Effects of information on salary satisfaction during the COVID-19 pandemic: an equity-based mediation model

Information's effects on salary satisfaction

Received 28 March 2023 Revised 24 July 2023 Accepted 28 July 2023

Efectos de la información en la satisfacción salarial en tiempos de COVID-19: un modelo de mediación basado en la equidad

Sandra Montalvo-Arroyo, José Manuel de la Torre-Ruiz, María Dolores Vidal-Salazar and Eulogio Cordón-Pozo Management Department, University of Granada, Granada, Spain

Abstract

Purpose – This research aims to study the effects of information (on salary, salary reductions and the pandemic's impact on the organization) on the salary satisfaction of workers whose salary had been cut during the coronavirus disease 2019 (COVID-19) pandemic, analyzing the mediating role of salary equity in this relationship.

Design/methodology/approach – Information was acquired with a structured questionnaire sent by email in May 2021 from 251 employees in Spain during the "third wave" of COVID-19. The model was estimated using the weighted least squares mean and variance adjusted (WLSMV).

Findings – Results collected reveal that workers' perceptions of equity fully mediated the relationship between salary information, information on salary cuts and salary satisfaction.

Practical implications – Learning more about the effects of information on salary satisfaction can contribute to communication policies that reduce the negative impact of sensitive salary decisions, practical implications for employees, organizations and policymakers.

Originality/value – This study examines the central role of organizational information as a mechanism for managing problems arising from the pandemic-induced unfavorable working conditions. This study analyzes how this information affects workers' attitudes, highlighting the role of equity as a mediator in this process.

Keywords COVID-19, Equity, Perceived justice, Informational justice, Salary information, Salary satisfaction **Paper type** Research paper

© Sandra Montalvo-Arroyo, José Manuel de la Torre-Ruiz, María Dolores Vidal-Salazar and Eulogio Cordón-Pozo. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

This research is publicly funded by the Institution "Regional Ministry of Economic Transformation, Industry, Knowledge and Universities, Andalusian Regional Government", Spain.



Academia Revista Latinoamericana de Administración Emerald Publishing Limited 1012-8255 DOI 10.1108/ARLA-03-2023-0054

Resumen

Propósito – Esta investigación pretende estudiar los efectos de la información (sobre el salario, las reducciones salariales y el impacto de la pandemia en la organización) en la satisfacción salarial de los trabajadores que sufrieron reducciones salariales durante la pandemia de COVID-19, analizando el papel mediador de la equidad salarial en esta relación.

Diseño/metodología/enfoque — La información se obtuvo mediante un cuestionario estructurado enviado por correo electrónico en mayo de 2021 a 251 empleados en Espa durante la "tercera ola" de COVID-19. El modelo se estimó utilizando la media ponderada de mínimos cuadrados, y varianza ajustada (WLSMV).

Conclusiones – Los resultados recogidos revelan que la percepción de equidad de los trabajadores media totalmente la relación entre la información salarial y la información de recortes salariales sobre la satisfacción salarial.

Implicaciones prácticas – Aprender más sobre los efectos de la información en la satisfacción salarial puede contribuir a políticas de comunicación que reduzcan el impacto negativo de decisiones salariales delicadas, implicaciones prácticas para empleados, organizaciones y responsables políticos.

Originalidad – Este estudio examina el papel central de la información organizativa como mecanismo de gestión de los problemas derivados de las condiciones laborales desfavorables inducidas por la pandemia. Analiza cómo esta información afecta a las actitudes de los trabajadores, destacando el papel de la equidad como mediador en este proceso.

Palabras clave COVID-19, Equidad, Justicia percibida, Justicia informativa, Información salarial, Satisfacción salarial

Tipo de papel Trabajo de investigación

Introduction

The health, economic and social crisis caused by the pandemic has generated enormous challenges for labor, with a devastating impact on organizations and their workers (Gallup Inc, 2022; Kniffin *et al.*, 2021; World Economic Forum, 2020). Labor relations, which due to their complex dynamic nature, depend on social and business contexts (Heaphy *et al.*, 2018), were affected by the lockdowns imposed by governments around the world to fight the spread of the virus.

The measures taken, along with the unstable health situation, caused numerous changes in the workplace (Rudolph *et al.*, 2021), high unemployment rates and severe loss of income worldwide, increasing economic and social inequality (International Labor Organization, 2020; Mishra and Cousik, 2021). Large numbers of workers lost their jobs temporarily or permanently, or their salaries were lowered, reducing household economies for months. The impact of these measures on workers is extremely important to business, since employees' satisfaction directly affects their productivity and competitiveness (De la Torre *et al.*, 2019; Luna *et al.*, 2020). Since employees' perception of their salary is subjective (Lloréns and Senise, 1996), salary satisfaction can be altered in several ways, including how internal salary procedures are communicated and implemented (Bobocel and Zdaniuk, 2005; Colquitt *et al.*, 2001). In this regard, previous research suggests that providing employees with honest, detailed information is an important factor in their perception of salary justice (Jawahar and Stone, 2011).

According to Castro-Martínez and Díaz-Morillas (2020), happiness and well-being in the workplace go through internal communications management, which if done properly, positively influences workers by increasing their motivation and improving their performance, productivity and identification with the brand. With such information, workers can appreciate the effort made by their organization, and the organization can continue defending ethical principles in its decisions, which, if not well justified, may *a priori* seem unfair, irresponsible, or unsupportive (Carter *et al.*, 2020; Crossan *et al.*, 2013). Although in a crisis like the COVID-19 pandemic, many organizations have little scope for action in the face of change, they can control the internal information they provide their workers. Learning more about the effects of information on salary satisfaction can

Information's effects on satisfaction

salarv

contribute to communication policies that reduce the negative impact of sensitive salary decisions. By satisfying the need of the individuals concerned to be informed about complex changes in the organization, their uncertainty is reduced and the new organizational framework makes more sense to them (Rudolph et al., 2021; Rutte and Messick, 1995; Sharpe, 2002).

The objective of this study was to analyze the impact of the information organizations provide employees on their work attitudes and on salary satisfaction in a context of reductions, considering the mediating effect of perceived equity. This is a significant issue, since perceived salary equity and salary satisfaction are two key factors in the organization's performance and success (De la Torre et al., 2019; Luna et al., 2020; Richter et al., 2018).

This article therefore contributes to the literature by analyzing how organizational information affects workers. First, it shows the importance of the message itself, since the type of information affects the attitudes developed by workers. Second, it analyzes how this information affects workers' attitudes, highlighting the role of equity as a mediator in this process.

Salary reductions

Compensation plays a fundamental role in organizations (Hazeen and Umarani, 2023; Mitra et al., 2020), and its effective management can improve and increase the motivation and productivity of salaried personnel, contribute to achievement of the organization's strategic objectives and facilitate changes planned (Crespi-Vallbona and Mascarilla-Miró, 2018). Compensation policies usually enable the organization to adapt to situations encountered, becoming an effective way to control and provide incentive for employees, as well as attract and retain talent (Mitra et al., 2020; Rahmandad and Ton, 2020; Taahir et al., 2020). Therefore, the effects of salary changes on salary satisfaction should be analyzed under conditions of the highest economic uncertainty when the company's ability to act is greatly diminished and salary reductions are widespread.

During the pandemic, the variations in the monthly average salary were evident (International Labor Organization, 2020). Salaries declined (or grew more slowly) in twothirds of the countries for which data were available. For example, in the United Kingdom, salary decreased by 2.1% with a stable unemployment rate. In France and Germany, the situation was similar. However, Ireland, Spain and Portugal underwent the largest wage bill reduction of over 10% (International Labor Organization, 2020). This caused a sudden significant loss of workers' income, which according to the literature, leads to negative labor relations, increasing frustration and harmfully impacting on employee morale (Gerhart and Rynes, 2003; Greenberg, 1990; Wang and Seifert, 2017). In the face of such abrupt changes, workers go into "high alert" and their work behavior changes, affecting factors such as attraction, retention and performance (Rynes et al., 2004). Wang and Seifert (2017), for example, found that salary reductions in times of recession had a strong impact on worsening morale that negatively affected workers' job satisfaction and organizational commitment, Sandvik et al. (2018) found that in the face of an 18% reduction in commissions, the level of employee effort was not significantly altered; however, turnover increased by almost 50% among those with the best performance, leading to a drop in business productivity.

Importance of the information provided by the company

The organization's decision to provide workers with adequate information is defended by the Organizational Justice Theory (e.g. Colquitt et al., 2001; Greenberg, 1993). Among its various

dimensions, informational justice refers to the extent to which explanations offered workers are sufficiently appropriate, clear, reasonable, detailed and timely (Colquitt *et al.*, 2001) to convince them when logically explained (Hosmer and Kiewitz, 2005). Informational justice reflects the perceived quality of the relationship between employees and employers (Montañez-Juan *et al.*, 2019) and has been shown to have direct effects on the intrinsic motivation of workers, significantly influencing their emotional attachment to the organizations they work for (Aguiar-Quintana *et al.*, 2020). It also has positive complementary effects on job satisfaction, workplace deviance and organizational citizenship behaviors, which in turn influences employee performance, absenteeism and turnover (Marasi *et al.*, 2018; Montañez *et al.*, 2019).

The absence of clear and adequate communication in human resources policies in organizations results in employees experiencing a lack of sincere support from management that affects employee attitudes and performance (Lee and Chui, 2019).

Previous research has shown that transparent communication in organizations builds bonds of trust between the parties involved (management-employees), providing effective organizational relationships and motivation that fosters workers' organizational commitment (Dolphin, 2005; Mishra et al., 2014; Scott et al., 2020).

Communication is like a "corporate lifeboat" in difficult times and a catalyst for organizational excellence and effectiveness (Dolphin, 2005). Likewise, exchange of information can be positively interpreted by workers, since it shows them how valuable they are to the company and encourages them to identify with the organization (Castro-Martínez and Díaz-Morilla, 2020).

Richter *et al.* (2018) showed that information and respectful treatment of workers through adequate explanations in a situation of uncertainty, and specifically, the possibility of losing their jobs, can mitigate their negative reactions by increasing their perception of equity. This increases their self-esteem and reduces the possibility of behavior harmful to the organization. The information provided, along with personal recognition by an organizational superior, helps cope with a stressful situation (job loss) and reduces uncertainty about social relationships (Richter *et al.*, 2018).

However, some research does not support the theories above. Schreurs *et al.* (2013) found that a climate of information exchange increases the effect of low salary satisfaction on turnover but does not mitigate negative feelings related to salary and contributes to "psychological withdrawal" of employees. The reasoning behind these results is that in this situation, workers perceive that this information exchange with the company implies its increased control (Schreurs *et al.*, 2013), because they see the organization as controlling. This may cause workers to view any organizational exchange with suspicion and resist change (Furst and Cable, 2008).

Effects of information on salary satisfaction in a context of salary reductions Effects of salary information

As remuneration is extremely important to workers (Day, 2011), greater knowledge about it in information communicated internally by the organization leads workers to develop a stronger bond of trust and sense of belonging in the company (Mishra *et al.*, 2014). The organization will be more productive and successful with an open approach to salary communication (Marasi *et al.*, 2018). Action taken to inform workers can shape their perception of whether the organization is really interested in their well-being (Schreurs *et al.*, 2013), enabling them to develop perceptions of fair salary practices (Colquitt *et al.*, 2001; Scott *et al.*, 2020). Therefore, the implementation of effective salary communication systems increases employee satisfaction with pay received (Jawahar and Stone, 2011;

Information's effects on salary satisfaction

Scott *et al.*, 2020). In addition, employees may think that the organization acts selflessly in reporting salaries and not hiding the information and addressing any concerns about salaries (Marasi and Bennett, 2016). This in turn has positive effects on their perception of informational justice (Colquitt *et al.*, 2001) and consequently on salary satisfaction (Day, 2011; Jawahar and Stone, 2011).

Similarly, Till and Karren (2011) found that comprehensive, honest salary information positively influences salary satisfaction through the perception of equity. As equity is evaluated in a comparison of the result-input relationship with other referents (internal and external), satisfaction is the result of the balance of those comparisons (Adams, 1963, 1965) based on the information provided by the organization (Folger and Cropanzano, 2001; Rutte and Messick, 1995).

If the organization explains its decisions to its employees sufficiently and logically, they will develop a perception of informational justice as "fair". This in turn will have a positive impact on the comparisons affecting equity, their attitudes toward the organization will be more positive (Colquitt *et al.*, 2001; Folger and Cropanzano, 2001), and their salary satisfaction will increase (Scott *et al.*, 2020).

In a situation of high uncertainty, if the company offers its employees salary information, they will be able to cope with the situation better and understand decisions made, even though they may be prejudicial for them, by correcting inaccurate perceptions about their salary (Scheller and Harrison, 2018; Scott *et al.*, 2020). In view of the above, we postulated:

- H1a. Satisfaction with salary information has a significant direct effect on salary satisfaction.
- H1b. Perceptions of equity mediate the relationship between satisfaction with salary information and salary satisfaction.

Effects of salary reduction information

Faced with an unexpected, stressful and personally significant situation with a negative or unfavorable outcome, people need to know why (Wong and Weiner, 1981). Specifically, the workers were able to ask a broader question: "is my organization fair"? (Colquitt et al., 2023). Therefore, in such situations, clear and honest information is an essential economic tactic for promoting perceptions of organizational justice (Greenberg, 1990).

Since any change in working conditions (e.g. changes in working hours, workplace closures, suspension of the employment contract, reduction in wages) has obvious consequences for workers, it is logical for each of these decisions to require relevant information, especially in controversial negative events (Shaw et al., 2003). Information in difficult times, specifically, during layoffs, reduces uncertainty about social relationships (Richter et al., 2018). Furthermore, it can be an effective tool for improving salary satisfaction as well as for improving perceptions of salary equity and salary satisfaction (Scott et al., 2020).

Wage cuts could cause negative morale, particularly if the organization does not communicate a convincing reason for the change (Greenberg, 1990). Perceptions of justice (e.g. the informational justice), can potentially play a role in the well-being of workers (Colquitt *et al.*, 2023).

Providing information about how salary reductions were implemented in the organization could improve workers' perception of the need for such reductions (Levi et al., 2019) and help internalize organizational challenges, accepting the organizational reasons for wage cuts (Greenberg, 1990, 1993). If an outcome is unfavorable for employees, but they receive information that makes the decision-making process look

fair, the decision-making authority is less likely to be questioned (Hartman *et al.*, 1999; Kanheman *et al.*, 1986; Rutte and Messick, 1995; Scott *et al.*, 2020). In other words, providing information on the decision made ensures that the organization's salary reductions are understood to be "necessary", consequently affecting the individual attitudes of workers and particularly their salary satisfaction (Jawahar and Stone, 2011).

In addition, information on salary cuts is expected to influence salary satisfaction through perception of equity (Greenberg, 1990; Hosmer and Kiewiz, 2005). Greenberg (1990) examined how an organization communicated pay cuts and its effect on workers' perceived equity. The results showed that the explanations given by the organization for salary reductions, as well as showing regret for them, increased workers' perception of equity. Later, Greenberg (1993) found, in a laboratory study, that when workers' salaries moved from what they considered equitable to insufficient, theft rates were moderated by the validity of the information given and the interpersonal sensitivity shown by the organization. Taking these approaches into account, the following hypotheses were formulated:

- H2a. Satisfaction with information on salary reductions has a significant direct effect on salary satisfaction.
- *H2b.* Perception of salary equity mediates the relationship between satisfaction with information about salary reductions and salary satisfaction.

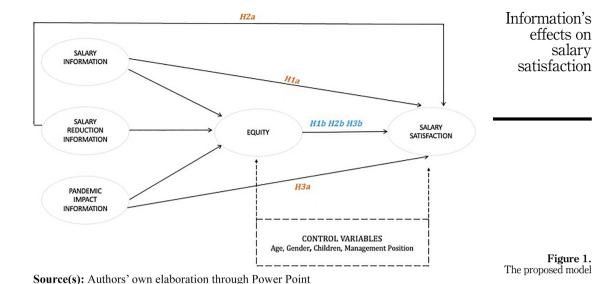
Effects of information on the pandemic impact on the organization

Previous research has suggested that information on how an organizational crisis is being managed mitigates the negative effects of the crisis (Bobocel and Zdniuvk, 2005; Shaw et al., 2003). When organizations provide information about negative events affecting them, they manage to make "psychological sense" of the event, positively influencing stakeholders (Zdaniuk and Chhinzer, 2019). Reporting on the organization's financial situation, especially during a period of high uncertainty, helps internalize the problems of the organization itself, improves perceptions of fairness and enables employees to understand organizational decisions in times of crisis (Wang and Seifert, 2017).

Moreover, such information can influence salary satisfaction through perception of equity. If the organization provides its workers with information explaining the prejudicial situation they are going through, their perception of equity can be increased (Carter *et al.*, 2020; Kahneman *et al.*, 1986), because they understand the cause of the harm done to them, reducing their possible negative reaction (Richter *et al.*, 2018). Therefore, we hypothesized that:

- H3a. Satisfaction with information on the impact of the pandemic on the organization has a significant direct effect on salary satisfaction.
- H3b. Perceptions of equity mediate the relationship between satisfaction with information on the impact of the pandemic on the organization and salary satisfaction

Figure 1 shows the model proposed. We analyzed the influence of the information provided by the organization on workers' salary satisfaction by means of their perception of equity.



Methodology

Sample

In Spain, the effect of the pandemic on salaries was particularly significant. Specifically, salaries were reduced by an estimated 12.7%: 9.7% due to the reduction in hours worked and 3% due to job loss (International Labor Organization, 2020). Many fixed salaries were cut due to the massive implementation of both temporary (ERTEs) and definitive (EREs) employment regulation measures. Likewise, variable salaries were also reduced due to the slowdown and temporary interruption of economic activity.

Information was acquired with a structured questionnaire sent by email in May 2021 that received 1,398 valid responses. Of the 1,398 workers who answered the questionnaire, 251 reported salary reductions (either in their fixed and/or variable salary or in social benefits), representing around 18% of the total sample. The men (52%) and women (48%) in the final sample (n=251) had a mean age of 41.42 years (Standard Deviation = 9.05), a minimum age of 23 and maximum of 62 and 50% had children. Of the employees surveyed and finally selected, 1.3% held managerial positions.

Measurement

The constructs of interest were measured as follows:

Salary information. Salary was measured in two items adapted from "The Comprehensive Compensation Satisfaction Questionnaire" (Williams *et al.*, 2008). The participants were asked to indicate on a seven-point Likert scale how satisfied they were with (1) the information received about their pay and (2) the information received about benefits. The Cronbach's alpha coefficient was 0.78.

Salary reduction information. The aim was to analyze company communications on salary changes and, more specifically, salary reductions. The five items focused on explanations or information given for why, when and how certain procedures or salary reductions implemented were communicated. The items were presented on a seven-point Likert scale adapted from the original "Informational Justice" scale by Colquitt (2001) adapted to the Spanish context by Díaz-Gracia et al. (2014). The Cronbach's alpha coefficient was 0.95.

Information on the pandemic's impact on the organization. This measure, designed ad hoc for this study, had one item rated on a 10-point Likert scale. Specifically, participants were requested to indicate how satisfied they were with the way in which the company informed them about the impact of the pandemic on the organization (from 1 = totally dissatisfied, the company has not informed us at all and 10 = completely satisfied, the company has been transparent in informing us about the effects of the pandemic on the organization).

Equity. Three items were used, based on the equity dimensions identified by Adams (1965), to measure employees' equity perceptions. Specifically, the proposal by Buttner and Lowe (2017) was adapted in a seven-point Likert scale. The alpha coefficient for the "Equity" scale was 0.92.

Salary satisfaction. This concept was measured by two items adapted from "The Comprehensive Compensation Satisfaction Questionnaire" (Williams *et al.*, 2008). Participants were asked to indicate on a seven-point Likert scale the extent to which they were satisfied with: 1) with the total monetary salary they receive (both fixed and variable) and 2) with the social benefits package. The alpha coefficient was 0.72.

Control variables. Previous research has controlled for the influence of certain demographic variables (e.g. gender, children, management position and age) on work attitudes and behaviors (Aguiar-Quintana et al., 2020; Greenberg, 1990; Terpstra and Honoree, 2003). Williams et al. (2006) provide consistent evidence for the view that gender is a determinant of salary satisfaction. Differences in the positions occupied by workers in the organization may lead to salary differences, which by extension, may affect the level of salary satisfaction (Heneman et al., 1988). In view of the above, four control variables related theoretically to the key variables in this study were included. These were participant gender (dichotomous variable coded as 0 for female and otherwise 1), age (years), children (0 = no, 1 = yes) and type of position held (0 = non-managerial and 1 = managerial).

Statistical methods

The final model was estimated using the path-analysis technique with observed variables, so only additive and No multi-item scales were used (Kline, 2016). All statistical calculations were carried out using R version 4.1.2 (R Core Team, 2021). Following the recommendations of Gana and Broc (2019), we used the weighted least squares mean and variance adjusted (WLSMV) method.

Table 1 presents a summary of reliability and descriptive statistics for the variables of interest along with the correlation matrix.

Results

Table 2 the results of the estimated model, showing that the information provided workers and the equity perceived by them predicted their salary satisfaction, explaining 37.10% of the variations.

Table 3 shows the indirect and total effects on salary satisfaction of the information provided by the organization.

The results found for the study hypotheses are specifically explained below. First, No statistically significant relationship was found between satisfaction with salary information and salary satisfaction not supporting Hypothesis 1a. However, the indirect effect of satisfaction with salary information on salary satisfaction through equity is statistically significant ($\beta = 0.22$, p < 0.001). In addition, as the direct effect of satisfaction with salary information on salary satisfaction is not significant, hence, equity fully mediates the relationship analyzed, supporting Hypothesis 1b.

Second, we found a positive but not statistically significant relationship between Satisfaction with salary reduction information and Salary satisfaction. Therefore, Hypothesis 2a did not support. Regarding the mediating role of equity, the indirect effect of satisfaction with the

Information's effects on salary satisfaction

Variable	Reliability	M	SD	1	2	3	4	2	9	7	8
1 А <i>о</i> ге	I	41 42	9.05								
0.0		25.55	00.0	000							
Z. Gender	ı	0.52	0.50	0.02							
3. Children	I	0.50	0.50	0.47**	-0.02						
4. Management Position	I	0.13	0.33	0.00	0.05	0.03					
5. Salary Information	0.78	3.69	1.72	80.0	-0.00	0.19**	60.0				
6. Reduction Salary Information	0.95	3.67	1.91	-0.02	-0.02	-0.00	0.07	0.57**			
7. Pandemic Impact Information	I	6.72	2.51	-0.00	-0.17**	0.04	0.05	0.43**	0.48**		
8. Equity	0.92	3.69	1.66	0.05	0.03	0.10	0.15*	0.64**	0.53**	0.36**	
9. Salary Satisfaction		3.79	1.28	-0.03	0.11	0.05	0.20**	0.30**	0.29**	0.18**	0.58
Note(s): n = 251. Reliability is used to Gender is coded: female (0) and male (1 Source(s): Authors' own elaboration	ed to represent r le (1). Children is ion	eliability. N coded: has	A and SD s No childi	o represent reliability. M and SD are used to represent me I). Children is coded: has No children (0) and has children (1	present mean s children (1).	nean and standard deviation, 1 (1). Management Position is (nd standard deviation, re fanagement Position is co		. Indicates * nanagerial (espectively. Indicates * p < 0.05; ** p < 0.01 oded: non-managerial (0) and managerial (1	$^{k}p < 0.01.$ Igerial (1)

Table 1. Reliability, means, standard deviations and correlations

ARL	Α
-----	---

Variable	E	Depend quity	ent variable Salary satisfaction		
Control variable	β	t	β	t	
Age	0.003	0.28	-0.01	-1.13	
Gender	0.12	0.79	0.23	1.80	
Children	0.01	0.05	0.10	0.66	
Management Position	0.40	2.03*	0.41	2.10*	
Independent variable					
Salary Information	0.46	7.03***	-0.09	-1.51	
Salary Reduction Information	0.19	3.14**	0.01	0.34	
Pandemic Impact Information	0.03	0.85	0.003	0.09	
Equity			0.48	9.14***	
R^2 Model	(0.45	0.37		

Table 2. Regression results. estimated coefficients. estimation method WLSMV

Note(s): n = 251. *p < 0.05; **p < 0.01; ***p < 0.001

Source(s): Authors' own elaboration

Table 3. Indirect and total effects on salary satisfaction, estimated coefficients. Estimation method WLSMV

	Indirect		Total	
Predictor variable	β	t	β	t
Salary Information	0.22	6.10***	0.13	1.90
Salary Reduction Information	0.09	2.78***	0.11	1.95
Pandemic Impact Information	0.01	0.85	0.01	0.54
Note(s): n = 251. *p < 0.05; **p < 0.05; *				

information on salary reductions on salary satisfaction through equity is statistically significant $(\beta = 0.09, p < 0.001)$. In addition, as the direct effect of satisfaction with the information on salary reductions on salary satisfaction was not significant, equity fully mediates the relationship analyzed, which supports Hypothesis 2b.

Finally, we found a positive, but not statistically significant relationship, between satisfaction with information on the impact of the pandemic on the organization and salary satisfaction ($\beta = 0.003$, p = 0.92), so Hypothesis 3a was not supported in our sample. Similarly, the indirect effect of satisfaction with information on the pandemic's impact on the organization on salary satisfaction through equity is not statistically significant, and therefore, Hypothesis 3b is not supported.

Table 2 shows that for the dependent variables, equity and salary satisfaction, the "Age" $(\beta = 0.003; p = 0.77)$, "Gender" $(\beta = 0.12; p = 0.42)$ and "Children" $(\beta = 0.01; p = 0.95)$ control variables did not influence the perception of equity of workers whose salaries had been cut. "Managerial Position" ($\beta = 0.40$; p = 0.04) did significantly influence perception of equity.

The control variables, "Age" ($\beta = -0.01$; $\beta = 0.25$), "Children" ($\beta = 0.10$; $\beta = 0.50$) and "Gender" ($\beta = 0.23$; p = 0.07), did not influence salary satisfaction when salaries had been cut. However, for "Managerial Position", the relationship was positive and significant ($\beta = 0.41$; p = 0.03). Occupying managerial positions in organizations increased perceptions of equity and salary satisfaction.

Discussion

We examined the effects of information (on salary, salary reductions and the pandemic's impact on the organization) on the salary satisfaction of workers whose salary had been cut

Information's effects on salary satisfaction

during the COVID-19 pandemic, analyzing the mediating role of salary equity in this relationship, which has been systematically ignored by empirical research (Williams *et al.*, 2006). Our starting approach adhered to Organizational Justice Theory (Colquitt *et al.*, 2001; Greenberg, 1990), which advocates that workers who are explained the processes and procedures implemented in the organization in sincere, adequate, clear, detailed and timely information, evaluate the structural aspects of the process, improve their perception of fairness and value their salary satisfactorily (Jawahar and Stone, 2011; Terpstra and Honoree, 2003; Till and Karren, 2011).

Our results led us to some interesting conclusions with theoretical and practical implications.

First, we did not find any significant direct relationship between any of the types of information analyzed and salary satisfaction. Contrary to what we expected from previous research (e.g. Jawahar and Stone, 2011; Till and Karren, 2011; Day, 2011), the information provided did not directly and significantly influence salary satisfaction. Our results suggest that when salaries are cut, information does not directly cause workers to be more satisfied with their salary. Despite complete, clear and truthful information, their salary satisfaction was not significantly altered. As previous research has been carried out in other contexts, it may not be applicable to our context of salary reductions and international economic crisis, with a pandemic severely affecting labor relations, and therefore, their results differ from those found here (Rudolph *et al.*, 2021).

Additionally, it is important to consider that previous studies were conducted in the USA. Our research was carried out in Spain. Both countries differ in terms of culture, labor legislation and employment traditions and practices (e.g. individualism, salary secrecy), all of which suggest that there are significant differences between the countries. These differences may influence the responses of workers in these countries (Scott *et al.*, 2020). Specifically, Scott *et al.* (2020) found that the average salary satisfaction scores were significantly higher in the USA (3.05) than in Spain (2.63), even though the average scores for perceptions of salary transparency were significantly lower in the USA (2.94) than in Spain (3.45). Hence, the context could explain why the impact of salary information is lower in some countries. As proposed by Williams *et al.* (2008), the fact that employees consider the provision of salary information as a frequent policy of firms can lead them to perceive it as natural rather than something special. Consequently, this perception may influence salary satisfaction and, in contexts of more salary transparency, like Spain, salary information can have a lower effect on salary satisfaction.

Secondly, our results show that both the provision of general salary information and information about salary reductions increase the salary satisfaction of workers whose salary has been cut, but only indirectly, through the improvement of their perception of equity, validating previous research (Greenberg, 1990–1993; Kahneman *et al.*, 1986; Wang and Seifert, 2017). Thus, perception of equity acts as a leveler in difficult times. As equity, like an antidote, shapes negative contextual pressures affecting the organization (Crossan *et al.*, 2013), when the organization provides salary information and information on salary reductions that workers consider adequate, they can make fairer salary comparisons inside and outside the organization. This complementary information helps them to perceive reductions as necessary and, therefore, to perceive their salary as fair and to value it satisfactorily. With such information, workers can make a more realistic and less emotional salary comparison since they can assess the situation more rationally.

Third, despite a positive correlation, the information on the impact of the crisis on the organization did not significantly influence workers' perceptions of equity or salary satisfaction. One explanation for this result is that information on the impact of the crisis on the organization is a more general measure of fairness than salary information and information on salary reductions which focus on salary. As suggested by Williams *et al.* (2006), this gives rise to different relationships with salary equity and satisfaction.

Informational organizational justice is more strongly related to salary equity and satisfaction with a salary-focused measure of justice. It assesses the degree of satisfaction with salary information and salary reductions more specifically than a general measure of justice, which assesses satisfaction with transparency in organizational information more broadly.

Other research (Scheller and Harrison, 2018) has shown that this more general measure of informational justice may be very beneficial for other work attitudes, such as organizational commitment, especially when considering salary satisfaction. Scheller and Harrison (2018) found that general information provided by the company positively influenced general employee ratings, but that such an effect did not extrapolate to reactions or ratings on other more specific aspects, such as salary in our case. This would explain why even though workers value information on salary and salary reductions, or information on the impact of the crisis on the organization positively, it does not significantly influence their salary satisfaction, either directly or indirectly, although it may have a favorable influence on other more general aspects.

Practical implications

Based on our research, we recommend that when salary reductions are widespread under highly uncertain circumstances, company and human resource managers provide sufficient salary information, since adequate, sincere, detailed and appropriate information is of vital importance for workers to consider their salary fair. Thus, maintaining a good salary communication strategy plays a fundamental role in perception of equity as a buffer against pressure during crises and helps to strengthen organizations' ethics and the well-being of their workers. Thus, for the good practice of human resource management, communicating information when the organization is going through difficult times can help increase, or at least maintain, employees' sense of well-being. In times of economic shock, most companies not only do not have the funds to motivate employees with salary increases but must make unpopular reductions. Salary communication policies that explain such adjustments can help compensate for the lack of financial resources to implement conventional measures. It is also important for human resource managers to analyze the internal pulse of fair pay, as a very appropriate indicator for organizational decisions affecting salary satisfaction. Strategies that promote the perception of salary equity can lead to acceptance of the a priori very difficult organizational changes required in such turbulent situations as the pandemic. Moreover, regardless of the tangible benefits that can be achieved through equity (Jawahar and Stone, 2011; Richter et al., 2018; Till and Karren, 2011), ethically competitive organizations may find it a valuable end (Cropanzano et al., 2022).

Limitations and future research

Our research has some limitations. Firstly, perceptions of equity and the way in which workers value their salary may be conditioned by cultural aspects (e.g. Bobocel and Zdaniuk, 2005; Hofstede, 1985). However, by focusing on a single country (Spain), the effects of these differences were controlled for. Nevertheless, future work on these relationships in other cultural contexts is necessary to demonstrate the consistency of the results obtained.

Secondly, future work should consider some aspects not covered in this study that could influence the effects of information, such as the source or medium through which the information is provided. This is extremely interesting, since the source or medium may influence the worker's perceptions when processing the information provided and may or may not be controlled for by the organization.

Thirdly, the research adopts a cross-sectional design. It was necessary to use a cross-sectional design, either impractical or it does not make theoretical sense to measure each of constructs at separate points in time, especially for testing assumptions about the

relationships of interest and provides a clear impression of the state or among a group of workers at a given point in time (Spector, 2019; Taris et al., 2021).

Finally, use of single key organizational informants is an effective approach in many research contexts (Yao-Sheng, 2007; Lee *et al.*, 2005). Following the recommendations of Podsakoff *et al.* (2003), several measures were adopted to reduce the potential risk of common method biases due to a single respondent. First, participants remained anonymous and were assured that there were No good or bad answers, asking them to be as sincere and honest as possible. Second, the items were very carefully constructed. Furthermore, we conducted Harman's single factor test to account for common method bias and included all the indicators in an exploratory factor analysis (Podsakoff *et al.*, 2003).

Information's effects on salary satisfaction

Conclusion

The COVID 19 pandemic brought about drastic social and labor changes that were very difficult to assimilate. The great challenges faced had not previously been experienced, so company behavior was often improvised. However, common sense and the desire of companies to maintain the ethical behavior valued by their workers meant that information about what was happening and how it influenced working conditions was essential to reducing the uncertainty.

References

- Adams, J.S. (1963), "Towards an understanding of inequity", *The Journal of Abnormal and Social Psychology*, Vol. 67 No. 5, pp. 422-436.
- Adams, J.S. (1965), "Inequity in social exchange", Advances in Experimental Social Psychology, Vol. 2, pp. 267-299.
- Aguiar-Quintana, T., Araujo-Cabrera, Y. and Park, S. (2020), "The sequential relationships of hotel employees' perceived justice, commitment, and organizational citizenship behavior in a high unemployment context", Tourism Management Perspectives, Vol. 35, 100676.
- Bobocel, D.R. and Zdaniuk, A. (2005), "How can explanations be used to foster organizational justice?", in Greenberg, J. and Colquitt, J.A. (Eds), *Handbook of Organizational Justice*, Lawrence Erlbaum, Mahwah, NJ, pp. 469-498.
- Buttner, E.H. and Lowe, K.B. (2017), "The relationship between perceived pay equity, productivity, and organizational commitment for US professionals of color", *Equality, Diversity, and Inclusion*, Vol. 36 No. 1, pp. 73-89.
- Carter, A.B., Bobocel, D.R. and Brockner, J. (2020), "When to explain why or how it happened: tailoring accounts to fit observers' construal level", *Journal of Experimental Psychology-Applied*, Vol. 26 No. 1, pp. 158-170.
- Castro-Martínez, A. and Díaz-Morilla, P. (2020), "Comunicación interna y gestión de bienestar y felicidad en la empresa española", Profesional De La Información, Vol. 29 No. 3, e290324.
- Colquitt, J.A. (2001), "On the dimensionality of organizational justice: a construct validation of a measure", Journal of Applied Psychology, Vol. 86 No. 3, pp. 386-400.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O. and Ng, K.Y. (2001), "Justice at the millennium: a meta-analytic review of 25 years of organizational justice research", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 425-445.
- Colquitt, J.A., Hill, E.T. and De Cremer, D. (2023), "Forever focused on fairness: 75 years of organizational justice in Personnel Psychology", Personnel Psychology, Vol. 76 No. 2, pp. 413-435.
- Crespi Vallbona, M. and Mascarilla i Miró, O. (2018), "Job satisfaction. The case of information technology (IT) professionals in Spain", *Universia Business Review*, Vol. 58 No. 2, pp. 36-51.

- Cropanzano, R., Skarlicki, D.P., Nadisic, T., Fortin, M., Van Wagoner, P. and Keplinger, K. (2022), "When managers become Robin Hoods: a mixed method investigation", *Business Ethics Quarterly*, Vol. 32 No. 2, pp. 209-242.
- Crossan, M., Mazutis, D. and Seijts, G. (2013), "In search of virtue: the role of virtues, values and character strengths in ethical decision making", *Journal of Business Ethics*, Vol. 113 No. 4, pp. 567-581.
- Day, N.E. (2011), "Perceived pay communication, justice and pay satisfaction", Employee Relations, Vol. 33 No. 5, pp. 476-497.
- De la Torre-Ruiz, J.M., Vidal-Salazar, M.D. and Cordón-Pozo, E. (2019), "Employees are satisfied with their benefits, but so what? The consequences of benefit satisfaction on employees' organizational commitment and turnover intentions", *The International Journal of Human Resource Management*, Vol. 30 No. 13, pp. 2097-2120.
- Díaz-Gracia, L., Barbaranelli, C. and Moreno-Jiménez, B. (2014), "Spanish version of Colquitt's organizational justice scale", *Psicothema*, Vol. 26 No. 4, pp. 538-544.
- Dolphin, R.R. (2005), "Internal communications: today's strategic imperative", *Journal of Marketing Communications*, Vol. 11 No. 3, pp. 171-190.
- Folger, R. and Cropanzano, R. (2001), "Fairness theory: justice as accountability", *Advances in Organizational Justice*, Vol. 1, pp. 1-55.
- Furst, S.A. and Cable, D.M. (2008), "Employee resistance to organizational change: managerial influence tactics and leader-member exchange", *Journal of Applied Psychology*, Vol. 93 No. 2, pp. 453-462.
- Gallup Inc (2022), State of the Global Workplace: 2022 Report: the Voice of the World's Employees, Washington, available at: https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx
- Gana, K. and Broc, G. (2019), Structural Equation Modeling with Lavaan, ISTE Ldt, London.
- Gerhart, B. and Rynes, S.L. (2003), Compensation: Theory, Evidence, and Strategic Implications. Foundations for Organizational Science, Sage Publications, New Delhi, ISBN: 978-81-7829-920-4.
- Greenberg, J. (1990), "Employee theft as a reaction to underpayment inequity: the hidden cost of pay cuts", Journal of Applied Psychology, Vol. 75 No. 5, pp. 561-568.
- Greenberg, J. (1993), "Stealing in the name of justice: informational and interpersonal moderators of theft reactions to underpayment inequity", Organizational Behavior and Human Decision Processes, Vol. 54 No. 1, pp. 81-103.
- Hartman, S.J., Yrle, A.C. and Galle, W.P. (1999), "Procedural and distributive justice: examining equity in a university setting", *Journal of Business Ethics*, Vol. 20 No. 4, pp. 337-352.
- Hazeen, M. and Umarani, C. (2023), "Fairness in human resource management practices and engineers' intention to stay in Indian construction firms", Employee Relations, Vol. 45 No. 1, pp. 156-171.
- Heaphy, E.D., Byron, K., Ballinger, G.A., Gittell, J.H., Leana, C. and Sluss, D.M. (2018), "Introduction to special topic forum: the changing nature of work relationships", Academy of Management Review, Vol. 43 No. 4, pp. 558-569.
- Heneman, R.L., Greenberger, D.B. and Strasser, S. (1988), "The relationship between pay-for-performance perceptions and pay satisfaction", Personnel Psychology, Vol. 41 No. 4, pp. 745-759.
- Hofstede, G. (1985), "The interaction between national and organizational value systems", Journal of Management Studies, Vol. 22 No. 4, pp. 347-357.
- Hosmer, L.T. and Kiewitz, C. (2005), "Organizational justice: a behavioral science concept with critical implications for business ethics and stakeholder theory", Business Ethics Quarterly, Vol. 15 No. 1, pp. 67-91.
- International Labor Organization (ILO) (2020), "Global wage report 2020-21: wages and minimum wages in the time of COVID-19", Geneva.

- Information's effects on salary satisfaction
- Jawahar, I. and Stone, T.H. (2011), "Fairness perceptions and satisfaction with components of pay satisfaction", Journal of Managerial Psychology, Vol. 26 No. 4, pp. 297-312.
- Kahneman, D., Knetsch, J.L. and Thaler, R. (1986), "Fairness as a constraint on profit seeking: entitlements in the market", *The American Economic Review*, Vol. 76 No. 4, pp. 728-741.
- Kline, R.B. (2016), Principles and Practice of Structural Equation Modeling, Guilford Press, New York.
- Kniffin, K.M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S.P., Bakker, A.B., Bamberger, P., Bapuji, H., Bhave, D.P., Choi, V.K., Creary, S.J., Demerouti, E., Flynn, F.J., Gelfand, M.J., Greer, L.L., Johns, G., Kesebir, S., Klein, P.G., Lee, S.Y., Ozcelik, H., Petriglieri, J.L., Rothbard, N.P., Rudolph, C.W., Shaw, J.D., Sirola, N., Wanberg, C.R., Whillans, A., Wilmot, M.P. and Vugt, M.V. (2021), "COVID-19 and the workplace: implications, issues, and insights for future research and action", American Psychologist, Vol. 76 No. 1, pp. 63-77.
- Lee, H. and Chui, J. (2019), "The mediating effect of interactional justice on human resource practices and organizational support in a healthcare organization", *Journal of Organizational Effectiveness: People and Performance*, Vol. 6 No. 2, pp. 129-144.
- Lee, K.C., Lee, S. and Kang, I.W. (2005), "KMPI: measuring knowledge management performance", Information and Management, Vol. 42 No. 3, pp. 469-482.
- Levi, A., Shapiro, D.L., Fried, Y., Markoczy, L. and Noghani, F. (2019), "When everyone works harder for fewer rewards, is it fair? Implications of 'Organization-wide hardship' for managing and studying organizational fairness", Group and Organization Management, Vol. 44 No. 2, pp. 396-424.
- Lloréns Montes, F.J. and Senise Barrio, M.E. (1996), *Una evaluación económica del impacto salarial en las actitudes de los trabajadores ante el mercado laboral*, Investigaciones Europeas de Dirección y Economía de la Empresa, Vol. 2 W3, pp. 13-25. researchgate.net.
- Luna-Arocas, R., Danvila-Del Valle, I. and Lara, F.J. (2020), "Talent management and organizational commitment: the partial mediating role of pay satisfaction", *Employee Relations*, Vol. 42 No. 4, pp. 863-881.
- Marasi, S. and Bennett, R.J. (2016), "Pay communication: where do we go from here?", *Human Resource Management Review*, Vol. 26 No. 1, pp. 50-58.
- Marasi, S., Wall, A. and Bennett, R.J. (2018), "Pay openness movement: is it merited? Does it influence more desirable employee outcomes than pay secrecy?", Organization Management Journal, Vol. 15 No. 2, pp. 58-77.
- Mishra, P. and Cousik, R. (2021), "Making pandemic response disability inclusive: challenges and opportunities for organizations", *Industrial and Organizational Psychology*, Vol. 14 Nos 1-2, pp. 76-80.
- Mishra, K., Boynton, L. and Mishra, A. (2014), "Driving employee engagement: the expanded role of internal communications", *International Journal of Business Communication*, Vol. 51 No. 2, pp. 183-202.
- Mitra, A., Israel, D. and Sharma, M. (2020), "Impact of compensation satisfaction on intention to quit: mediating role of job satisfaction", South Asian Journal of Management, Vol. 27 No. 3, pp. 129-155.
- Montañez-Juan, M.I., García-Buades, M.E., Sora-Miana, B., Ortiz-Bonnín, S. and Caballer-Hernández, A. (2019), "Work design and job satisfaction: the moderating role of organizational justice", *Revista Psicologia Organizações e Trabalho*, Vol. 19 No. 4, pp. 853-858.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- R Core Team (2021), R: A Language and Environment for Statistical Computing, R Foundation for Statistical Computing, Vienna, available at: https://www.R-project.org/
- Rahmandad, H. and Ton, Z. (2020), "If higher pay is profitable, why is it so rare? Modeling competing strategies in mass market services", *Organization Science*, Vol. 31 No. 5, pp. 1053-1071.

- Richter, M., König, C.J., Geiger, M., Schieren, S., Lothschütz, J. and Zobel, Y. (2018), "Just a little respect": effects of a layoff agent's actions on employees' reactions to a dismissal notification meeting", *Journal of Business Ethics*, Vol. 153 No. 3, pp. 741-761.
- Rudolph, C., Allan, B., Clark, M., Hertel, G., Hirschi, A., Kunze, F., Shockley, K., Shoss, M., Sonnentag, S. and Zacher, H. (2021), "Pandemics: implications for research and practice in industrial and organizational psychology", *Industrial and Organizational Psychology*, Vol. 14 Nos 1-2, pp. 1-35.
- Rutte, C.G. and Messick, D.M. (1995), "An integrated model of perceived unfairness in organizations", Social Justice Research, Vol. 8 No. 3, pp. 239-261.
- Rynes, S.L., Gerhart, B. and Minette, K.A. (2004), "The importance of pay in employee motivation: Discrepancies between what people say and what they do", *Human Resource Management: Published in Cooperation with the School of Business Administration, the University of Michigan and in Alliance with the Society of Human Resources Management*, Vol. 43 No. 4, pp. 381-394.
- Sandvik, J., Saouma, R., Seegert, N. and Stanton, C. (2018), "Analyzing the aftermath of a compensation reduction", (No. W25135), National Bureau of Economic Research.
- Scheller, E.M. and Harrison, W. (2018), "Ignorance is bliss, or is it? The effects of pay transparency, informational justice, and distributive justice on pay satisfaction and affective commitment", Compensation and Benefits Review, Vol. 50 No. 2, pp. 65-81.
- Schreurs, B., Guenter, H., Schumacher, D., Van Emmerik, I.H. and Notelaers, G. (2013), "Pay-level satisfaction and employee outcomes: the moderating effect of employee-involvement climate", Human Resource Management, Vol. 52 No. 3, pp. 399-421.
- Scott, D., Antoni, C., Grodzicki, J., Morales, E. and Peláez, J. (2020), "Global pay transparency: an employee perspective", *Compensation and Benefits Review*, Vol. 52 No. 3, pp. 85-97.
- Sharpe, A. (2002), "The psychological contract in a changing work environment", in *Hi-Res Theme Paper*, The Nottingham Trent University, Nottingham.
- Shaw, J.C., Wild, E. and Colquitt, J.A. (2003), "To justify or excuse? A meta-analytic review of the effects of explanations", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 444-458.
- Spector, P.E. (2019), "Do not cross me: optimizing the use of cross-sectional designs", Journal of Business and Psychology, Vol. 34 No. 2, pp. 125-137.
- Taahir, A., Ng, Y. and Mohd Remie, M. (2020), "The impact of human resource management practices on employee's loyalty in Malaysia", Business and Management, Vol. 12 No. 3, pp. 79-93.
- Taris, T.W., Kessler, S.R. and Kelloway, E.K. (2021), "Strategies addressing the limitations of cross-sectional designs in occupational health psychology: what they are good for (and what not)", Work and Stress, Vol. 35 No. 1, pp. 1-5.
- Terpstra, D.E. and Honoree, A.L. (2003), "The relative importance of external, internal, individual, and procedural equity to pay satisfaction: procedural equity may be more important to employees than organizations believe", *Compensation and Benefits Review*, Vol. 35 No. 6, pp. 67-74.
- Till, R.E. and Karren, R. (2011), "Organizational justice perceptions and pay level satisfaction", *Journal of Managerial Psychology*, Vol. 26 No. 1, pp. 42-57.
- Wang, W. and Seifert, R. (2017), "Pay reductions and work attitudes: the moderating effect of employee involvement practices", *Employee Relations*, Vol. 39 No. 7, pp. 935-950.
- Williams, M.L., McDaniel, M.A. and Nguyen, N.T. (2006), "A meta-analysis of the antecedents and consequences of pay level satisfaction", Journal of Applied Psychology, Vol. 91 No. 2, pp. 392-413.
- Williams, M.L., Brower, H.H., Ford, L.R., Williams, L.J. and Carraher, S.M. (2008), "A comprehensive model and measure of compensation satisfaction", *Journal of Occupational and Organizational Psychology*, Vol. 81 No. 4, pp. 639-668.
- Wong, P.T. and Weiner, B. (1981), "When people ask 'why' questions, and the heuristics of attributional search", *Journal of Personality and Social Psychology*, Vol. 40 No. 4, pp. 650-663.

World Economic Forum (2020), "The future of jobs report 2020", in World Economic Forum, Geneva, October 20.

Yao-Sheng, L. (2007), "The effects of knowledge management strategy and organization structure on innovation", *International Journal of Management*, Vol. 24 No. 1, pp. 53-60.

Zdaniuk, A. and Chhinzer, N. (2019), "The effect of explanations and CEO presence on stock market reactions to downsizing", *Journal of Organizational Change Management*, Vol. 32 No. 4, pp. 441-456. Information's effects on salary satisfaction

Further reading

Colquitt, J.A. and Zipay, K.P. (2015), "Justice, fairness, and employee reactions", Annual Review of Organizational Psychology Organizational Behavior, Vol. 2 No. 1, pp. 75-99.

About the authors

Sandra Montalvo-Arroyo is PhD student in the Business and Management Department at the University of Granada, Spain. She is a member of the research group Innovation, Sustainability, and Development (ISDE) through a public pre-doctoral contract (00061-BOJA No. 71, of April 17) research grant from the "Regional Ministry of Economic Transformation, Industry, Knowledge and Universities, Junta de Andalucía". Spain.

José Manuel de la Torre-Ruiz, PhD, is Associate Professor in the Management Department at the University of Granada, Spain. He is a Full Member of the research group ISDE. His primary research interests are human resource management and organizational behavior. He is author of multiple works in prestigious academic journals such as *Business Strategy and the Environment, Management Decision, Small Group Research, International Journal of Manpower*, among others. José Manuel de la Torre-Ruiz is the corresponding author and can be contacted at: imtorre@ugr.es

María Dolores Vidal-Salazar, PhD, is Associate Professor in the Business and Management Department at the University of Granada, Spain. Her research interests include the relationship between several human resource management practices (i.e. personnel training and development and compensation) and firm as well as employees' performance. Her works have been published in several high-impact journals, such as *Human Resource Management* or *International Journal of Human Resource Management*, and she has presented her works international conferences, such as the Academy of Management Conference and European Academy of Management (EURAM).

Eulogio Cordón-Pozo is Associate Professor in the Business and Management Department at the University of Granada, Spain. He holds a PhD in Management from the University of Granada. His current research interests include innovation in specific business areas and human resource management. His works have been published in several high-impact journals, such as Management Decision, Industrial Marketing Management, Human Resource Management and the International Journal of Technology Management, among others.