are most prone to loneliness are those who report shyness, low social competence, emotional instability, and low self-esteem (Ernst and Cacioppo 1998). In this way, effective leaders are usually well interconnected in their social relationships and those relationships are precisely what make them powerful and respected (Lee and Tiedens 2001). Thus, if we relate behavior to seniority and leadership, as more sociable people tend to stay longer in companies and to be more effective leaders, we can conclude that seniority in leadership tends to reduce the feeling of loneliness. For these reasons, these studies suggest that if an effective leader feels lonely, the reasons for this lie in personal, social, and contextual factors, rather than in seniority itself (Lee and Tiedens 2001).

In all, the relationship between the sociodemographic variables studied here (such as gender, age, academic qualifications, function/position, number of hours of work per week, and years of work/seniority) and the feeling of leadership has already been the subject of analysis by several authors (Allgood-Merten et al. 1990; Bell et al. 1990; Borys and Perlman 1985; Goleman 2004; Ibarra et al. 2013; Kark and Eagly 2009; Kleinke et al. 1982; Lau and Gruen 1992; Lee and Tiedens 2001; Liu et al. 2019; Longnecker et al. 2006; Magee and Smith 2013; Ong 2022; Page and Cole 1991; Radloff 1991; Rokach 2014, 2018; Robinson 2016; Robinson and Shakeshaft 2015; Stoltzfus et al. 2011; Yukl 1988; Waytz et al. 2015; Weissman and Klerman 1977; Wright 2012; Zumaeta 2019).

**Hypothesis 1 (H1).** Sociodemographic variables influence the feeling of loneliness in leadership.

Another finding is that lonely workers reduce their levels of in-role performance (Lam and Lau 2012). We also know that the social context of work can greatly influence

people's behavior (Grant 2007). In addition, loneliness not only influences how people feel in organizations, but also their level of performance in the workplace; that is, the lack of security that this feeling can generate easily leads to lower performance (Ayazlar and Güzel 2014; Barsade and Gibson 2007; Ozcelik and Barsade 2011; Stoica and Brate 2013). There are also studies that demonstrate that loneliness can generate stress (Bakker et al. 2004; Maslach et al. 2001). Jung et al. (2021) argue that workplace loneliness decreases employees' engagement with their jobs and the relationship between engagement and motivation is a reality, as less engagement leads to less motivation (Rosli and Hassim 2017). Studies also show that leaders' loneliness has a significant negative impact on social self-efficacy and voice-taking behavior (Zhang et al. 2019), and that loneliness at work inhibits motivation (Barsade and Ozcelik 2018).

#### **Hypothesis 2 (H2).** The feeling of loneliness affects the motivation for work.

In addition, several studies have shown that loneliness affects leadership. For example, loneliness affects performance and ends up generating occupational stress, which is important because there is a strong relationship between stress and organizational performance (Taris 2006; Vîrgă et al. 2019). It should also be noted that there are studies that associate loneliness with increased turnover (Erdil and Ertosun 2011). Thus, there are authors who focus on what steps can be taken to minimize loneliness in leadership, namely in terms of the negative impact it can have (Avolio and Gardner 2005; Boyd and Taylor 1998; Diddams and Chang 2012; Dussault and Barnett 1996; Goleman 1998; Mao 2006; Lincoln and Miller 1979), with one of the most suggested strategies being peer support from other leaders. However, although a leader must act with his or her peers and collaborators with a participative and open spirit, in practice, this is not always the case, because of the abyss between the high echelon and the other people of the hierarchical pyramid. Often, sharing problems with colleagues can lead to conflicts. As a result, even though leaders are constantly surrounded by people, they do not always feel comfortable sharing their decisions and concerns, and they become lonelier, which affects their leadership (Akande 1992). In this way, loneliness has a great influence on leadership (Rokach 2014).

#### **Hypothesis 3 (H3).** *The feeling of loneliness affects leadership.*

Despite emphasizing the relational nature of leadership, Hollander (1964, 1978) also emphasizes the role of the leader's internal processes, in terms of his/her self-awareness. According to Avolio et al. (2004) self-awareness is seen, in part, as being linked to selfreflection and introspection, which makes authentic leaders gain clarity and agreement in relation to their interests, values, emotions, and goals. Through self-awareness, the leader has better access to the information necessary to make fundamental choices and commitments and to align his/her actions with his/her values, vision, and goals (Bruch and Ghoshal 2004). This process of self-awareness is part of authentic leadership, because only through it can a leader find his/her place of reflection and renewal, where he/she listens to him/herself (Heifetz and Linsky 2002). Koestenbaum (2002) argues that loneliness can help to develop a leader's vision, as he/she gains greater control over him/herself and over the space and time that surround him/her. The author also adds that the courageous leader is one who is prepared for loneliness. Beyond this, leader self-efficacy enhances the extent to which problem-solving pondering occurs when leaders feel lonely (Gabriel et al. 2020). Moreover, several studies indicate that there are many influences that lead to loneliness at work. These influences may be due to factors related to the individual or contextual factors. For example, the loneliness experienced in organizations can be related to responsibility and isolation in the decision-making process (Wright 2012). Additionally, studies demonstrate that high levels of loneliness in leadership predict less perceived self-control, which leads to a tendency to avoid risks-that is, loneliness tends to make leaders more conservative and less open to risk in the decision-making process. However, this effect is only significant in gain scenarios rather than loss scenarios (Wang and Zhu 2017).

#### **Hypothesis 4 (H4).** *The feeling of loneliness affects the decision-making process.*

Thus, the intensity and frequency of loneliness experienced by leaders at work can vary and depend, to a large extent, on the qualitative aspects of the person and their work environment, instead of being determined by an objective variable (Wright 2012), which does not always find concordance in the literature. Both loneliness and organizations are complex phenomena, especially when it comes to the topic of leadership. Therefore, the association of these themes makes it necessary to carry out further studies on this matter.

However, if topics such as leadership and loneliness and their association among themselves are of great importance, it is pertinent to analyze them in specific contexts, as in this study, which focuses on the Portuguese banking sector. Banking leadership has also been the subject of studies, but without a focus on loneliness. Indeed, leadership is an essential foundation for banking organizations to operate today. In a study conducted at the banking institution Crédito Agrícola (Portugal), Matos and Machado (2014) concluded that leaders prefer to make decisions with the participation of other team members and not alone, a result that is particularly important in a study that aims to analyze loneliness in leadership with a focus on the banking sector.

It is also important to mention that the progress made by the Portuguese banking sector, in the period that followed the sovereign debt crisis, was significant. At the end of 2019, according to Associação Portuguesa de Bancos (2020), the sector showed considerable improvement in terms of efficiency, liquidity, asset quality, profitability, and solvency. The progress made is particularly relevant as, on top of the significant challenges already affecting the performance of banking activity, such as the environment of low interest rates, a new business model framework, growing competition by new operators, and the weight of legislation/regulations, the COVID-19 pandemic crisis generated an unprecedented economic shock and high levels of uncertainty. The coordinated implementation of monetary, fiscal, and regulatory policy measures was crucial in providing support to the economy and mitigating the impacts on economic agents.

The COVID-19 crisis brings new challenges and opportunities for the banking industry. Carletti et al. (2020) suggest that COVID-19 will accelerate some existing trends in the banking sector, will temporarily reverse others, and will influence the private and public players in the sector. Most importantly, it will accelerate the digitalization and restructuring of the sector. The potential effects of the COVID-19 pandemic and the measures needed to control it pose critical challenges for the banking sector in Portugal, which already faced significant pressure before the pandemic. Among these, the following challenges stand out: the deep economic recession, the maintenance of a low interest rate environment, the high level of uncertainty regarding the recovery, the high indebtedness level of the non-financial sector, and the potential increase in defaults.

For all these reasons, studying leadership in the banking sector is of great relevance, particularly involving the factors that affect it, such as the feeling of loneliness.

#### 3. Research Methodology

# 3.1. Procedures

For this study, a quantitative research tool was used in the form of a questionnaire, which was applied to a group of collaborators, with leadership responsibilities, of the financial institutions authorized to operate in Portugal. Quantitative research is an approach for testing objective theories by examining the relationships among variables (Creswell 2014), and it is often applied to descriptive research that seeks to discover and classify relations between variables in addition to ascertaining the causal link that might exist between phenomena (Richardson et al. 1999).

Questionnaires have frequently been used for assessing and monitoring economic and social phenomena, as well as to compare several elements of a whole or dimensions within an element. The questionnaire was built from the analyzed literature and a focus-group, which determined the main topics to be addressed. Subsequently, the questionnaire was tested with professionals in leadership positions from other institutions. After collecting the suggestions that were given, it was possible to arrive at the data collection instrument used in the study. The research comprised a total of 20 questions which, apart from one, were closed-ended with options, and questions where the evaluation of statements was required. The survey by questionnaire involved managers as staff who coordinate the activities of other staff and whose function is to conduct business in the sense that the organizational objectives are achieved. For this purpose, the levels of management from the vertical perspective were considered: top, middle, and first-line managers. The questionnaire directed to those financial institution heads was a tool whose intent was to allow the researchers to access, evaluate, and monitor their opinions on various aspects associated with their perception of loneliness in leadership. The survey by questionnaire was implemented via an online platform, with a direct link sent by email straight to the potential respondents. This allowed the survey to be filled out promptly and be more convenient for the sample subjects, providing a greater guarantee of confidentiality, while respondents could feel free to express their views. Those filling out the questionnaires were guaranteed anonymity, the answers being treated on an aggregate basis, to preserve the identity of those who agreed to participate.

Concerning the research procedures, Table 1 presents a summary of the variables considered in this study. It includes both sociodemographic variables and variables related to the feeling of loneliness. Employees answered the questions related to the feeling of loneliness on a 5-point Likert scale from 1—" strongly disagree" to 5—"strongly agree" (Likert 1932). It is important to highlight that the interest variable for our study is "Have you ever felt loneliness when making decisions?". To answer H1, this variable was dichotomized considering: 1—"agree" (includes 4—agree and 5—strongly agree) and 0—"do not agree" (includes 1—strongly disagree, 2—disagree, and 3—no opinion).

	Variables	Categories	
	Age	$\leq$ 35 years; 36–45 years; 46–55 years; 56–65 years	
Sociodemographic variables	Gender	Male; Female	
	Academic qualifications	12th year or equivalent; Degree or equivalent; Graduate or equivalent; Master; PhD	
<u> </u>	Position	Administration; Intermediate Management; Line Management	
	Working hours (per week)	≤40 h; 45 h; >45 h	
	Years of work	${\leq}10$ years; 11–15 years; 16–20 years; >20 years	
	Have you ever felt or feel loneliness when making decisions?		
Variables related to the faciling	Do you consider that a leader's loneliness is important and necessary?	- 1—Strongly disagree 2—Disagree	
Variables related to the feeling of loneliness	Do you admit that loneliness is a demotivating factor?	- 3—No opinion 4—Agree - 5—Strongly agree	
	Do you believe that loneliness in leadership affects only organizations whose decisions are very centralized?	- 5-5trongly agree	
	Source: Own calculations based on own survey data.		

Table 1. Summary of the study variables.

### 3.2. Participants

According to Banco de Portugal (2021), the Portuguese Central Bank, institutions authorized to operate in the country are divided into 45 types, not including itself. Based on this information, the units of analysis targeted in our questionnaire were all bank headquarters and branches located in Portugal (domestic activity), including Banco de Portugal. Following Associação Portuguesa de Bancos (2020), on 31 December 2019, this association included 29 financial institutions that jointly accounted for 94.6% of the total value of the Portuguese consolidated banking assets. From these 29 financial institutions, only 25 provided information to the 2019 Annual Activity Report. At the end of 2019, the domestic activity total workforce of the financial institutions' members was broken down as follows in Table 2.

Table 2. APB HR by size and by leadership position.

By Size					By Le	adership Po	osition		
Total	Men	%	Women	%	Total	Men	%	Women	%
28,301	14,203	50.2	14,098	49.8	7974	4904	61.5	3070	38.5

Source: Data obtained from the APB 2019 Activity Report (Associação Portuguesa de Bancos 2020).

In the same line, in what concerns Banco de Portugal (2020, p. 88), "As of 31 December 2019, the number of staff members employed by Banco de Portugal stood at 1778, of whom 1700 were active [...] approximately 20% of the Bank's staff members were managerial staff." (Table 3).

Table 3. Banco de Portugal HR by size and by leadership position.

By Size				By Leadership Position					
Total	Men	%	Women	%	Total	Men	%	Women	%
1778	892	50.2	886	49.8	477	300	62.9	177	37.10

Source: Data obtained from the BP 2019 Annual Report—Activities and Financial Statements (Banco de Portugal 2020).

It is worth mentioning that BP presented the breakdown by quota of the three categories of leaders, which is not possible to extract from APB. From APB's human resource statistics, it is not possible to isolate the four entities that did not provide information for the Activity Report—2019, so the total number of individuals with leadership functions was considered. This situation causes an excess estimate in the statistical data presented in Table 4, which will be used to calculate the sample.

Table 4. HR by leadership position.

8451	5204	3247

Source: Data obtained from Associação Portuguesa de Bancos (2020) and Banco de Portugal (2020).

The size of the sample was calculated bearing in mind the universe in question (8451 < 100,000), which is finite in nature, in which the confidence level established was 95% and the allowed estimation error was 5%. Hence, the following formula was used (Israel 1992):

$$n = \frac{Nz^2 p(1-p)}{(N-1)e^2 + z^2 p(1-p)}$$

where:

n = sample size;

N = size of the universe;

*z* = confidence level chosen in terms of deviation:  $95\% \rightarrow z = 1.96$ ;

p = proportion of characteristics researched in the universe. We assume p = 20%, as the proportion of active managerial staff of the bank's staff members (Banco de Portugal 2020, p. 88);

q = proportion of the universe not having the characteristic researched (100% – p); and e = allowed estimation error.

The formula gave the necessary sample size of 239 elements for the universe of 8451 individuals, considering an estimation error of 5%. The information we collected was only from 165 (69%) despite some insistence, which means that we have an estimation error of approximately 6% (6.04%).

The sampling techniques used in this study were of a non-probabilistic nature (quota sampling and purposive sampling). From the above result, 165 professionals from the Portuguese banking sector voluntarily participated in the study (aged  $46.56 \pm 9.86$ ; 44.8% women and 55.2% men), belonging to 11 different banking institutions.

## 3.3. Statistical Analyses

Statistical analyses were performed using Statistical Package for Social Sciences (SPSS), V27.0<sup>®</sup>, for Windows (IBM Corp 2020), and statistical significance was set at  $p \le 0.05$ . A descriptive statistical analysis (absolute and relative frequencies) was considered to describe the study variables.

The relationships between the feeling of loneliness (dichotomized) and the classification variables were checked using the Chi-square test. Cramer's V was also obtained to measure the association between the variables. Its interpretation was made based on the following criteria (Rea and Parker 1992): <0.1, negligible association; 0.1–0.2, weak association; 0.2–0.4, moderate association; 0.4–0.6, relatively strong association; 0.6–0.8, strong association; 0.8–1.0, very strong association.

Then, a binomial logistic regression model was considered to assess which classification variables have a significant influence on the agreement of the feeling of loneliness (dichotomized). Only the classification variables whose univariate test was significant (p < 0.05) or showed a tendency for the existence of a significant relationship (p < 0.10) were selected for the model. The forward stepwise (likelihood ratio) selection method was considered, and the results were reported by odds ratio (OR) estimates and their 95% confidence intervals (CI). To evaluate the quality of the adjustment, Nagelkerke's R2 was used. The model's goodness of fit was assessed through the Hosmer–Lemeshow test and the area under the ROC curve (AUC) was used to evaluate the discriminative capacity of the model. Collinearity and multicollinearity situations were not detected, and the assumption of no extreme values was also verified.

The correlation between motivation for work, leadership, and decision making with feelings of loneliness was assessed by considering Spearman's correlation coefficient, and its interpretation was based on the following criteria (Davis 1971): <0.09, negligible association; 0.10–0.29, low association; 0.30–0.49, moderate association; 0.50–0.69, substantial association;  $\geq$ 0.70, very strong association.

## 4. Results

#### 4.1. Relationship between the Sociodemographic Variables and the Feeling of Loneliness

The analysis of the results presented in Table 5 reveals a significant relationship between the feeling of loneliness and the years of work (p = 0.004), with a moderate association (V = 0.283). After 16 years of work, most agree with the feeling of loneliness when making decisions (16–20 years, 84.2% and <20 years 66.7%). We also conclude that there exists a tendency for the existence of a significant relationship between the feeling of loneliness and position (p = 0.066 < 0.1, weak association) and academic qualifications (p = 0.068 < 0.1, moderate association). From the total sample, it is important to highlight that in what concerns academic qualifications, only 5.5% have the secondary level (12th year or equivalent), and only 2.4% have a position in administration.

The remaining sociodemographic variables (gender, age, and hours of work per week) have no significant relationship with the feeling of loneliness (p > 0.05).

**Table 5.** Relationship between the sociodemographic variables and the feeling of loneliness (agree and do not agree).

		Have You Ever Felt or Feel Loneliness When Making Decisions?				
	-	Total	Do Not Agree	Agree	<i>p</i> -Value <sup>#1</sup>	Cramer's V
	Male	74 (44.8%)	30 (40.5%)	44 (59.5%)	1 000	0.010
Gender -	Female	91 (55.2%)	36 (39.6%)	55 (60.4%)	- 1.000	0.010
	$\leq$ 35 years	25 (15.2%)	14 (56.0%)	11 (44.0%)		
<b>A</b>	36–45 years	50 (30.3%)	23 (46.0%)	27 (54.0%)	-	0.187
Age	46–55 years	55 (33.3%)	17 (30.9%)	38 (69.1%)	- 0.124	
	56–65 years	35 (21.2%)	12 (34.3%)	23 (65.7%)	_	
	12th year or equivalent	9 (5.5%)	5 (55.6%)	4 (44.4%)		0.208
Academic	Degree or equivalent	59 (35.8%)	28 (47.5%)	31 (52.5%)	-	
qualifications	Graduate or equivalent	40 (24.2%)	18 (45.0%)	22 (55.0%)	- 0.068 **	
	Master and PhD	57 (34.5%)	15 (26.3%)	42 (73.7%)	_	
	Administration	4 (2.4%)	0 (0.0%)	4 (100.0%)		
Position	Intermediate Management	48 (29.1%)	15 (31.3%)	33 (68.8%)	- 0.066 **	0.182
	Line Management	113 (68.5%)	51 (45.1%)	62 (54.9%)	_	
	$\leq$ 40 h	26 (15.8%)	12 (46.2%)	14 (53.8%)		
Working hours (per week)	45 h	62 (37.6%)	26 (41.9%)	36 (58.1%)	0.650	0.075
(per week)	>5 h	77 (46.7%)	28 (36.4%)	49 (63.6%)	_	
	$\leq 10$ years	32 (19.4%)	18 (56.3%)	14 (43.8%)		
	11–15 years	30 (18.2%)	17 (56.7%)	13 (43.3%)	-	0.000
Years of work	16–20 years	19 (11.5%)	3 (15.8%)	16 (84.2%)	- 0.004 *	0.283
	>20 years	84 (50.9%)	28 (33.3%)	56 (66.7%)	_	

<sup>#1</sup> Chi-square test; \* p < 0.05; \*\* p < 0.1. Source: Own calculations based on own survey data.

Table 6 reveals that only the independent variables of academic qualifications and years of work were included in the logistic regression model (p < 0.05). The overall model presents a well-fitting value (pHosmer-Lemeshow > 0.05), and its discriminant capacity is also suitable (AUC = 0.722).

Considering the obtained results, we may conclude that a professional who has a degree or equivalent is twice as likely to feel loneliness when making decisions compared to a professional who has a 12-year education or equivalent (OR = 2.083, IC95% = [0.489–8.862]). On the other hand, a professional who has a graduate degree or equivalent and a master's degree or PhD is 2.5 and 8.6 times more likely, respectively, to feel loneliness when compared to a professional who has a 12-year education or equivalent (OR = 2.493, IC95% = [0.550; 11.305] and OR = 8.633, IC95% = [1.766; 42.208]).

Regarding the years of work, a professional who has worked 11–15 years in the banking sector has a 14.4% lower likelihood of feeling loneliness when making decisions when compared to a professional who has worked  $\leq$ 10 years in this sector (OR = 0.856, IC95% = [0.295–2.483]). A professional who has worked 16–20 years or >20 years is 7.3 and 4.3 times more likely, respectively, to feel loneliness compared to a professional who

has worked  $\leq 10$  years in the banking sector (OR = 7.266, IC95% = [1.665; 31.704] and OR = 4.273, IC95% = [1.669; 10.937]).

**Table 6.** Estimated regression coefficients from binary logistic regression analysis, only for significant variables (agree and do not agree).

		" Value (Wald)	OB	IC95% OR	
	Coefficients	<i>p</i> -Value (Wald)	OR	Lower	Upper
Academic qualifications (a)		0.008			
Degree or equivalent	0.734	0.321	2.083	0.489	8.862
Graduate or equivalent	0.913	0.236	2.493	0.550	11.305
Master and PhD	2.156	0.008	8.633	1.766	42.208
Years of work <sup>(b)</sup>		0.001			
11–15 years	-0.156	0.774	0.856	0.295	2.483
16–20 years	1.983	0.008	7.266	1.665	31.704
>20 years	1.452	0.002	4.273	1.669	10.937
Constant	-1.675	0.042	0.187		
<b>D</b> <sup>2</sup> 0.20 <b>7</b>				TO (11 0)	

 $R^{2}_{Nagelkerke} = 0.205; p_{Hosmer and Lemeshow} = 0.504; AUC = 0.722 (IC_{95\%} = [0.644, 0.800])$ 

OR, odds ratio; <sup>(a)</sup> reference category = 12th year or equivalent; <sup>(b)</sup> reference category =  $\leq 10$  years; AUC, area under the ROC curve. Source: Own calculations based on own survey data.

# 4.2. Relationship between the Feeling of Loneliness and Motivation to Work, Leadership, and Decision-Making Processes

From these results, we can observe that 60% of the respondents (agree and strongly agree) have felt or feel loneliness when making decisions, and agree and strongly agree that loneliness is a demotivating factor. Although these feelings are important, almost 62% (disagree and strongly disagree) have the opinion that a leader's loneliness is not important or necessary.

Asked about whether loneliness in leadership affects only organizations whose decisions are very centralized, 47% do not share this opinion, while 26% have no opinion on this issue. Table 7 presents the sample characterizations regarding loneliness in leadership.

Variables	1—Strongly Disagree	2—Disagree	3—No Opinion	4—Agree	5—Strongly Agree
Have you ever felt or feel loneliness when making decisions?	3 (1.8%)	51 (30.9%)	12 (7.3%)	69 (41.8%)	30 (18.2%)
Do you consider that a leader's loneliness is important and necessary?	25 (15.2%)	77 (46.7%)	23 (13.9%)	38 (23.0%)	2 (1.2%)
Do you admit that loneliness is a demotivating factor?	11 (6.7%)	41 (24%)	14 (8.5%)	81 (49.1%)	18 (10.9%)
Do you believe that loneliness in leadership affects only organizations whose decisions are very centralized?	8 (4.8%)	70 (42.4%)	43 (26.1%)	35 (21.2%)	9 (5.5%)

Table 7. Sample characterization regarding the loneliness in leadership.

Source: Own calculations based on own survey data.

The results of Table 8 reveal a significant correlation between the feeling of loneliness and the demotivation for work, being negative and low (p = 0.002, r = -0.243), which means that with the increase in the feeling of loneliness, the less it affects the motivation for work. The correlation between the feeling of loneliness and the importance of leadership is also significant, being positive and moderate (p < 0.001, r = 0.381). With the increase in the

feeling of loneliness, greater is the agreement on the importance of a leader's loneliness. On the other hand, the feeling of loneliness and the decision-making process are not significantly correlated (p = 0.761), which means that the feeling of loneliness does not affect the organizations in decision making.

**Table 8.** Relationship between motivation for work, leadership, and decision making with the feeling of loneliness.

		Do You Admit That Loneliness Is a Demotivating Factor?	Do You Consider That a Leader's Loneliness Is Important and Necessary?	Do You Believe That Loneliness Affects Only Organizations Whose Decisions Are Very Centralized?
Have you ever felt or feel loneliness when	Correlation Coefficient <sup>#2</sup>	-0.243	0.381	-0.024
making decisions?	<i>p</i> -value	0.002	<0.001	0.761

<sup>#2</sup> Spearman's correlation coefficient. Source: Own calculations based on own survey data.

# 5. Discussion

Regarding the first hypothesis—the sociodemographic variables influence the feeling of loneliness in leadership—we can conclude that there are some variables that affect the feeling of loneliness in leadership more than others. For example, the analysis of the results revealed a significant relationship between the feeling of loneliness and the years of work. There also seems to be a relationship between years of work and loneliness in the decision-making process, but not in a general way, and the range that is associated with less loneliness is that between 11 and 15 years of work. However, the literature has not determined a direct relationship between loneliness and the number of years of work, indicating that other variables may be the source of the feeling of loneliness, since people with more years of service are usually more sociable, which goes against the profile of people who tend to feel lonelier. In fact, the literature reveals that years of work, by themselves, are not sufficient to determine the feeling of loneliness (Ernst and Cacioppo 1998; Goleman 2004; Lee and Tiedens 2001; Yukl 1988). However, if we relate behavior to seniority and leadership, as more sociable people tend to stay longer in companies and tend to be more effective leaders, we could conclude that seniority in leadership tends to reduce the feeling of loneliness. However, the literature suggests that if an effective leader feels lonely, the reasons for this are rooted in personal, social, and contextual factors, and not so much in seniority itself (Lee and Tiedens 2001).

In the case of the position, we conclude that there exists a tendency for the existence of a significant relationship between the feeling of loneliness and this variable. Bell et al. (1990) argue that loneliness is more commonly associated with those at the bottom of the hierarchy. However, our conclusion fits with the studies of other authors who defend that people with leadership positions tend to feel lonelier than people with lower positions (Bell 1985; Bell et al. 1990; Hojat 1982). It also fits with the study of Zumaeta (2019), who argues that top executives are more prone to being lonely due to the pressures of the role, increased social distance, lack of social support, and exhaustion related to the role. Silard and Wright (2022) stated that the loneliness predictors differ between managers and employees, with emotional connection and mutuality predicting loneliness in employees but not in managers.

Regarding academic qualifications, we conclude that a professional who has a higher degree has more chances of feeling loneliness when making decisions when compared with a professional who has a lower degree. However, Page and Cole's (1991) research suggests that lower academic qualifications are an influential factor in reporting loneliness, because economic status influences loneliness, and lower income and lower academic qualifications are influential factors in reporting loneliness. Professionals who typically have a higher

income and more advanced educational levels are, according to Page and Cole, less likely to be lonely due to their economic and social well-being, which leads to great power. In fact, according to the literature and assuming the relationship between higher academic qualifications and greater power, low power can increase loneliness and high power can decrease loneliness (Waytz et al. 2015). In this sense, higher academic qualifications can lead to a lesser feeling of loneliness.

For the remaining sociodemographic variables (gender, age, and hours of work per week), we found no significant relationship with the feeling of loneliness, which contradicts the literature that anticipates this relationship, namely with regard to gender, suggesting that women in leadership positions tend to feel more loneliness (Ibarra et al. 2013; Ong 2022; Robinson and Shakeshaft 2015; Rokach 2018), age, since, there is some evidence to suggest that younger leaders find it more difficult to adjust to the leadership role and can often experience the so-called "command isolation" (Longnecker et al. 2006), as well as hours of work. In this specific case, the literature suggests that the long working hours that are typical of senior-level positions impose time constraints on leaders in social interactions (Kark and Eagly 2009). In this way, the high number of working hours of a leader can lead to a greater feeling of loneliness.

From the second hypothesis—the feeling of loneliness affects the motivation for work we conclude that the feeling of loneliness promotes the demotivation for work, which agrees with the studies that indicate that loneliness at work inhibits motivation (Barsade and Ozcelik 2018). Additionally, Jung et al. (2021) argue that workplace loneliness decreases employees' engagement with their jobs and the relationship between engagement and motivation is a reality, as less engagement leads to less motivation (Rosli and Hassim 2017).

Concerning the third hypothesis—the feeling of loneliness affects leadership—we conclude that the correlation between the feeling of loneliness and the importance of leadership is significant. This is in line with studies that indicate that loneliness has a significant influence on leadership (Rokach 2014). Furthermore, although leaders are always surrounded by people, they do not always feel confident in sharing their decisions and concerns and thus become lonelier, which affects their leadership (Akande 1992).

Regarding the fourth hypothesis—the feeling of loneliness affects decision making according to the results of this study, there is no relationship between these two variables, which does not agree with Wright's (2012) ideas nor Wang and Zhu's (2017) studies, which demonstrate that high levels of loneliness in leadership predict less perceived self-control, which leads to a tendency to avoid risks; that is, loneliness tends to make leaders more conservative and less open to risk in the decision-making process.

In short, we believe that the differences found between the literature and the conclusions of our study are due to the specificity of the studied sector, which constitutes an interesting contribution to this field of research, allowing us to take into account the need to consider the activity sector which, due to its own characteristics, can cause its leaders to express different levels of loneliness in the development of their tasks and face different consequences arising from this loneliness.

#### 6. Conclusions and Future Research

We carried out this study to analyze the loneliness in leadership with application to the Portuguese banking sector. Regarding the research question—which variables most influence loneliness in leadership in the Portuguese banking sector?—we can conclude that while some variables influence the feeling of loneliness in leadership (years of work, position, and academic qualifications), others do not (gender, age, and hours of work per week). We also found a relationship between loneliness and demotivation. It was also proved that the feeling of loneliness affects leadership but does not affect decision making. In short, as theoretical contributions, with this study it was possible to analyze a theme that has not yet been sufficiently explored in the literature and apply it to a specific sector—the banking sector—where this type of study is not common, which makes it even more relevant in terms of the literature. On the other hand, the combination of several factors/variables applied to the feeling of loneliness of the leader in a single study also makes it innovative in the context of the literature.

Regarding practical contributions, this study has far-reaching implications, as it identifies the variables that most influence the feeling of loneliness among leaders, including at the level of their decision-making process and their motivational levels, which will allow organizations to better manage this situation, insofar as they will be able to anticipate the variables that most promote loneliness among leaders and reduce its incidence at that level through measures that can reduce the feeling of loneliness and even the demotivation that it can cause in people who hold leadership positions.

For the banking sector, this study is of considerable relevance, as there is no knowledge of other studies that have been dedicated to this theme in this sector, particularly in the Portuguese context. Another practical contribution is to understand that it is necessary to analyze the relationship between loneliness and leadership by sector, as this study suggests that the results may be specific to the banking sector, as some of them contradict the literature regarding studies carried out in other sectors of the economy.

The limitations of the study and further research directions are as follows.

The first limitation that could be found is in the use of a sample for the study instead of applying it to the whole population of the Central Bank and bank leaders. The decision to use a sample was affected by the size of the universe and the impossibility of isolating the entities that did not provide information for the APB's Activity Report—2019, and because of the time available for carrying out the study and the number of leaders involved.

The second limitation is associated with the type of sample. Being non-probabilistic, it would not be possible to draw conclusions for the leader population of the Central Bank and banks as a whole, so the results will have to be considered only within the scope of the sample analyzed.

The third limitation is related to the non-fulfillment of quotas for all staff in leadership positions. As stated beneath Table 3, only BP presented the breakdown by quota of the three levels of management from the vertical perspective, so the different categories represented in the sample do not have any points of comparison.

For future studies, we propose to analyze the positive and negative aspects that the feeling of loneliness can imply in leadership and other variables that were not analyzed here, namely the organizational culture and the leadership style, which we believe also have an influence on this level. Applying this theme to other specific sectors can also be important, as well as in contexts more conducive to loneliness, such as the current pandemic context in which we live.

Author Contributions: Conceptualization, C.M.M., C.F.M. and C.P.N.; methodology, C.M.M., C.F.M. and C.P.N.; validation, C.M.M., C.F.M. and C.P.N.; formal analysis, C.M.M., C.F.M. and C.P.N.; investigation, C.M.M., C.F.M. and C.P.N.; writing—original draft preparation, C.M.M., C.F.M. and C.P.N.; writing—review and editing, C.M.M., C.F.M. and C.P.N. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical review and approval were waived for this study.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data cannot be made available, as it was obtained through the application of a questionnaire, which guaranteed anonymity to respondents. So, due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

Conflicts of Interest: The authors declare no conflict of interest.

#### References

Akande, Adebowale. 1992. Coping with entrepreneurial stress. Leadership and Organization Development Journal 13: 27–32. [CrossRef] Alfarajat, Hebah Suliman, and Okechukwu Lawrence Emeagwali. 2021. Antecedents of Service Innovative Behavior: The Role of Spiritual Leadership and Workplace Spirituality. Organizacija 54: 320–33. [CrossRef]

- Allgood-Merten, Betty, Peter Lewinsohn, and Hyman Hops. 1990. Sex differences in adolescent depression. *Journal of Abnormal Psychology* 99: 55–63. [CrossRef] [PubMed]
- Anand, Payal, and Sushanta Mishra. 2021. Linking core self-evaluation and emotional exhaustion with workplace loneliness: Does high LMX make the consequence worse? *The International Journal of Human Resource Management* 32: 2124–49. [CrossRef]
- Andel, Stephanie, Winny Shen, and Maryana Arvan. 2021. Depending on your own kindness: The moderating role of self-compassion on the within-person consequences of work loneliness during the COVID-19 pandemic. *Journal of Occupational Health Psychology* 26: 276–90. [CrossRef]
- Anderson, Lars. 1998. Loneliness research and interventions: A review of literature. Aging and Mental Health 2: 264–74. [CrossRef]
- Aryee, Samuel, Fred Walumbwa, Qin Zhou, and Chad Hartnell. 2012. Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Human Performance* 25: 1–25. [CrossRef]
- Associação Portuguesa de Bancos. 2020. Activity Report—2019. Available online: https://www.apb.pt/content/files/BIA\_2019\_EN. pdf (accessed on 25 August 2020).
- Avolio, Bruce, and William Gardner. 2005. Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly* 16: 315–38. [CrossRef]
- Avolio, Bruce, William Gardner, Fred Waluabwa, Fred Luthans, and Douglas May. 2004. Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly* 15: 801–23. [CrossRef]
- Ayazlar, Gokhan, and Berrin Güzel. 2014. The Effect of Loneliness in the Workplace on Organizational Commitment. Procedia–Social and Behavioral Sciences 131: 319–25. [CrossRef]
- Ayoko, Oluremi, and Eunice Chua. 2014. The importance of transformational leadership behaviors in team mental model similarity, team efficacy, and intra-team conflict. *Group and Organization Management* 39: 504–31. [CrossRef]
- Bakker, Arnold, Evangelia Demerouti, and Willem Verbeke. 2004. Using the job demands-resources model to predict burnout and performance. *Human Resource Management* 43: 83–104. [CrossRef]
- Banai, Moshe, and William Reisel. 2007. The influence of supportive leadership and job characteristics on work alienation: A six-country investigation. *Journal of World Business* 42: 463–76. [CrossRef]
- Banco de Portugal. 2020. Annual Report—Activities and Financial Statements 2019. Available online: https://www.bportugal.pt/ sites/default/files/anexos/pdf-boletim/relatorio\_atividade\_contas\_2019\_en.pdf (accessed on 25 August 2020).
- Banco de Portugal. 2021. Authorized Institutions. Available online: https://www.bportugal.pt/en/entidades-autorizadas (accessed on 12 December 2021).
- Barsade, Sigal, and Donald Gibson. 2007. Why does affect matter in organizations? *Academy of Management Perspectives* 21: 36–59. [CrossRef]
- Barsade, Sigal, and Hakan Ozcelik. 2018. The Painful Cycle of Employee Loneliness, and How It Hurts Companies. *Harvard Business Review*. Available online: https://hbr.org/2018/04/the-painful-cycle-of-employee-loneliness-and-how-it-hurts-companies? registration=success (accessed on 3 July 2022).
- Bass, Bernard. 1990. From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics* 18: 19–31. [CrossRef]
- Bass, Bernard, and Bruce Avolio. 2004. Multifactor Leadership Questionnaire. Manual and Sampler Set, 3rd ed. Redwood City: Mindgarden.
- Bell, Robert. 1985. Conversational involvement and loneliness. Communication Monographs 52: 218–35. [CrossRef]
- Bell, Robert, Michael Roloff, Karen Van Camp, and Susan Karol. 1990. Is it lonely at the top? Career success and personal relationships. Journal of Communication 40: 9–23. [CrossRef]
- Bennis, Warren, and Burt Nanus. 1985. Leaders: The Strategies for Taking Charge. New York: Harper and Row.
- Borys, Shelley, and Daniel Perlman. 1985. Gender differences in loneliness. *Personality and Social Psychology Bulletin* 11: 63–74. [CrossRef]
- Boyd, Nancy, and Robert Taylor. 1998. A developmental approach to the examination of friendship in leader-follower relationships. *Leadership Quarterly* 9: 1–25. [CrossRef]
- Brown, Kirk Warren, and Richard Ryan. 2003. The benefits of being present: Mindfulness and its role in psychological well-being. Journal of Personality and Social Psychology 84: 822–48. [CrossRef]
- Bruch, Heike, and Sumantra Ghoshal. 2004. A Bias for Action. San Francisco: Harvard Business School Press.
- Burger, Jerry. 1995. Individual differences in preference of Solitude. Journal of Research in Personality 29: 85–108. [CrossRef]
- Burke, Ronald, and Cary Cooper. 2006. The new world of work and organizations: Implications for human resource management. *Human Resource Management Review* 16: 83–85. [CrossRef]
- Carletti, ElenaStijn Claessens, Antonio Fatás, and Xavier Vives. 2020. *The Bank Business Model in the Post-COVID-19 World. The Future of Banking*. London: Centre for Economic Policy Research. Available online: https://voxeu.org/content/bank-business-model-post-covid-19-world (accessed on 8 July 2022).
- Carmeli, Abraham. 2009. High-quality relationships, individual aliveness and vitality and job performance at work. In *Research on Emotion in Organizations*. Edited by Neal Ashkanasy, Wilfred Zerbe and Charmine Hartel J. Oxford: Elsevier JAI Press, pp. 350–78.

Carter, Michele. 2000. Abiding Loneliness: An Existential Perspective. Illinois: Park Ridge Center.

- Chan, Sow Hup, and Hua Han Qiu. 2011. Loneliness, Job Satisfaction, and Organizational Commitment of Migrant Workers: Empirical Evidence from China. *International Journal of Hu-man Resource Management* 22: 1109–27. [CrossRef]
- Charbonnier-Voirin, Audrey, Akremi El Akremi, and Christian Vandenberghe. 2010. A multilevel model of transformational leadership and adaptive performance and the moderating role of cli-mate for innovation. *Group and Organization Management* 35: 699–726. [CrossRef]
- Charoensap-Kelly, Piyawan, Pavica Sheldon, Mary Grace Antony, and Laura Provenzani. 2021. Resilience, Well-Being, and Organizational Outcomes of Croatian, Thai, and US Workers during COVID-19. *Journal of Management and Organization* 27: 1083–111. [CrossRef]
- Chen, Xiao, Jian Peng, Xue Lei, and Yanchun Zou. 2021. Leave or stay with a lonely leader? An investigation into whether, why, and when leader workplace loneliness increases team turn-over intentions. *Asian Business and Management* 20: 280–303. [CrossRef]
- Çolak, Murat, and Cemile Çetin. 2021. Loneliness and cyberloafing in the time of COVID-19: A psychological perspective. International Journal of Contemporary Management 57: 15–27. [CrossRef]

Cooke, Fang Lee. 2013. Human Resource Management in China: New Trends and Practices. London: Routledge.

- Creswell, John. 2014. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research,* 4th ed. London: Pearson Education Limited.
- Davis, James. 1971. Elementary Survey Analysis. Englewood Cliffs: Prentice-Hall.
- Deci, Edward, and Richard Ryan. 1980. Self-determination theory: When mind mediates behavior. *The Journal of Mind and Behavior* 1: 33–43.
- Deci, Edward L., and Richard M. Ryan. 2014. Autonomy and need satisfaction in close relationships: Relationships motivation theory. *Human motivation and interpersonal relationships* 2014: 53–73.
- Dickmann, Michael, and Nancy Stanford-Blair. 2009. *Mindful Leadership: A Brain-Based Framework*, 2nd ed. Thousand Oaks: Corwin Press.
- Dickmann, Michael, Chris Brewster, and Paul Sparrow. 2008. *International Human Resource Management—n European Perspective*, 2nd ed. London: Routledge.
- Dickmann, Michael, Emma Parry, Ben Emmens, and Christine Williamson. 2010. Engaging Tomorrow's Global Humanitarian Leaders Today, Report for ELHRA (Enhancing Learning and Research for Humanitarian Assistance). Cranfield: People in Aid and Cranfield University.
- Diddams, Margaret, and Glenna Chang. 2012. Only human: Exploring the nature of weakness in authentic leadership. *The Leadership Quarterly* 23: 593–603. [CrossRef]
- Dussault, Marc, and Bruce Barnett. 1996. Peer-assisted leadership: Reducing educational man-ager's professional isolation. *Journal of Educational Administration* 34: 5–14. [CrossRef]
- Dussault, Marc, Eric Frenette, Alexis Salvador Loye, and Andrée-Ann Deschênes. 2017. Supervisor transformational leadership and employees' loneliness [Leadership transformationnel du superviseur et solitude professionnelle des employés]. *Psychologie du Travail et des Organisations* 23: 187–96. [CrossRef]
- Erdil, Oya, and Öznur Gülen Ertosun. 2011. The relationship between social climate and loneliness in the workplace and effects on employee well-being. *Procedia-Social and Behavioral Sciences* 24: 505–25. [CrossRef]
- Ernst, John, and John Cacioppo. 1998. Lonely hearts: Psychological perspectives on loneliness. *Applied and Preventative Psychology* 8: 1–22. [CrossRef]
- Firoz, Mantasha, Richa Chaudhary, and Aamna Khan. 2020. Desolated milieu: Exploring the trajectory of workplace loneliness (2006–2019). *Management Research Review* 44: 757–80. [CrossRef]
- Gabriel, Allison, Klodiana Lanaj, and Remy Jennings. 2020. Is One the Loneliest Number? A Within-Person Examination of the Adaptive and Maladaptive Consequences of Leader Loneliness at Work. *Journal of Applied Psychology* 106: 1517. [CrossRef]
- Ganta, Vinay Chaitanya, and Jaya Kumar Manukonda. 2014. Leadership during change and uncertainty in organizations. *International Journal of Organizational Behaviour & Management Perspectives* 3: 1183.
- Goleman, Daniel. 1998. Working with Emotional Intelligence. London: Bloomsbury.
- Goleman, Daniel. 2004. What makes a leader? Harvard Business Review 82: 82-91.
- Grant, Adam. 2007. Relational job design and the Motivation to Make a Prosocial Difference. *The Academy of Management Review* 32: 393–417. [CrossRef]
- Gumpert, David, and David Boyd. 1984. The loneliness of the small business owner. Harvard Business Review 62: 18–24.
- Hareli, Shlomo, and Anat Rafaeli. 2008. Emotion cycles: On the social influence of emotion in organizations. *Research in Organizational Behavior* 28: 35–59. [CrossRef]
- Heifetz, Ronald, and Marty Linsky. 2002. A survival guide for leaders. Harvard Business Review 80: 65–74. [PubMed]

Hogg, Michael. 2005. Social identity and leadership. In *The Psychology of Leadership: New Perspectives and Research*. Edited by David Messick and Roderick Kramer. Mahwah: Erlbaum, pp. 53–80.

- Hojat, Mohammadreza. 1982. Loneliness as a function of selected personality variables. *Journal of Clinical Psychology* 38: 137–41. [CrossRef]
- Hollander, Edwin Paul. 1964. Leaders, Groups, and Influence. Oxford: Oxford University Press.

Hollander, Edwin Paul. 1978. Leadership Dynamics: A Practical Guide to Effective Relationships. New York: Free Press.

- Hollenhorst, Steven, and Christopher Jones. 2001. Wilderness solitude: Beyond the social–spatial perspective. In *Visitor Use Density* and Wilderness Experience: Proceedings RMRS-P-20; Edited by Wayne Freimund and David Cole. Ogden: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, pp. 56–61.
- Holt-Lunstad, Julianne. 2021. A Pandemic of Social Isolation. World Psychiatry 20: 55–56. [CrossRef] [PubMed]
- Ibarra, Herminia, Robin Ely, and Deborah Kolb. 2013. Women rising: The unseen barriers. Harvard Business Review 91: 60-66.
- IBM Corp. 2020. IBM SPSS Statistics for Windows. Version 27.0. Armonk: IBM Corp.
- Israel, Glenn. 1992. *Determining Sample Size*. Gainesville: University of Florida, pp. 1–5.
- Jago, Arthur. 1982. Leadership: Perspectives in theory and research. Management Science 28: 315–36. [CrossRef]
- Jung, Hyo Sun, Min Kyung Song, and Hye Hyun Yoon. 2021. The effects of workplace loneliness on work engagement and organizational commitment: Moderating roles of leader-member ex-change and coworker exchange. *Sustainability* 13: 948. [CrossRef]
- Kaiser, Robert, Robert Hogan, and Bartholomew Craig. 2008. Leadership and the fate of organizations. *American Psychologist* 63: 96–110. [CrossRef]
- Kaltiainen, Janne, and Jari Hakanen. 2020. Fostering task and adaptive performance through employee well-being: The role of Servant Leadership. *BRQ Business Research Quarterly* 25: 1–16. [CrossRef]
- Kark, Ronit, and Alice Eagly. 2009. Gender and leadership: Negotiating the labyrinth. In *Handbook of Gender Research in Psychology*. Edited by Joan Chrisler and Donald McCreary. New York: Springer, vol. 2, pp. 443–70.
- Katz, Daniel, and Robert Kahn. 1978. The Social Psychology of Organizations. New York: John Wiley.
- Keith, Kent. 2008. The Case for Servant Leadership. The Greenleaf Center for Servant Leadership. Westfield: Greenleaf Center for Servant Leadership.
- Kets de Vries, Manfred. 1989. Leaders who self-destruct: The causes and cures. Organizational Dynamics 17: 5–17. [CrossRef]
- Kleinke, Chris, Richard Staneski, and Jeanne Mason. 1982. Sex differences in coping with de-pression. *Sex Roles* 8: 877–89. [CrossRef] Koestenbaum, Peter. 2002. *Leadership: The Inner Side of Greatness*. San Francisco: Jossey-Bass Publishers.
- Lam, Long, and Dora Lau. 2012. Feeling Lonely at Work: Investigating the Consequences of Unsatisfactory Workplace Relationships. International Journal of Human Resource Management 23: 4265–82. [CrossRef]
- Larson, Reed. 1990. The Solitary of life: An examination of people spend time from childhood to old age. *Development Review* 10: 155–83. [CrossRef]
- Lau, Sing, and Gerald Gruen. 1992. The social stigma of loneliness: Effect of target person's and perceiver's sex. *Personality and Social Psychology Bulletin* 18: 182–89. [CrossRef]
- Lee, Fiona, and Larissa Tiedens. 2001. Who's being served? Self-serving attributions in social hierarchies. *Organizational Behavior and Human Decision Processes* 84: 254–87. [CrossRef]
- Linden, Robert, Sandy Wayne, Renata Jaworski, and Nathan Bennett. 2004. Social loafing: A field investigation. *Journal of Management* 30: 285–304. [CrossRef]
- Likert, Rensis. 1932. A Technique for the Measurement of Attitudes. Archives of Psychology 22: 5–55.
- Lincoln, James, and Jon Miller. 1979. Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly* 24: 181–99. [CrossRef]
- Liu, Huijun, Mengru Zhang, Qing Yang, and Bin Yu. 2019. Gender differences in the influence of social isolation and loneliness on depressive symptoms in college students: A longitudinal study. *Social Psychiatry and Psychiatric Epidemiology* 55: 251–57. [CrossRef]
- Long, Christopher. 2000. A Comparison of Positive and Negative Episodes of Solitude. Unpublished Master's thesis, University of Massachusetts, Amherst, MA, USA.
- Long, Christopher, and James Averil. 2003. Solitude: An exploration of benefits of being alone. *Journal of the Theory of Social Behavior* 33: 21–44. [CrossRef]
- Longnecker, Justin, Carlos Moore, William Petty, and Leslie Palich. 2006. Small Business Management. Stamford: Thomson.
- Lord, Robert, and Rosalie Hall. 2005. Identity, deep structure and the development of leadership skill. *The Leadership Quarterly* 16: 591–615. [CrossRef]
- Lux, Andrei, Steven Grover, and Stephen Teo. 2019. Reframing commitment in authentic leadership: Untangling relationship–outcome processes. *Journal of Management and Organization*, 1–19. [CrossRef]
- Magalhães, Carla, Amélia Ferreira-da-Silva, José Manuel Pereira, and Alice Lopes. 2015. Foucault's perspective of performance appraisal in public administration. *Mediterranean Journal of Social Sciences* 6: 375–85.
- Magee, Joe, and Pamela Smith. 2013. The social distance theory of power. Personality and Social Psychology Review 17: 158-86. [CrossRef]
- Mao, Hsiao-Yen. 2006. The relationship between organizational level and workplace friendship. *International Journal of Human Resource Management* 17: 1819–33. [CrossRef]
- Maslach, Christina, Wilmar Schaufeli, and Michael Leiter. 2001. Job burnout. Annual Review of Psychology 52: 397–422. [CrossRef]
- Matos, Maria Heliodora, and Carolina Feliciana Machado. 2014. Institutional leaderships: The case of Crédito Agrícola in Portugal. International Journal of Applied Management Sciences and Engineering 1: 67–90. [CrossRef]
- Matos, Maria Heliodora, and Carolina Feliciana Machado. 2020. The role of institutional leadership in employee motivation, satisfaction, and personal development—Design of a research proposal. In *Research Methodology in Management and Industrial Engineering*. Edited by Carolina Machado and João Paulo Davim. Cham: Springer, pp. 129–50.

- McPherson, Miller, Lynn Smith-Lovin, and Matthew Brashears. 2006. Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review* 71: 353–75. [CrossRef]
- Miller, Julie, Taylor Patskanick, Lisa D'Ambrosio, and Joseph Coughlin. 2020. Staying Isolated in Order to Stay Safe: Exploring Experiences of the MIT AgeLab 85+ Lifestyle Leaders during the COVID-19 Pandemic. *Journal of Gerontological Social Work* 63: 694–95. [CrossRef]
- Ong, Wei Jee. 2022. Gender-contingent effects of leadership on loneliness. *Journal of Applied Psychology* 107: 1180–202, Advance Online Publication. Available online: https://psycnet.apa.org/record/2021-44298-001 (accessed on 2 August 2022). [CrossRef] [PubMed]
- Ozcelik, Hakan, and Sigal Barsade. 2011. Work Loneliness and Employee Performance. Academy of Management Proceedings 2011: 1–6. [CrossRef]
- Page, Randy, and Galen Cole. 1991. Demographic predictors of self-reported loneliness in adults. *Psychological Reports* 68: 939–45. [CrossRef] [PubMed]
- Peng, Jiang, Yushuai Chen, Ying Xia, and Yaxuan Ran. 2017. Workplace loneliness, leader-member ex-change and creativity: The cross-level moderating role of leader compassion. *Personality and Individual Differences* 104: 510–15. [CrossRef]
- Prentice, William. 1961. Understandig Leadership. Harvard Business Review 39: 143-51.
- Radloff, Lenore Sawyer. 1991. The use of the Center for Epidemiologic Studies Depression Scale in adolescents and young adults. Journal of Youth and Adolescence 20: 149–66. [CrossRef]
- Rea, Louis, and Richard Parker. 1992. Designing and Conducting Survey Research: A Comprehensive Guide. San Francisco: Jossey-Bass Publishers.
- Richardson, Roberto, José Augusto Peres, José Carlos Wanderley, Lindoya Martins Correia, and Maria de Holanda Peres. 1999. *Pesquisa Social: Métodos e Técnicas*, 3rd ed. São Paulo: Editora Atlas.
- Robinson, Kerry. 2016. What have we learned from the departures of female superintendents? *Journal of Women in Educational Leadership* 72: 1–28.
- Robinson, Kerry, and Charol Shakeshaft. 2015. Women superintendents who leave: Stress and health factors. *Planning and Changing* 46: 440–58.
- Rokach, Ami. 2014. Leadership and loneliness. International Journal of Leadership and Change 2: 48–58.
- Rokach, Ami. 2018. Effective Coping with Loneliness: A Review. Open Journal of Depression 7: 61–72. [CrossRef]
- Rosli, Nor Diyana, and Aliza Abu Hassim. 2017. The Relationship between Intrinsic Motivation and Job Engagement among Gen Y Employees at National Heart Institute, Work-Life Balance as Moderating Effect. *Journal of Administrative Science* 14: 1–15.
- Rost, Joseph. 1991. Leadership For the Twenty-First Century. Westport: Greenwood Publishing Group, Inc.
- Rubin, Philip. 2019. John T. Cacioppo (1951–2018). The American Psychologist 74: 745. [CrossRef] [PubMed]
- Ryan, Richard, and Edward Deci. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist* 55: 68–78. [CrossRef] [PubMed]
- Silard, Anthony, and Sara Wright. 2020. The price of wearing (or not wearing) the crown: The effects of loneliness on leaders and followers. *Leadership* 16: 389–410. [CrossRef]
- Silard, Anthony, and Sara Wright. 2022. Distinctly lonely: How loneliness at work varies by status in organizations. *Management Research Review* 45: 913–28. [CrossRef]
- Sîrbu, Alexandru-Andrei, and Andrei Cosmin Dumbravă. 2019. Loneliness at Work and Job Performance: The Role of Burnout and Extraversion. *Psihologia Resurselor Umane* 17: 7–18.
- Stogdill, Ralph. 1974. Handbook of Leadership: A Survey of Theory and Research. New York: The Free Press.
- Stoica, Mihaela, and Adrian Brate. 2013. Resilience, organizational commitment, supervisory support and loneliness at work in a medical unit. *Psychology of Human Resources Journal* 11: 71–82.
- Stoltzfus, Geniffer, Brady Leigh Nibbelink, Debra Vredenburg, and Elizabeth Thyrum. 2011. Gender, gender role, and creativity. *Social Behavior and Personality: An International Journal* 39: 425–32. [CrossRef]
- Suedfeld, Peter. 1982. Aloneness as a healing experience. In *Loneliness: A Sourcebook of Current Theory, Research, and Therapy*. Edited by Letitia Anne Peplau and Daniel Perlman. New York: Wiley and Sons, pp. 54–67.
- Taris, Toon. 2006. Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work and Stress* 20: 316–34. [CrossRef]
- Van Vugt, Mark, Robert Hogan, and Robert Kaiser. 2008. Leadership, followership, and evolution: Some lessons from the past. *American Psychologist* 63: 182–96. [CrossRef]
- Vecchio, Robert. 1987. Situational leadership Theory: An Examination of a Prescriptive Theory. *Journal of Applied Psychology* 72: 444–51. [CrossRef]
- Vîrgă, Delia, Wilmar Schaufeli, Toon Taris, Ilona van Beek, and Coralia Sulea. 2019. Attachment Styles and Employee Performance: The Mediating Role of Burnout. *The Journal of Psychology* 153: 383–401. [CrossRef] [PubMed]
- Wang, Chen, and Yu Zhu. 2017. The Lonelier, the More Conservative? A Research about Loneliness and Risky Decision-Making. *Psychology* 8: 1570–85.
- Wang, Gang, In-sue Oh, Stephen Courtright, and Amy Colbert. 2011. Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group and Organization Management* 36: 223–70. [CrossRef]

- Waytz, Adam, Eileen Chou, Joe Magee, and Adam Galinsky. 2015. Not so lonely at the top: The relationship between power and loneliness. *Organizational Behavior and Human Decision Processes* 130: 69–78. [CrossRef]
- Weick, Karl, and Kathleen Sutcliffe. 2006. Mindfulness and the quality of organizational attention. *Organization Science* 17: 514–24. [CrossRef]
- Weissman, Myrna, and Gerald Klerman. 1977. Sex differences and the epidemiology of de-pression. *Archives of General Psychiatry* 34: 98–111. [CrossRef]
- Wickens, Christine, André J. McDonald, Tara Elton-Marshall, Samantha Wells, Yeshambel T. Nigatu, Damian Jankowicz, and Hayley A. Hamilton. 2021. Loneliness in the COVID-19 pandemic: Associations with age, gender and their interaction. *Journal of Psychiatric Research* 136: 103–8. [CrossRef]
- Wright, Sarah. 2012. Is it lonely at the top? An empirical study of leaders' and nonleaders' loneliness in organizations. *Journal of Psychology: Interdisciplinary and Applied* 146: 47–60. [CrossRef]
- Wright, Sarah, Christopher Burt, and Kenneth Strongman. 2006. Loneliness in the Workplace: Construct Definition and Scale Development. *New Zealand Journal of Psychology* 35: 59–68.
- Yukl, Gary. 1988. Leadership in Organizations. Englewood Cliffs: Prentice-Hall.
- Yukl, Gary. 2002. Leadership in Organizations. Upper Saddle River: Prentice Hall.
- Zhang, Guanglei, Silu Chen, Youqing Fan, and Yue Dong. 2019. Influence of leaders' loneliness on voicetaking: The role of social self-efficacy and performance pressure. *International Journal of Mental Health Promotion* 21: 13–29. [CrossRef]
- Zhou, Xuan. 2018. A Review of Research Workplace Loneliness. Psychology 9: 1005–22. [CrossRef]
- Zumaeta, Jessy. 2019. Lonely at the Top: How Do Senior Leaders Navigate the Need to Belong? *Journal of Leadership and Organizational Studies* 26: 111–35. [CrossRef]