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Violence and Job Satisfaction of Nurses: Importance of a Support Network in Healthcare

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ABSTRACT

Employees in the healthcare sector are the professionals who are the most exposed to violence. The severity of its consequences makes it necessary to inquire into its effects and associated factors. The objective of this study was to analyze the relationship between violence toward nursing staff and job satisfaction, and to find out the mediating role of social support in this relationship. The sample was made up of 1,357 nurses aged 22 to 58, who were administered the Negative Acts Questionnaire, Healthcare-Workers Aggressive Behaviour Scale-Users, Brief Perceived Social Support Questionnaire, and Overall Job Satisfaction. The results showed that violence and bullying by coworkers, users, family members, or other people accompanying the patient had a direct negative effect on internal and external job satisfaction, and this effect was mediated by perceived social support. These outcomes suggest the need to stimulate a firm healthcare support network to improve nurses' job satisfaction by buffering the adverse effects of workplace violence.

La violencia y la satisfacción laboral de los profesionales de enfermería: importancia de la red de apoyo en el ámbito sanitario

RESUMEN

Los trabajadores del sector sanitario son los más expuestos a situaciones de violencia laboral. La gravedad de sus consecuencias hace necesario indagar en sus efectos y los factores asociados. El objetivo del presente trabajo fue analizar la relación entre la violencia hacia el personal de enfermería y la satisfacción laboral, así como establecer el papel mediador del apoyo social en esta relación. La muestra estuvo formada por 1,357 profesionales de enfermería de entre 22 y 58 años, a quienes se les administró el *Negative Acts Questionnaire,* la *Healthcare-Workers Aggressive Behaviour Scale-Users,* el *Brief Perceived Social Support Questionnaire* y la *Overall Job Satisfaction.* Los resultados mostraron que la violencia y acoso por parte de compañeros, usuarios y acompañantes o familiares ejercía un efecto directo negativo sobre la satisfacción laboral interna y externa, siendo este efecto mediado por el apoyo social percibido. Estos resultados muestran la necesidad de estimular una red de apoyo firme en el sector sanitario para mejorar la satisfacción con el trabajo entre los profesionales de enfermería, amortiguando los efectos adversos de la violencia laboral.

In recent years, there has been an increase in workplace violence in healthcare. In spite of the preventive activity promoted by Law no 31 (1995), in improving the situation of employees, there has been a rise in psychosocial risks surrounding violence in the workplace (Instituto Nacional de Seguridad, Salud y Bienestar en el Trabajo, 2018). It refers to workplace bullying, threats, or assaults on employees that place their physical and psychological safety wellbeing, and health at risk (International Labor Organization, [ILO, 2002]). According to Instituto Nacional de Seguridad, Salud y Bienestar en el Trabajo (2018), healthcare workers are the most exposed to physical violence, verbal abuse, harassment, and intimidation.

Violence in Healthcare

Although violence toward healthcare professionals is a reality affecting the healthcare system, at the present time in Spain there are no official data. Some studies have shown that 11.8% of nurses have undergone at least one episode of violence per year while performing their duties (Pérez-Fuentes et al., 2020), while other

studies place this figure at 17% to 90% (Ruiz-Hernández et al., 2016). This figure could shoot up even further due to the increase in attacks on healthcare workers during COVID-19 pandemic (Bagcchi, 2020; McKay et al., 2020). Some of the reasons for the differences between studies are the broad concept of workplace violence (Blanco et al., 2019), tolerance to violence (Copeland & Henry, 2018), and job characteristics of professionals, such as service area (Wei et al., 2016). Specifically, depending on how it is expressed, workplace violence may be classified into non-physical (referring to abuse and verbal intimidation, harassment, taunting, threats, and disrespectful or aggressive body language) and physical (physical intimidation and harm to the individual, property, or furnishings) (Waschgler et al., 2013). As mentioned in some studies, most of the violence perpetrated against healthcare professionals is not physical, the areas most affected are mental health and emergencies (Babiarczyk et al., 2020; Llor et al., 2017; Pérez-Fuentes et al., 2020), and the night shift is the most troublesome (Kaya et al., 2016). It is also carried out mostly by patients themselves or their relatives (Mento et al., 2020; Shea et al., 2017).

Studies have shown that nursing is the professional sector most affected, and that nurses are at the greatest risk of experiencing violence from users, especially threats to their physical integrity and verbal violence, although the number of workers who have undergone direct physical aggression is also rather high (Alameddine et al., 2015; Seo et al., 2019). This is because their work involves continuous direct contact with a large number of users (Brophy et al., 2017; Pérez-Fuentes et al., 2019). However, they are also often exposed to violence from their own coworkers in the form of bullying, intimidation, horizontal and vertical violence, and others (Skarbek et al., 2015). This type of violence, as is also the case in other contexts (Loinaz & de Sousa, 2020), is usually generated by a power imbalance, whether due to a real hierarchical structure or perceived by professionals. It generates feelings of humiliation, vulnerability, and helplessness in the victims, limiting their ability to develop competency and defend themselves (Anusiewicz et al., 2019).

Some of the factors related to the appearance of both types of violence, from outside and by coworkers, are absence of support from other workers or from the administration, fearing retaliation, lack of training, insufficient resources and personnel, and the social perception that nurses are weak (Nowrouzi-Kia et al., 2019). These workers are also exposed to high stress, as they perceive themselves to be subject to excessive demands on which they have little control, and that their great effort is poorly rewarded (Jones et al., 2013; Molero et al., 2019; Pérez-Fuentes et al., 2018; Tirado et al., 2019; Wersabe et al., 2018). Thus, the most stressful settings are also the most prone to violence and, in turn, exposure to violent situations in the workplace cause stress (Magnavita, 2014; Secretaría de Salud Laboral, 2011).

Some studies regarding the characteristics of professionals suggest that young women with little experience and no training in handling conflicts in the workplace are the most affected (Anusiewicz et al., 2019; Bilgin et al., 2016; Pompeya et al., 2020). According to Llor et al. (2017), these data are especially representative of non-physical violence, but with regard to physical violence men are more exposed, possible due to gender stereotypes which force them to expose themselves to moral obligation to a greater extent, and not feel intimidated and escape from dangerous situations.

Thus, workplace violence places wellbeing and health of these workers at risk, leading to short-term (anxiety, problems concentrating and sleeping, headaches, psychosomatic problems, and so forth) and long-term (chronic fatigue, taking drugs, depression, cardiovascular and respiratory problems, dermatological and digestive conditions, etc.) problems and impact on employees' family and social life, as well as service quality (Anusiewicz et al., 2019; Secretaría de Salud Laboral, 2011). According to Lanctôt and Guay (2014), the most frequent consequences are psychological

(such as posttraumatic stress and depression), emotional (such as fear and anger), and those referring to working (requesting sick leave and low job satisfaction). Furthermore, although professionals who have been assaulted while performing their duties said that they had not sustained any physical or psychological consequences, most of them had higher levels of anxiety, which leads to somatic alterations (Pérez-Fuentes et al., 2020). Thus, working under insecure conditions in healthcare affects both work climate (Samur & Intepeler, 2017) and health and satisfaction of employees (Khamisa et al., 2015; McDermid et al., 2019; Mento et al., 2020; Ruiz-Hernández et al., 2016). According to Staempfli and Lamarche (2020), nurses' job satisfaction must be ensured for their own wellbeing, but also for improving the safety and quality given to the patient, thereby making healthcare more profitable. These authors, following Maslow's hierarchy of needs and Herzberg's two-factor theory, propose a series of factors that must be present for job satisfaction in this sector. Specifically, after salary perceived, needs for security and absence of violence are the most important for satisfaction.

In this line, Organic Law No 1 (2015), March 30th, modifying the Criminal Code, made progress in matters of aggression on public healthcare workers by making any aggression during the performance of their duties an assault against authority. Some regions, such as Andalusia, have specific plans for prevention of and attention to aggression in the context of public healthcare (Instruction No 1/2018). However, the same document mentions the difficulty in totally eradicating these situations due to the sociocultural nature, so factors buffering the negative impact on workers must be known. Therefore, to achieve a comprehensive approach to occupational health and wellbeing, attention must be given to factors promoting optimum psychosocial functioning of these employees (Castellano et al., 2019).

Role of Social Support in the Context of Healthcare Work

Typical duties and roles of healthcare personnel are always performed in a specific social setting. Social climate within the organization becomes a factor involved in workplace violence, either inhibiting or stimulating its appearance (Blanco et al., 2019). According to the European Foundation for the Improvement of Living and Working Conditions (2016), organizational climate is a favorable framework for exploring original forms of intervention in this problem. Kvas and Seljak (2015) mention that victimization of nurses by coworkers depends on organizational environment, along with characteristics of the aggressor. Lack of support from coworkers has also been identified as a factor related to the appearance of violence in healthcare (Morken et al., 2015; Nowrouzi-Kia et al., 2019; Santirso et al., 2020). Thus, when nurses are assaulted, but do not perceive sufficient support from coworkers or other employees, it often generates feelings of resignation that lead them to believe that the abuse is an inevitable part of job (Ferri et al., 2020). On the contrary, conflicts at work mediate psychosocial risks, such as workplace violence, and level of job satisfaction (Sureda et al., 2019). Therefore, social support seems to be a determining factor in coping with workplace violence (Seo et al., 2019). Hsieh et al. (2018) found that nurses who have been exposed to abuse while performing their duties are more resilient if after assault they can count on sufficient social support. Social support is therefore a measure for coping effectively with violence against healthcare workers, as it enables them to relieve their emotions (Karatuna et al., 2020; Soriano et al., 2019). This is why when healthcare workers experience violence in the workplace it is important for their emotional reaction to be given attention and they must be offered support to avoid the impact on their health and wellbeing (Shi et al., 2020).

As per Law no. 33 (2001), on Occupational Health, both management and employees through the organizations which
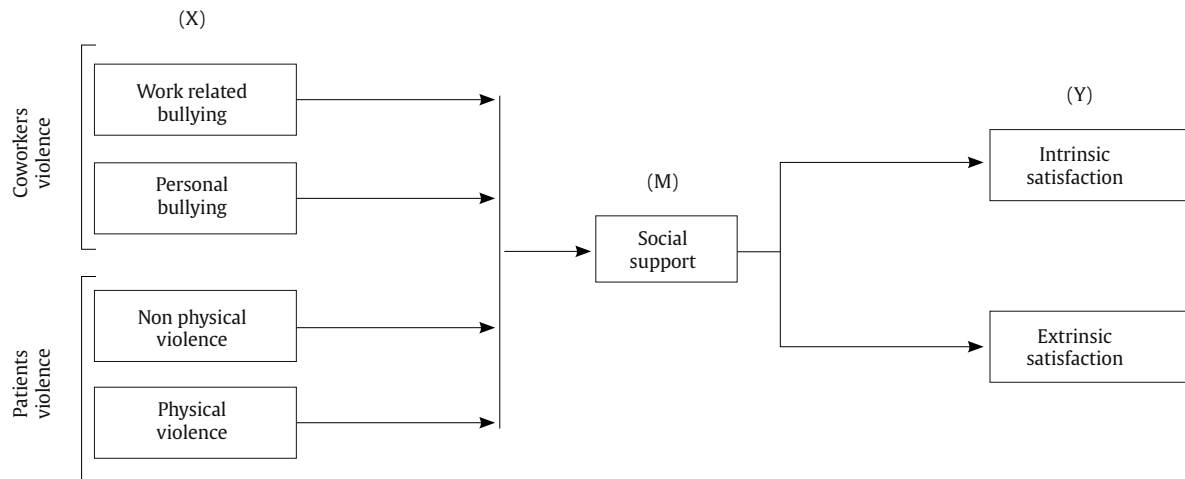
Figure 1. Hypothetical Model of the Relationship between Workplace Violence, Social Support, and Job Satisfaction.

represent them, must participate in planning and control of occupational health management in such matters as workplace violence. Thus, prevention of the psychosocial risk entailed in aggression in the workplace must be the objective of any healthcare community, not only communities affected.

The Present Study

The Violence and Harassment Convention (International Labor Organization [ILO, 2019a]), passed during the International Conference on Labor, states that all members of the International Labor Organization (ILO, 2019b) shall adopt legislative measures for the prevention and elimination of violence and harassment in the workplace, especially in those sectors where employees are most exposed. To do so, both risks and repercussions of such acts must be identified and evaluated. After the review of previous research, the objectives of this study are therefore to: (1) examine the relationship between exposure to violence, social support, and job satisfaction. The first hypothesis is that there is a strong negative relationship between exposure to violence and job satisfaction (*H*1). The second hypothesis is that there is a relationship, also negative, between exposure to violence and social support (*H*2). And the third hypothesis is that social support received and job satisfaction are positively related (*H*3); (2) analyze the mediating role of social support in the relationship between exposure to violence and job satisfaction. Social support is expected to exert an indirect effect on the negative relationship between exposure to violence and job satisfaction (*H*4) (Figure 1).

Method

Participants

The original sample consisted of 1,627 Spanish nurses, of whom those who were actively employed in the Region of Andalusia (Spain) at the time of data acquisition (*N* = 1,377) were selected. Then, 20 more were discarded because incongruencies or random answers were identified. Thus, the study sample was finally made up of a total of 1,357 participants.

Participants' mean age was 30.86 (*SD* = 6.09) in a range of 22 to 58. Of these, 83.9% (*n* = 1,138) were women and 16.1% (*n* = 219) were men, with a mean of 30.80 (*SD* = 6.12) and 31.15 (*SD* = 5.92) years of age, respectively.

Instruments

Negative Acts Questionnaire (NAQ) Spanish version. This test measures workplace bullying. For this study, the Spanish version of the NAQ (Einarsen et al., 1994; Einarsen & Raknes, 1997) validated by Moreno et al. (2007) was used. It contains 14 items which are rated on a Likert-type scale ranging from 1 (*never*) to 5 (*daily*) providing two subscales: work-related bullying (e.g., "Information is withheld from me which affects my performance") and bullying related to private and personal life (e.g., "I have had insulting or offensive remarks made about my person, attitudes or my private life"). Reliability analysis of the scale showed high internal consistency (Moreno et al., 2007). In this study, the reliability indices were optimum, with a McDonald's omega of .90 for the overall scale, .89 for the work-related bullying subscale, and .64 for the personal bullying subscale.

Healthcare-Workers Aggressive Behaviour Scale-Users (HABS-U). This 10-item scale, designed by Waschgler et al. (2013), measures two dimensions, non-physical violence (e.g., "Users get angry with me because of delay") and physical violence (e.g., "Users have even shoved, shaken, or spit at me"), showing high internal consistency. Answers are rated on a Likert-type scale from 1 (*never*) to 6 (*daily*). In this study, internal reliability found was optimum, with a McDonald's omega of .93 for the general scale and .91 and .83 for the non-physical and physical violence dimensions, respectively.

Cuestionario Breve de Apoyo Social Percibido (CASPE) [Brief Perceived Social Support Questionnaire]. This questionnaire, designed by Calvo and Díaz (2004), has nine items referring to social support received from partner, family, friends and participation in organizations. The first seven items are rated on a four-point Likert-type scale (e.g., "If you have an economic problem and need money, you can count on close friends and relatives who would not hesitate to help you out…"), Item 9 on a five-point scale ("Your relationship with your partner is…"), and answers to Item 8 are dichotomous (Yes/No) ("Do you belong to an association or cultural, recreative religious, or other group in which you actively participate and often attend?"). Reliability and validity indices of the original questionnaire were acceptable (Calvo & Díaz, 2004). In this study, reliability had an optimum McDonald's omega coefficient of .88.

Overall job satisfaction. This scale, designed by Warr et al. (1979), consisting of 15 items which ask questions on job satisfaction considering employees' experience. It provides a general job satisfaction score and two specific scores on intrinsic and extrinsic working conditions. The intrinsic subscale, through seven items, asks about recognition received for work, responsibility, promotion,

Table 1. Correlation Matrix

		WB	PB	NPV	PV	GS	IS	ES	SS
WB	Pearson's *r*	-							
	Upper 95% CI	-							
	Lower 95% CI	-							
PB	Pearson's *r*	.731***	-						
	Upper 95% CI	.754	-						
	Lower 95% CI	.705	-						
NPV	Pearson's *r*	.433***	.399***	-					
	Upper 95% CI	.475	.443	-					
	Lower 95% CI	.389	.353	-					
PV	Pearson's *r*	.335***	.419***	.510***	-				
	Upper 95% CI	.382	.462	.548	-				
	Lower 95% CI	.287	.374	.469	-				
GS	Pearson's *r*	-.448***	-.323***	-.304***	-.219***	-			
	Upper 95% CI	-.404	-.274	-.255	-.168	-			
	Lower 95% CI	-.490	-.370	-.351	-.269	-			
IS	Pearson's *r*	-.448***	-.329***	-.283***	-.224***	.974***	-		
	Upper 95% CI	-.404	-.280	-.233	-.173	.977	-		
	Lower 95% CI	-.490	-.375	-.331	-.274	.971	-		
ES	Pearson's *r*	-.427***	-.302***	-.309***	-.204***	.978***	.905***	-	
	Upper 95% CI	-.382	-.253	-.260	-.153	.980	.914	-	
	Lower 95% CI	-.469	-.350	-.356	-.255	.975	.895	-	
SS	Pearson's *r*	-.287***	-.291***	-.151***	-.190***	.372***	.381***	.346***	-
	Upper 95% CI	-.237	-.241	-.098	-.138	.417	.426	.392	-
	Lower 95% CI	-.335	-.339	-.203	-.241	.325	.334	.298	-

Note. WB = work-related bullying; PB = personal bullying; NPV = non-physical violence; PV = physical violence; GS = general satisfaction; IS = intrinsic satisfaction; ES = extrinsic satisfaction; SS = social support.
***p < .001.

etc. (e.g., "ecognition of work well done", "responsibility given you") and the extrinsic subscale analyzes worker satisfaction with organization of work through eight items (e.g. "physical working conditions", "your fellow workers"). Employees answer on a Likert-type scale from 1 to 7, where 1 = *very unsatisfied* and 7 = *very satisfied.* The scale has good internal consistency (Warr et al., 1979). In this study, the McDonald's omega coefficient for reliability was .95 for the general scale, .93 for intrinsic satisfaction, and .88 for extrinsic satisfaction.

Procedure

Before collecting data, participants were guaranteed compliance with the standards of information, confidentiality, and ethics in data processing. The Bioethics Committee of the University of Almería approved the study (Ref: UALBIO2019/030). The questionnaires were implemented on a CAWI [Computer Aided Web Interviewing] survey, which enabled them to be filled in by participants online. Participation was voluntary, and on the first page of the questionnaire, before answering, participants received information on the study and its purpose, and also marked a box indicating their informed consent before they could start to take the survey.

Random or incongruent answers were controlled for by including a series of control questions (e.g., "Right now I am doing a survey") for their detection and these cases were discarded from the study sample.

Data Analysis

First, a bivariate Pearson's correlation coefficient was calculated to identify the association between variables. To determine the existence of differences between groups (by sex and age) with regard to exposure to different violent behaviors, a Student's *t*-test for independent samples was applied. Cohen's (1988) *d* was used as a measure of effect size, following the following criteria: *d* < 0.50 small effect size, *d* from 0.50 to 0.80 medium, and *d* ≥ 0.80 large. The Bayesian alternative was also computed to estimate the evidence in favor of the hypothesis with the Bayes factor. JASP (2019) statistical software ver. 0.11.1 was used for estimation of the Bayes *t*-test. The Cauchy prior width was the software default of 0.707 (Morey & Rouder, 2015).

Then a mediation analysis was performed with potential predictors, a mediator (perceived social support), and two result variables (intrinsic and extrinsic satisfaction), with adjustment for a confounder (sex). JASP mediation analysis based on lavaan (Rosseel, 2012) was used for computing the models. Bootstrapping was applied for model estimation and the confidence intervals were calculated using the bias-corrected percentile method, as suggested by Biesanz et al. (2010).

To determine the reliability of the evaluation instruments used, following the recommendations of Ventura-León and Caycho (2017), McDonald's omega coefficient (McDonald, 1999) was estimated.

Results

Correlations and Descriptive Analyses

Table 1 shows the correlation matrix of negative behaviors toward nurses, exposure to violent behavior by users of the health services, job satisfaction, and social support.

First, there were positive relationships between the different types of exposure to violence in the workplace.

Furthermore, the relationship between exposure to violence and job satisfaction was negative in all cases, whether general, intrinsic, or extrinsic.

Lastly, the extent of perceived social support correlated negatively with exposure to violence between coworkers and superiors. Social support was also negatively related to exposure to violence by users and positively with job satisfaction (general, intrinsic, and extrinsic).

Table 2. Descriptive Statistics and Independent Samples *t*-test by Sex

| | Men | | | Women | | | *t* | Mean Dif. | *SE* Dif. | 95% CI | | Cohen's *d* |
	N	M	SD	N	M	SD				Lower	Upper	
Work-related bullying	217	12.42	4.27	1135	11.24	3.49	4.39***	1.18	0.26	0.65	1.71	0.32
Personal bullying	217	7.79	2.89	1135	7.05	1.96	4.71***	0.74	0.15	0.43	1.05	0.34
Non-physical violence	217	24.91	12.20	1135	22.01	11.34	3.42***	2.90	0.84	1.23	4.56	0.25
Physical violence	217	3.94	2.10	1135	3.60	1.67	2.63**	0.34	0.12	0.08	0.59	0.19

**p < .01, ***p < .001.

Table 3. Age Groups Descriptive and Independent Samples *t*-test

| | < 30 years | | | ≥ 30 years | | | *t* | Mean Dif. | *SE* Dif. | 95% CI | | Cohen's *d* |
	N	M	SD	N	M	SD				Lower	Upper	
Work-related bullying	652	11.65	3.78	705	11.23	3.51	2.13*	0.42	0.19	0.03	0.81	0.11
Personal bullying	652	7.16	2.14	705	7.17	2.16	-0.10	-0.01	0.11	-0.24	0.21	-0.005
Non-physical violence	652	22.82	11.43	705	22.16	11.62	1.06	0.66	0.62	-0.56	1.89	0.05
Physical violence	652	3.70	1.83	705	3.62	1.67	0.87	0.08	0.09	-0.10	0.27	0.04

*p < .05.

Statistically significant gender differences were found in all the variables related to violence in the workplace (Table 2), with a small effect size of *d* < 0.50. Men scored significantly higher than women in negative behavior received from fellow workers, and also those who scored highest in exposure to violent situations by users.

There were significant differences ($p < 0.05$) by age group (under 30 years vs. 30 and over) in negative behavior received (work-related). In both cases, professionals under 30 scored the highest (Table 3). According to the Cohen's *d* (*d* < 0.50), the effect size of differences found was small.

Finally, the Bayes factor (BF) was calculated to test the weight of available evidence in favor of the alternative hypothesis (H_1), that there are differences between groups, compared to the null hypothesis (H_0), that there is no significant difference between groups.

The following results supported evidence in favor of the alternative hypothesis with regard to the differences between men and women: work-related bullying ($BF_{10} = 1010$), personal bullying ($BF_{10} = 4130$), non-physical violence ($BF_{10} = 25.2824$), physical violence ($BF_{10} = 2.427$). Concerning the differences between age groups, after estimation of the Bayes factor, data found provided evidence in favor of the null hypothesis: work-related bullying (BF_{01} = 1.731), personal bullying ($BF_{01} = 16.2759$), non-physical violence ($BF_{01} = 9.366$), physical violence ($BF_{01} = 11.2163$).

Mediation of Social Support in the Relationship between Negative Behavior Received and Job Satisfaction

Table 4 shows the direct negative effects of WB on intrinsic and extrinsic satisfaction. However, the indirect effects revealed the existence of a mediating effect by SS, and this path was significant in all cases.

The total effects of the model showed significance for WB over both dimensions of job satisfaction. The model explained 27% (R^2 = .274) of the variance for intrinsic satisfaction and 24% (R^2 = .241) for extrinsic satisfaction.

Table 5 shows the direct negative effects of NPV on intrinsic and extrinsic satisfaction. The indirect effects revealed a mediating effect of SS, and this path was significant for all cases, especially when the variable to be predicted is extrinsic satisfaction.

The total effects of the model showed significance for both NPV and PV on both dimensions of job satisfaction. The model explained 20% (R^2 = .205) of the variance for intrinsic satisfaction and 19% (R^2 = .192) for extrinsic satisfaction.

Table 4. Direct, Total, and Indirect Effects (Coworker Violence)

| Direct effects | | Estimate | SE | z-value | p | 95% Confidence Interval | |
						Lower	Upper
WB	→ IS	-0.964	0.083	-11.667	< .001	-1.136	-0.789
WB	→ IS	0.206	0.140	1.468	.142	-0.087	0.531
PB	→ ES	-1.035	0.090	-11.442	< .001	-1.213	-0.850
PB	→ ES	0.301	0.154	1.959	.050	-0.028	0.647
Indirect effects		Estimate	SE	z-value	p	95% Confidence Interval	
						Lower	Upper
WB	→ SS → IS	-0.101	0.026	-3.820	< .001	-0.167	-0.047
WB	→ SS → ES	-0.188	0.046	-4.132	< .001	-0.310	-0.095
PB	→ SS → IS	-0.097	0.026	-3.751	< .001	-0.162	-0.045
PB	→ SS → ES	-0.180	0.044	-4.045	< .001	-0.301	-0.091
Total effects		Estimate	SE	z-value	p	95% Confidence Interval	
						Lower	Upper
WB	→ IS	-1.065	0.086	-12.417	< .001	-1.234	-0.891
WB	→ IS	0.018	0.146	0.124	.901	-0.27	0.328
PB	→ ES	-1.132	0.093	-12.171	< .001	-1.310	-0.946
PB	→ ES	0.122	0.158	0.771	.441	-0.211	0.462

Note. WB = work-related bullying; PB = personal bullying; IS = intrinsic satisfaction; ES = extrinsic satisfaction; SS = social support. Delta method standard errors, bias-corrected percentile bootstrap confidence intervals.

Table 5. Direct, Total and Indirect Effects (Patient Violence)

Direct effects							95% Confidence Interval	
		Estimate	SE	z-value	p		Lower	Upper
NPV	→ IS	-0.152	0.022	-7.005	< .001		-0.197	-0.110
PV	→ IS	-0.280	0.143	-1.954	.051		-0.607	0.020
NPV	→ ES	-0.205	0.023	-8.756	< .001		-0.253	-0.159
PV	→ ES	-0.088	0.155	-0.572	.567		-0.437	0.253
Indirect effects							**95% Confidence Interval**	
		Estimate	SE	z-value	p		Lower	Upper
NPV	→ SS → IS	-0.017	0.008	-2.095	.036		-0.033	-0.002
NPV	→ SS → ES	-0.247	0.054	-4.534	< .001		-0.397	-0.124
PV	→ SS → IS	-0.016	0.008	-2.088	.037		-0.032	-0.002
PV	→ SS → ES	-0.237	0.053	-4.465	< .001		-0.386	-0.118
Total effects							**95% Confidence Interval**	
		Estimate	SE	z-value	p		Lower	Upper
WB	→ IS	-0.168	0.023	-7.320	< .001		-0.214	-0.123
WB	→ IS	-0.527	0.151	-3.490	< .001		-0.877	-0.194
PB	→ ES	-0.221	0.025	-9.000	< .001		-0.272	-0.173
PB	→ ES	-0.325	0.161	-2.020	.043		-0.706	0.037

Note. NPV = non-physical violence; PV = physical violence; IS = intrinsic satisfaction; ES = extrinsic satisfaction; SS = social support. Delta method standard errors, bias-corrected percentile bootstrap confidence intervals.

Discussion

Employees in the healthcare sector are the professionals who are most exposed to violence (Instituto Nacional de Seguridad, Salud y Bienestar en el Trabajo, 2018), and especially nurses (Alameddine et al., 2015). Such violence could be by users and those that accompany them (Seo et al., 2019) or by coworkers and other employees (Skarbek et al., 2015).

In spite of the national legislation passed to protect healthcare personnel from such aggression (Organic Law 1, 2015, modifying the Criminal Code), such situations are still far from being eradicated, and are a severe problem both for the individual worker and the society as a whole, because such assaults affect workers' health and wellbeing, which transcends to social family issues and the quality of healthcare (Anusiewicz et al., 2019; Secretaría de Salud Laboral, 2011). It therefore becomes necessary to know the factors related to the negative repercussions of such acts and how to palliate them to promote the psychosocial functioning of healthcare workers (Castellano et al., 2019; Instruction No 1, 2018).

The objective of this study was to analyze the relationship between violence toward nurses and job satisfaction, and to find out the mediating role of social support in this relationship. In the first place, the results of this study confirmed the two hypotheses originally posed, since it was shown that internal violence and external violence toward nurses are positively related and these in turn are negatively related to social support and job satisfaction, while the latter two variables are positively related. Job contexts in which violence appears increase employee stress, and this tension in turn raises the probability of such violence reoccurring (Magnavita, 2014; Secretaria de Salud Laboral, 2011). Furthermore, experiencing aggression can diminish the perception of efficacy in stopping assault (Anusiewicz et al., 2019) and even become tolerated or justified by employees who think that such behavior is an inevitable part of the job (Copeland & Henry, 2018; Ferri et al., 2020). Violence diminishes employee satisfaction (Khamisa et al., 2015; Lanctôt & Guay, 2014; McDermid et al., 2019; Mento et al., 2020; Ruiz-Hernández et al., 2016), especially when the victim does not receive social support after aggression (Morken et al., 2015; Nowrouzi-Kia et al., 2019). Moreover, this study showed that

nurses who say they have been the most affected by physical or non-physical violence from patients or bullying by coworkers were men under 30 years of age. Other studies have shown that professionals with less work experience are more exposed to workplace violence due to their limited conflict management skills (Anusiewicz et al., 2019). However, in regard to sex, our results differ from those in other studies (Pompeya et al., 2018) where women experienced more violence. This may be due to the fact that men, motivated by gender stereotypes, feel morally obligated to face dangerous situations and to deal with more violence and bullying without seeking alternative solutions that limit their presence or later appearance (Bilgin et al., 2016).

With regard to the third hypothesis, a model was posed in which violence toward nurses and its effect on intrinsic and extrinsic job satisfaction could be mediated by perceived social support. The results showed that violence from coworkers, as well as by users and family or those who accompany them, had a direct negative effect on job satisfaction and that this effect was mediated by perceived social support. Experiencing aggression, both by fellow workers and users or those accompanying them during the performance of their duties diminishes the satisfaction employees feel for their job (McDermid et al., 2019; Mento et al., 2020). However, when victims receive enough support, it can alleviate their distress and develop new ways of coping with aggression (Karatuna et al., 2020), promoting resilience (Hsieh et al., 2018), minimizing the impact on health, and contributing to the wellbeing of professionals (Shi et al., 2020). Along the same line, other studies mention similar results in the workplace finding that where there is an unfavorable social climate, coworker conflict acts as a mediating variable between violence and job satisfaction, increasing its effect (Sureda et al., 2019).

This study had some limitations. First, both the functions and type of relationship and contact with patients and coworkers are different in different healthcare units. In this case, data on this variable were not collected, so it would be of interest to include them in future studies along with the direct consequences of aggression. The severity and consequences of aggression may also be a factor related to job satisfaction, so it would be recommendable to evaluate their influence. Furthermore, the cross-sectional design

of this study does not allow conclusions related to the evolution of the study variables to be evaluated. Finally, more women participated than men. Even though this higher proportion of women is a characteristic of the nursing population, it should be taken into account when generalizing the findings.

Conclusions

The need to take action to stop violence and bullying in the workplace, especially in healthcare as one of the sectors most affected, urges the scientific community to identify its repercussions as well as related factors. The social context in the organization has been delimited as a favorable framework for preventing associated consequences. In the light of our findings, it may be said that social support is a mediating factor between violence and workplace bullying in nursing and its repercussions on job satisfaction.

The eradication of violence toward healthcare workers is a complex challenge that requires educating the public, limiting the imbalance in power within the organizational structure and stimulating social recognition of the role of these professionals. Meanwhile, the development of organizational protocols and legislation protecting workers from aggression and promoting development of a satisfactory work climate could buffer the adverse effects of violence in the workplace.

Conflict of Interest

The authors of this article declare no conflict of interest.

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Note

[1]Data availability statement: The data that support the findings of this study are available from the corresponding author upon reasonable request. The Bioethics Committee of the University of Almería approved the study (Ref: UALBIO2019/031).

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