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Can Safety Leadership Be an Antidote in the COVID-19 Fear of Job Insecurity and the Work Engagement Relationship in the Norwegian Service Industry? A Moderated-Mediation Model

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Abstract: While there is evidence of job-related antecedents of work engagement, there is little information in the relevant literature on cross-domain effects. The purpose of this empirical study is to examine this under-researched aspect by analyzing data from the conservation of resource theory and the jobdemand resource model. A moderated mediation model is proposed wherein COVID-19, the fear reduces service employees' work engagement through job insecurity, and safety leadership acts as the supportive construct to cope with adverse effects of the pandemic on mentioned outcomes. The research, based on the experiences of 376 Norwegians working in the service sector, found that: the fear of COVID-19 had a major deterrent effect on employee engagement. One of the reasons for this relationship was job insecurity, which acted as a mediator between the COVID-19 fear and engagement, in work. In addition, the moderating role of the safety leadership in the relationship between COVID-19 anxiety and worker engagement was confirmed. In other words, workers who were under the supervision of safety leaders had lower links between these concepts, even if they were indirectly linked through job insecurity. With regard to the stress-related effects of COVID-19 on service personnel's perceptions, attitude, and actions regarding their jobs and conditions of employment, this study has both theoretical and managerial implications. It also expands upon the existing understanding of how managers can handle such negative consequences. The limitations of the study's contextual scope and sampling procedure of the study are discussed.

Keywords: work engagement; COVID-19 fear; job insecurity; safety leadership



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1. Introduction

The World Health Organization (WHO) declared COVID-19 as a global pandemic on 11 March 2020, which spread rapidly across all continents [1]. Inescapably, hospitality, in general, has been one of the industries that was damaged most [2]. COVID-19 caused panic in the public by decreasing the demand in the tourism industry [3,4], and the recovery of the global tourism industry might take longer than the average expected recovery period of 10 months. Much like other countries, Norway had to contend with economic challenges that have never been observed before. Compared to 2019, the measured unemployment rate in the Norwegian hospitality sector increased from 3.4% to 13.6%, as of February 2021 [5].

Such sorts of structural changes threaten staff members' job security and trigger high stress and an uncertain environment [6–8]. Job insecurity, which is described as the threat of unemployment or the concern of losing the present work in the future, is taken into consideration as a vital stressor that prevents employees' individual growth as well as development [7,9]. In the situation of the COVID-19 pandemic, the relevant literature points out that the fear has reached its peak after having gained important momentum. Scholars prioritize the sustainability of the industry [10,11] and the coping strategies over a wide spectrum in the context of the COVID-19 pandemic [12–17]. However, the relevant research is very sparse regarding the pandemic's impacts on attitudes and behavioral

Sustainability **2022**, 14, 12203 2 of 16

outcomes. Therefore, it is vital to investigate how human resources have been affected by the pandemic both during and after the COVID-19 period.

In a workplace, where human resources perceive or experience the concern of possible job losses, the importance of keeping or retaining engaged human resources in the organization has become even more important. Because, firstly, an engaged workforce is considered to be a cornerstone of sustaining a competitive advantage [18]. Secondly, the employees who are characterized by the three dimensions of work engagement (namely absorption, vigor and dedication) [19] show favorable attitudinal and behavioral outcomes [20–22]. It is even more vital to investigate the engagement levels of employees during the pandemic. Whereas coworkers can exert a considerable amount of influence on employee work outcomes, a reverse effect may be observed in the case of a high number of dismissals in the same workplace [23]. Because as of today, in the downsizing of service industry firms, it is not only the dismissed people but also the ones who "are left behind" have been affected negatively. The phenomenon, so-called the survivor syndrome, highlights the adverse effects such as erosion of trust and morale, as well as the increase in work pressure, emotional stress and job insecurity, by those who remain behind [24]. Accordingly, it has been revealed that job insecurity erodes work engagement as well as engenders detrimental outcomes such as exhaustion, service sabotage and staff member incivility [25,26]. Therefore, it is claimed that employees may be disengaged from their jobs because of the stressful COVID-19 circumstances that affect their job insecurity perceptions.

According to Conservation of Resource Theory (COR), which suggests that people may withdraw in an attempt to cope and prevent the loss of energetic resources in the face of stress [27], the support from their supervisors is considered as one of the key resources. Because it might help employees to alleviate psychological stress responses and relieve tension [28]. Similarly, the job demand resource (JD-R) model indicates a link between strain and job demands [29] and highlights the reciprocal relationship between job resources, personal resources and work engagement [30]. Since the leader-member exchange is considered a job resource that leads to positive outcomes via work engagement [31], the role of leadership styles needs to be investigated within that context. Together with the prevalent inadequacy of research studies concerning the relationship between COVID-19 fear and work engagement, questions remain regarding the role and the effect of leadership on the mentioned process, and on employees' perception of job insecurity. Safety leadership is a safety-goal-oriented leadership style, which is the ability to achieve the optimum safety benefits by effectively arranging organizational resources, as well as having a significant positive effect on employee safety behavior and workplace safety [32]. Several scholars examined the positive outcomes of the safety leadership style and found a direct relationship between the organizational performance [33], employee performance [34] and workplace safety [35]. Similarly, one of the recent studies conducted in the hotel industry during the COVID-19 pandemic revealed a direct relationship between safety leadership and safety behavior [35]. Even though recent studies have expanded our knowledge about the potential direct effects of safety leadership on employee job outcomes, moderating the role of a such leadership style in the service industry has been neglected in recent studies. In a similar vein, in the Nordic service industry, there is no evidence concerning whether service employees who are concerned about losing their jobs in the future are more inclined to show minimized appealing behaviors (i.e., engagement, commitment, etc.).

To fill out such research study gaps, this study aims to test a research model where job insecurity mediates the influence of the COVID-19 fear on employees' work engagement, by testing the COR theory and the JD-R model. The focus of this paper is on: (a) the impact of the COVID-19 fear on work engagement (b) the effect of job insecurity on work engagement (c) the mediating role of job insecurity in the abovementioned linkages and the moderating role of safety leadership on the COVID-19 fear and the abovementioned indirect relationship. The data collected from employees in the service industry in Stavanger, Norway were used to assess the mentioned relationships.

Sustainability **2022**, 14, 12203 3 of 16

2. Theoretical Background and Hypotheses Development

2.1. COVID-19 Fear and Work Engagement

Work engagement is described as a good, rewarding state of mind related to work, characterized by vitality, dedication and absorption. Vitality is associated with a high level of energy and mental stamina at work, an enthusiasm for work, and the determination in the face of adversity, while dedication is associated with a sense of significance, passion, inspiration, pride and competition. The final characteristic, absorption, is defined as being completely concentrated and intensely engrossed in one's work, and refers to having trouble detaching oneself from work [36].

As highlighted in the transactional model of stress, the emotional and behavioral response of people to events is related to how they construe that event [37]. The way people perceive a stressful event directly shapes their individual outcomes. Several studies suggested that stress is directly associated with undesired outcomes such as poor wellbeing [38], job satisfaction [39], and work disengagement [40]. A previous study also reported that the perceived COVID-19 crisis decreased the engagement levels of employees [41]. One possible explanation for this relationship, which conforms with the basic principle of the COR theory, is that people may step back in an attempt to cope or avoid the loss of energetic resources when they experience stress [27]. Reacting in that way may lead employees to consider that situation as a depletion of their personal resources in the workplace; thus their work engagement levels might be directly affected by that situation as it was proved that personal resources were one of the main antecedents of engagement [42]. Furthermore, risk at the workplace is considered a job demand [43]; and based on the health impairment process of the JD-R model, which suggests the excessively increased job demands result in impaired health through energy depletion [44], the increased level of risk that emerged during COVID-19, may have created a decrease in work engagement levels. Because the COVID-19 fear was a stressful situation itself, that could be explained as a depletion of personal resources, people may have been less likely to hinder their ability to engage in their work and workplace and went beyond to serve their organizations. It has also been confirmed that the COVID-19 fear negatively affected work engagement [45]. When all of the evidence was considered, the following hypothesis was proposed.

Hypothesis 1 (H1): Fear of COVID-19 is adversely connected to job engagement.

2.2. COVID-19 Fear and Job Insecurity

One of the much-cited definitions was recently made by Sverke et al. [8] By remarking on the subjectivity of peoples' anticipations, they claimed that job insecurity should be defined as the "subjectively experienced anticipation of a fundamental and involuntary event related to job loss". Besides, Jiang & Lavaysse [46] claimed that it has been difficult to acquire a conceptualization that is broadly accepted, therefore they suggested a new differentiation of job insecurity by claiming that there are two different sub-dimensions, namely cognitive job insecurity and affective job insecurity. According to their empirical study, cognitive job insecurity can be defined as the detected threat to the persistence of one's employment, whereas affective job insecurity points out the emotional reactions such as concern, anxiety, and fear in case the job insecurity feeling is experienced.

Pandemics such as COVID-19 increase the level of fear and panic felt by societies. Especially in sectors that require direct physical contact with other people, such as the service industry, the possibility of being infected by COVID-19 undoubtedly causes employees to feel fear. The main principle of the COR theory points out that stress is increased by the perceived threat of the loss of valuable resources such as health and job security [47]. Based on that principle, COVID-19 is one of the determinants of stress as it threatens valuable individual resources.

Some recent studies have drawn attention to the psychological wellbeing of people during the pandemic. Mahmud et al. [48] found that the future workforce is getting depressed and anxious about their future career due to COVID-19. Similarly, two studies conducted in

Sustainability **2022**, 14, 12203 4 of 16

Canada and India showed that employees experienced high levels of job insecurity during COVID-19, and this feeling can be associated with well-being and stress [49,50].

Hypothesis 2 (H2): *COVID-19 fear is positively related to employees' job insecurity.*

2.3. Job Insecurity and Work Engagement

Crawford et al. [51] suggested that people feel that they are frustrated in their efforts to overcome hindrance stressors, and they become less willing to invest energy to deal with those challenging situations. Their findings suggested that stressors hamper peoples' progress toward the accomplishment of goals. As job insecurity is a stressful situation itself, that decreases the well-being of employees, who may experience burnout and emotional exhaustion as a result of the negative emotions and the passive, emotion-focused coping styles that reflect this withdrawal reduce employee engagement. As was stated in the study by Wang et al. [52] "job-insecure employees are not able to be fully engaged at work, because they are concerned about their job outcomes. Instead, they will experience greater anxiety, anger, or frustration" (p. 1251).

In line with the COR theory, people who lose valuable resources might take some actions to gain new ones. Halbesleben and Bowler [53] found an interesting pattern whereby emotional exhaustion, as a resource loss, led people to invest their resources in creating better relationships with their supervisors and coworkers, by developing organizational citizenship behaviors that benefit individuals. Employees experiencing job insecurity may act in a similar way to secure their employability. Corollary 4 of the COR theory states that individuals who possess strong resource pools most likely try to obtain a resource gain by seeking or accepting risk resource opportunities [54]. In other words, people may take the risk of giving up some of the resources they have in order to gain new ones. People whose valuable resources are threatened due to the experienced job insecurity will be looking for a resource gain (e.g., feeling of being successful or valuable to others, status in the workplace), even if there is a probability of losing the existing resources (e.g., free time, personal health). Staufenbiel and König [9] noted that when employees experience job insecurity, their initial response might be to work harder. However, Attridge [55] stated that if those uncommon work efforts last for too long, employees might experience some negative consequences such as job burnout; which is the term that is strictly distinguished from and considered as the antipode of work engagement [19].

Even though the linkage between job insecurity and work engagement has been evident [56,57], this association has been subjected to scant investigation in the Norwegian service industry. Therefore, the following hypothesis is stated.

Hypothesis 3 (H3): *Job insecurity is negatively related to work engagement.*

2.4. Job Insecurity as a Mediator

People need to deal with challenges by going through cognitive processes in that they assess the significance of the situation (primary appraisal) and determine the actions that need to be taken (secondary appraisal) [37]. Considering the nature of COVID-19, which the circumstances constantly show an alteration in a short span of time, it can be argued that people may have moved between the primary and secondary appraisal processes repeatedly because of the dramatic changes that were observed daily, such as the health measures, vaccination process, or financial indicators of the economy, in a short period of time. The research conducted by Li et al. [58] showed that a lower number of reported COVID-19 cases lead people to develop more optimistic expectations regarding the country's economic performance. As there is a strong relationship between job insecurity and economic conditions in the country [59], it is expected that the positive changes observed in the COVID-19 daily cases reduce job insecurity by developing more optimistic expectations about the future. However, as observed in other countries, the daily COVID-19 cases in Norway have never shown a constant trend since COVID-19 started

Sustainability **2022**, 14, 12203 5 of 16

to spread in the country. This ongoing fluctuation trend may create disappointment as the expectation of people concerning the recovery following the pandemic is not fulfilled, and leads people to repeatedly evaluate the new situation (primary appraisal), and make decisions regarding the individual actions that need to be taken (secondary appraisal). Past studies suggested that unsuccessful problem-solving attempts can damage individual mental well-being instead of being beneficial [60,61], and make people feel incapable and incompetent, which damages their sense of control [61,62]. All of those outcomes emerge due to the repeated unsuccessful problem-solving stages that can be considered as a loss of valuable resources. As a result, in parallel with the basic principles of the COR theory that highlight the linkage between stress and the loss of resources, it is claimed that people who suffer from the abovementioned issues cannot stay vigorous, dedicated, and engaged.

However, the empirical evidence highlighting the linkage between the COVID-19 fear and work engagement is limited, even though there has been no attention paid for explaining the underlying mechanisms of this link. Job insecurity is suggested to play a mediator role in terms of explaining the relationship between the COVID-19 fear and work engagement. Because the abovementioned unfulfilled expectations will cause people to be less hopeful about the future, and specifically about the continuity of their employment status. As it was discussed above, the repeated unsuccessful attempts to recover from the effects of the pandemic might reduce the positive thoughts about the future, and a lack of them creates hopelessness [63]. In this regard, people who become more hopeless about the future due to unsuccessful attempts might lose their vigor, dedication, and absorption, as they create negative thoughts such as threats towards the continuity of their current job. Therefore, the following hypothesis was stated.

Hypothesis 4 (H4): *Job insecurity mediates the relationship between the COVID-19 fear and work engagement.*

2.5. Moderating Role of Safety Leadership

The way employees perceive their leaders and the quality of the dual relationship between those parties predict their attitudes and behaviors, such as job satisfaction, turnover intentions and job performance [64]. Leaders are an important asset of the organizations as their subordinates become more attached to a supportive climate as long as they are provided with the fundamental information about work-related issues including organizational practices [65].

Borg et al. [66] claimed that job insecurity could be generalized. They proposed that any loss of desirable job features should be taken into consideration. Resources (people, materials, information) and supervision quality were accepted as job features; and the loss of any of those increased job insecurity [67]. Taken together, the factors that safety leadership point out become important. Because, if employees cannot reach the resources essential for protecting themselves against COVID-19, first they may experience stress and they may feel job insecurity through the lack of job features (resources). Similarly, those who are not managed by the leaders who are prioritizing the pandemic's threats, may suffer from the same issue. Therefore, leadership styles that prioritize training and development activities and provide organizational support within a safety context may help employees to cope with negative emotional states created by job insecurity, by augmenting the job resources mentioned in the JD-R model.

In this sense, it is claimed that safety leadership can be efficient within the job insecurity context that is caused by the COVID-19 fear because of the following reasons. First, two sub-dimensions of safety leadership, safety coaching and safety caring, focus on improving the members' skills and awareness about safety-related issues by providing support [34]. Employees who feel supported might become more committed to their job, thus they might feel less job insecurity in return. Second, safety leaders might strengthen the job resources by establishing regulations related to the COVID-19 prevention and by giving rewards to those who participate in that prevention process [34]. Finally, the only way that service

Sustainability **2022**, 14, 12203 6 of 16

industry firms can survive during a pandemic is to generate trust among their customers by creating a safe environment [68]. The leaders who consider safety issues as a top priority might transmit a strong positive sub-message about the sustainability of their companies. In this way, as companies that fight against the COVID-19 pandemic will be perceived as "strong enough" to maintain their operations, employees might suffer less from job insecurity. Based on the debate, the following hypothesis was proposed.

Hypothesis 5 (H5): *Safety leadership moderates the association between the COVID-19 fear and job insecurity, making the relationship weaker with increasing levels of safety leadership.*

The increased stress levels of employees due to the COVID-19 fear severely diminishes the personal resources of employees. As it was mentioned, the JD-R model indicates the reciprocal relationship between job resources, personal resources and work engagement. Therefore, the quality of leader-member exchange and the efficiency of leadership practices become more critical under the influence of stress-generated issues; because emotional support concerning nonwork problems and/or crises that impinge on the work situation, are important parts of the leader-member exchange process [69].

Nahrgang et al. [43] tested the JD-R model, burnout, engagement and safety outcomes in the workplace; and suggested that risks and hazards are the job demands which are associated with burnout, engagement and safety outcomes. They claimed that the most consistent job resource that explains variance in those outcomes was the existence of a supportive environment. According to their study, the risk perception led to an increase in job stress. Additionally, Cheung and Qingbin [70] proposed a conceptual model that relied on the framework of the JD-R model and suggested that the perceived health-related risks negatively relate to work engagement as people might be overwhelmed with the job stress caused by a high level of risk perception. Consequently, there is a need for a leadership that tempers the stress of COVID-19 on personal resources, contains motivational factors and manages the risk perception of the pandemic. In this regard, this study claims that safety leadership can be beneficial based on the following reason. The organizational support (the extent to which employees perceive that the management values their contributions and cares about their well-being) has a significant positive effect on personal resources [71]. Two subdimensions of safety leadership, safety coaching and caring, refer to the emotional support and caring about employees' needs, understanding their problems and providing sufficient safety-related resources [34]. To cope with the stress caused by COVID-19 and increase the work engagement level; those subdimensions of safety leadership might strengthen employees' personal resources (through the provided emotional support), and provide job resources (through provided sufficient safety-related resources). Based on that discussion, the following hypothesis was stated.

Hypothesis 6 (H6): Safety leadership moderates the indirect association between the COVID-19 fear and work engagement via job insecurity, such that this in-direct relationship becomes weaker with greater levels of safety leadership.

The proposed framework demonstrating the hypothesized relationships is presented in Figure 1.

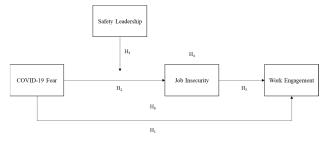


Figure 1. The hypothesized model.

Sustainability **2022**, 14, 12203 7 of 16

3. Research Methodology

3.1. Sample and Data Collection

Rogaland has been strategically important for cruise tourism for many years. In 2019, Stavanger (the biggest city in Rogaland) hosted 460,000 cruise tourists and became Norway's second most visited port. [72]. Considering the contribution of the region to the Norwegian service industry and the experienced economic hitches due to COVID-19, employees working in the service industry residing in Rogaland were the selected as the population of the study.

Based on the guideline suggested by Westland [73], a priori sample size calculation was performed to obtain the required sample size. Given the number of observed variables (38), latent variables (9), anticipated effect size (0.30), desired statistical power level (0.95) and probability level (0.05), the recommended minimum sample size of 264 was required. At the start of the poll, there were 654 participants who took part. However, 278 surveys that were not completed needed to be excluded before the data analysis process started. As a result, the present study used a sample size of 376 which well exceeds the requirements defined according to Westland [73].

The convenience sampling method is mostly chosen when it is available for the researcher to reach population members who are conveniently available to participate in the study, and it is commonly used when there is no known population to select from [74]. Therefore, one of the non-probability techniques, the convenience sampling method was preferred in this study. As it is difficult to gather data from the field by distributing the surveys under the COVID-19 circumstances, the online survey form was employed. Only the closed Facebook groups in the Rogaland region, where only locals are allowed as members, were selected for the distribution of the survey. The survey was published continuously every day to increase the sample size over a 3-month period between February and April 2021. To reach the representative sample by eliminating the participants living outside of the Rogaland region, a mandatory screening question was added. Only those who answered verifiably to "I live in the Rogaland region and have been working in the service industry for at least a year" was used for analysis.

3.2. Measurements

The Fear of COVID-19 Scale (FCV-19S), which was the first published questionnaire that measured the COVID-19 fear, and was crafted by Ahorsu et al. [75], was used in this study. The final version of the measurement consists of seven items measuring the participants' fear of COVID-19. The respondents were asked to rate their agreement with each statement on a 5-point scale from "1—Strongly Disagree" to "5—Strongly Agree." The item factor loadings of the original study were reported between 0.66 to 0.74, and the acceptable reliability values, such as the internal consistency (α = 0.82) and test-retest reliability (ICC = 0.72) was reported.

Job Insecurity was assessed with a four-item scale developed by Delery and Doty [76]. The respondents were asked to use a five-point scale of 5 (strongly agree) to 1 (strongly disagree). All of the items were reverse scored. The Cronbach's α values of the scale were 0.82 [77].

The Utrecht Work Engagement Scale (UWES) by Schaufeli et al. [19] was used to measure the engagement levels of the participants. The original items consisted of 17 items, however, in this research, the short nine-item scale version was employed. The respondents used a seven-point Likert scale ranging from 0 ("never") to 9 ("always"). In the original study, in which the shorter version of the scale was developed, Cronbach's alpha value for the total nine-item scale varied between 0.85 and 0.92 (median = 0.92) across all 10 countries where the data were gathered.

Safety leadership was assessed with the scale designed by Zhang et al. [35]. The original scale, which consists of a total of 18 items, was adopted from studies conducted by Wu [78] and Lu and Yang [79]. The exploratory factor analysis (EFA) that was conducted to examine the reliability and validity of the questionnaire data in the original study

Sustainability **2022**, 14, 12203 8 of 16

indicated that four sub-dimensions of safety leadership (safety coaching, safety control, safety motivation and safety care) had Cronbach's α values of 0.919, 0.918, 0.875 and 0.947, respectively. The respondents were asked to use a seven-point scale of 7 (strongly agree) to 1 (strongly disagree).

3.3. Data Analysis

3.3.1. Descriptive Statistics

The distribution of the participants' gender was almost even (Male—49.2%, Female—50.8%). 39% of those who participated had only a high school diploma, whereas 5% of those who participated had a doctoral degree. The largest demographic included in the poll was those between the ages of 21 and 30 (47.6%), followed by those between the ages of 31 and 40 (26.1%).

3.3.2. Data Analysis

We conducted a confirmatory factor analysis in the manner of Anderson and Gerbing [80]. The CFA was used to assess the convergent and discriminant validities of the research variables. The threshold value of 0.70 was used to test the reliability. A correlation study for the variables was also conducted to examine the relationships among the variables. We used a moderated mediation approach using job insecurity as the mediator and safety leadership as the moderator. As a result, Hayes' process macro was run to examine the moderated mediation effect [81].

3.3.3. Measurement Model

The COVID-19 fear scale, work engagement, job insecurity and leadership in safety were the four components of the evaluative framework. We used the CFA (confirmatory factor analysis) to verify the validity of the proposed framework. The Model 2, RMSEA, CFI, TLI, and I were used to validate the model, along with other fit indices (IFI). Values greater than 0.95 for The CFI, GFI, IFI and TLI confirm a satisfactory model fit, consistent with the findings of Hair et al. [82], who noted the insignificance of 2. While the RMSEA values below 0.05 imply a satisfactory model fit.

Table 1 shows that the statistical findings verified by the suggested model in contrast to the alternative models: 2/df = 1.38, CFI = 0.97, RMSEA = 0.032. The uniqueness of each theoretical framework proposed was so demonstrated.

Model	χ^2	df	$\Delta \chi^2$	Δdf	RMSEA	CFI	SRMR
4-Factor Model	1052.77	763	-	-	0.029	0.97	0.0321
3-Factor Model (a)	1656.42	766	603.65	3	0.064	0.93	0.0488
1-Factor Model (b)	4183.422	769	2526.88	3	0.112	0.72	0.0952

Table 1. Main Constructs: A Comparison of Available Models.

(a) Blending of both the JINS and WE; (b) Blending items of all variables.

All values of the AVE are greater than the criterion of 0.5 [83], indicating that the convergent validity of the proposed model is satisfactory (see Table 2). The discriminant validity of all theoretical variables is also checked using the criteria proposed by Fornell and Larcker [84]. According to the requirements, the square root of the variables should be greater than their correlations. This criterion is met in this example because the square root of all variables is greater than their correlations (see Table 2, shown on the diagonals). In addition, the Cronbach's alpha reliabilities of the COVID-19 fear, job insecurity, safety leadership and work engagement are 0.96, 0.95, 0.97 and 0.92, respectively, which is good and consistent with the criterion of 0.70 given by Hair et al. [85].

Sustainability **2022**, 14, 12203 9 of 16

	Variables	Mean	SD	CR	α	AVE	1	2	3	4
1	COVFE	2.38	0.753	0.915	0.96	0.593	(0.770)			
2	JINS	2.32	0.827	0.882	0.95	0.727	0.319 **	(0.852)		
3	WE	3.76	0.668	0.976	0.92	0.506	-0.202**	0.206 **	(0.711)	
4	SLEAD	3.96	0.604	0.952	0.97	0.526	-0.300**	-0.050	0.174 **	(0.725)

Table 2. Correlation Analysis.

The regression coefficients of the correlation analysis indicated that the COVID-19 fear is highly connected to job insecurity (r = 0.319, p = 0.01), employee engagement (r = -0.202, p = 0.01) and safety leadership (r = -0.300, p = 0.01). According to the results, job insecurity is strongly associated with work engagement (r = -0.206, p = 0.01), but not with safety leadership (r = -0.50, p = 0.01). Safety leadership and employee engagement at work were significantly related (r = -0.174, p = 0.01). Thus, the proposed hypothesis was first validated by the correlation data.

3.3.4. Test of the Hypotheses

The hypothesized model was tested using the method described by Preacher et al. [86]. Specifically, Hayes' macro [81] PROCESS was used to test the assumptions made earlier in the study. To conduct the moderated mediation analysis, we used PROCESS Model 7, which fits well with the model we assumed.

Table 3 shows the results of the mediation study. The results support the prediction that concerns about COVID-19 has a negative impact on workers' motivation to do their jobs. The hypothesized correlation was confirmed by the data (β = -0.202, t = -3.98, p < 0.001), therefore H1 was accepted. Consistent with the second prediction, the COVID-19 fear was associated with increased levels of job insecurity. It was found that there was a statistically significant correlation between the two variables (β = 0.309, t = 6.50, p < 0.001), so the second hypothesis was also accepted. Workers' disinterest in their jobs is predicted by the third hypothesis. Moreover, the statistical analysis provided evidence for the hypothesized relationship (β = -0.206, t = -4.07, p < 0.001), so we accept hypothesis 3. The fourth hypothesis states that job insecurity is one of the ways in which the COVID-19 fear may influence employee engagement. The 95% confidence interval did not contain zero, indicating that there is an indirect effect of COVID-19 anxiety on job engagement (-0.0848; -0.0143). The mediation study results suggest that job insecurity partially mediates the causal relationship between the COVID-19 fear and employee engagement (see Table 3).

Table 3.	Results of	The Mediation	Analyses.
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	Coefficient	SE	Bootstrap 95% CI
IV to the mediator (a path) COVFE \rightarrow JINS	0.309 **	0.057	
Mediator to DV (b path) IINS \rightarrow WE	-0.206 **	0.039	
Total effect of IV on DV (c path)	-0.1790 **	0.045	
Direct effect of IV on DV (ć path) Indirect effect of IV on DV through the proposed mediator	-0.1343 *	0.046	
COVFE \rightarrow JINS \rightarrow WE	-0.0447	0.016	[-0.0848, -0.0143]

 $[*]p < 0.05, **p < 0.001, \texttt{COVFE} = \texttt{COVID} \ 19 \ \text{fear, JINS} = \text{job insecurity, E} = \text{work engagement, SLEAD} = \text{safety leadership.}$

The statistical data reported in Table 4 ($\beta = -0.2551$, p < 0.01) lend credence to the fifth hypothesis, which states that safety leadership moderates the link between the COVID-19 fear and job insecurity. Consistent with the expectations, the correlation was less for workers who exhibited strong safety leadership. Since this is the case, H5 is confirmed. In addition, the 95% bootstrap confidence interval for the index of moderated mediation did not include zero, as shown by the overall models. It was also determined that the fear of COVID-19 has indirect effects on employee work engagement via job insecurity across all three criteria of the safety leadership. Since the upper and lower bounds of the confidence

^{**} p < 0.001.

Sustainability **2022**, 14, 12203

interval both contained zero, a one standard deviation drop below the mean = 0.6050 was not statistically significant (-0.1148, -0.0214). The statistical results were significant when the standard deviation (SD) was more than 0.6050 below the mean. The 95% confidence interval from the bootstraps did not include zero (-0.0636, -0.0042). As a result of these statistical indicators, hypothesis 6 was confirmed.

Table 4. Ordinary Least Squares Regression Coefficients from Moderated Mediation Med	Table 4.	Ordinary Least S	guares Regression	Coefficients from	Moderated Media	tion Model.
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Outcome						
Predictors	M: Job insecurity-JINS		Y: Work Engagement -WE			
Constant	2.3644		4.043			
X: (COVFE)	0.3537 ***		-0.1343 ***			
M: JINS			-0.1210 **			
SLEAD	-0.0405 *					
$(COVFE) \times SLEAD$	0.2551 ***					
\mathbb{R}^2	0.1283		0.0	0.0631		
F	12.352 ***		7.4725 ***			
Moderator	Index of Moderated Mediation			ce Interval (5000 straps)		
SLEAD	-0.0309		-0.071	0-0.0083		
Conditional Indirect Effects = Mean \pm 1SD						
SLEAD	Bootstrap Indirect Effect	Bootstrap SE	Boot LLCI	Boot ULCI		
-0.8280	-0.6050	0.0145	-0.0636	-0.0042		
0.0000	-0.0000	0.0171	-0.0850	-0.0150		
0.8280	0.6050 0.0233		-0.1148	-0.0214		

Note: N = 376; PROCESS Model 7, Bootstrap sample size = 5000, LL = lower limit, UL = upper limit, CI = confidence interval; COVFE = COVID 19 fear, JINS = job insecurity, WE = work engagement, SLEAD = safety leadership; * p < 0.10, ** p < 0.05, *** p < 0.01 (two-tailed).

4. Discussion and Conclusions

The aim of this study was to analyze how the fear of COVID-19 affected workers in the service sector during the pandemic. The authors of [87] discussed the data collected in Norway after COVID-19 to investigate the factors affecting workers' engagement in their jobs. However, they recommended further research on the moderating role of some characteristics of employment, particularly in the areas of work resources and expectations. Therefore, this study seems to be one of the first attempts to investigate this issue in the Norwegian service industry using the theory COR and the JD-R model. The following objectives were proposed for the study: (a) to determine the influence of fear of COVID-19 on job insecurity and work engagement; (b) to determine the influence of job insecurity on work engagement; (c) to determine the role of safety leadership as a moderator and mediator in these relationships. Data collected from service workers confirmed the premise.

The study, which examined a relationship between the COVID-19 anxiety and job insecurity, is not only consistent with the COR hypothesis [88], but is also supported by previous studies [89–92]. For workers during the COVID-19 epidemic, uncertainty about one's employment situation was exacerbated by fear of being laid off. That is, higher levels of job insecurity are the direct result of workers harboring unfavorable biases about the stability of their position.

Service industry employees' job insecurity likewise aggravates their work engagement. This causes the degeneration of the relationship between lower-level staff and the firm [57]. As the COR theory indicates [54], service industry staff who have inadequate work-related resources and/or lose their valued resources while attempting to manage their job insecurity, lose their confidence toward their management at the micro and their overall trust at the macro levels. Employees who view that the COVID-19 fear appears to be a widespread practice throughout the breakout of COVID-19, display anxiousness or stress and anxiety and for that reason have damaging understandings of work engagement. This finding is

Sustainability **2022**, 14, 12203 11 of 16

likewise in agreement with the health impairment process of the JD-R model [93]. Similarly, the findings of the study validate the reciprocal relationship between job resources, personal resources and work engagement suggested by Xanthopoulou et al. [30]. Arguably, the systems established by safety leaders, their guidance and the effect of the motivation they provide to the employees in the leader-member relationship, will positively contribute to the materials and information which are accepted as important job features [67]. That is, the relationship between the COVID-19 fear and engagement will not be complete if the lost resources are disregarded.

Additionally, the empirical analysis of the mediating influence of job insecurity on work engagement showed that the degree to which employees experienced the anticipation of job loss played a significant mediating role between the COVID-19 fear and work engagement. This negative significant relationship is in line with the study of Jiang and Lavaysse [46], where it is suggested that affective job insecurity had stronger relations with most of the work-related consequences, such as work engagement. Because the main reason that decreases the work engagement level of employees is not only related to the perceived threat to the continuity of employment (cognitive job insecurity); but also strongly linked with the emotion-based reaction which emerged due to the fear of COVID-19 (affective job insecurity).

The informants chosen for this study agreed with the study's interaction conclusion about the moderating influence of safety leadership on the aforementioned COVID-19 fear. Consistent with the JD-R model, staff members exhibit high job insecurity due to stress caused by the COVID-19 fear; however, when they perceive that they can cope with such fear thanks to support/resources from safety leadership, the interaction effect is likely to result in low levels of stress caused by COVID-19 tension. The findings of this study provide empirical support for the claim that safety leaders improve employee engagement by fostering a culture of safety in the workplace. Employees who believe that the COVID-19 fear seems to be a frequent practice during the outbreak of COVID-19, display uneasiness or anxiety, and as a result, have adverse judgments of work engagement, as suggested by the research findings. Job insecurity partially mediates this effect.

5. Research Implications

5.1. Theoretical Implications

The outcomes of the current study shed brand-new light on and supply considerable insights into the repercussions of the COVID-19 fear. This is among the very first research studies providing empirical findings and conversations in this industry in the recent relevant literature.

This empirical study points out the need, as postulated by several researchers [94–96], of examining the COVID-19 fear amongst service industry staff members throughout the COVID-19 pandemic process. This requirement is likewise evident considering that countless service employees are faced with layoffs or lost their positions/in the service industries [11].

The COVID-19 fear may cause high stress which may be an indication of failure to meet the commitments or pledges [97] according to the psychological contract theory, and for that reason deteriorates staff members' work engagement [98]. The research study fills in this gap by evaluating the effect of the COVID-19 fear on work engagement amongst service industry staff.

Second, the existing literature provides research studies that have connected the COVID-19 fear to conventional effects such as turnover intention, life and job satisfaction, emotional exhaustion and psychological distress [91,98]. As for what the COR theory confirms [54], high levels of inadequate resources and/or demanding conditions lead to undesired results.

The COVID-19 fear literature does not have proof of the relationship of the COVID-19 fear to two vital constructs, such as job insecurity and work engagement. Even though Jung et al. [98] investigated the relationship between job insecurity and job engagement recently amongst hotel staff members, the COVID-19 fear was not investigated as a separate

Sustainability **2022**, 14, 12203 12 of 16

variable in that study but considered as a situational variable instead. This study differs from the mentioned research, as it is the first to attempt to empirically test the COVID-19 fear within the Norwegian service industry where the linkages of the two mentioned constructs were investigated.

5.2. Managerial Implications

This research study suggests several useful ramifications that can allow department supervisors/managers to act throughout and even after COVID-19, to retain skilled workers. To attain this, primarily the management should consider both the high level of stress and job security perceptions of employees which may affect their mental well-being, and their well-being while threatening employees in the organization during the pandemic diffusion. The management should not be budget-minded and just try to consider payroll cuts or reductions. That is, they need to be empathetic and should keep in mind that they send negative signals to employees in every singular decision, which it takes for the betterment of the organization's financial outcomes, which reduces the bottom-line employees 'overall belief in the organization.

Service industry firms can follow the close communication with employees by giving some feedback about the organization's position and set up some training programs (online or hybrid) to assist workers to cope with their uneasiness or stress and anxiety. In these online briefings or training, staff members may see that the organization does not underestimate their values as associates of the business, attempts to maintain them and assist them to establish strength and development. Using such an approach management may continue its credibility and can continue to keep and retain their skilled employees. In addition, management ought to go on organizing such workshops when COVID-19 is calmed. This is necessary due to the fact that service industry staff members who are often besieged with stress factors and struggle with stress and anxiety [99–101], would take advantage of establishing close positive communication, psychological strength, and security and confidence with other employees.

6. Limitations and Avenues for Future Research

This study examines the consequences of the COVID-19 fear during the pandemic. Even though qualitative studies are very limited in the relevant literature [102], future research studies examining the results of both the qualitative and quantitative COVID-19 fear amongst service industry staff members would be included in the extant literature. In addition to favoritism, sabotage and nepotism, these kinds of counterproductive work behaviors (CWB), or oppositely positive aspects of organizational behavior such as organizational citizenship behavior; can be examined in a future research study that would boost the results of the COVID-19 fear throughout the contagious COVID-19 pandemic.

This study used the convenience sampling method, which is often criticized for its selection bias, poor generalization or transferability [103]. Future research could apply using different sampling methods, as well as a bigger sample size for more generalized results.

The results might shed light on the understanding of the COVID-19 fear in a wider manner. The data was able to acquire information from informants in the Norway service industry. Future research studies can use information from more informants in the Nordic settings.

In closing, collecting cross-national information and evaluating the linkage illustrated in the design by means of such information would improve the existing understanding of the COVID-19 fear.

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Sustainability **2022**, 14, 12203 13 of 16

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Sustainability **2022**, 14, 12203 16 of 16

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