Impact of diversity in Organizations

A compendium of studies on the role of diversity in psychosocial risks, workplace violence and the Covid19 pandemic effects perception

Germán Cañavate Buchón

Directora:

Dra. Isabella Meneghel

Junio, 2023

Programa de Doctorado en diseño, gestión y evaluación de políticas públicas de bienestar social

Escuela de Doctorado de la Universitat Jaume I

Impact of diversity in Organizations

A compendium of studies on the role of diversity in psychosocial risks, workplace violence and the Covid19 pandemic effects perception

Impacto de la diversidad en las organizaciones

Un compendio de estudios sobre el papel de la diversidad en la percepción de riesgos psicosociales, violencia laboral y efectos de la pandemia del Covid19

Memoria presentada por Germán Cañavate Buchón para optar al grado de doctor por la Universitat Jaume I

Germán Cañavate Buchón   Dra. Isabella Meneghel

Castellón de la Plana, julio de 2023

Financiación recibida

Tesis por compendio de las siguientes publicaciones

Cañavate, G., Meneghel, I., & Salanova, M. (2023). The Influence of Psychosocial Factors according to Gender and Age in Hospital Care Workers. *The Spanish Journal of Psychology*, 26, E1. https://doi.org/10.1017/SJP.2023.1 *Factor de impacto según JCR para el año 2021: 1.526 (JCI=0,40)*

Cañavate Buchón, G. & Meneghel, I. (2023). Analysis of some demographic and psychosocial factors that influence in the perception of the workplace violence. *International Journal of Psychological Research*, 16(1), 57-66. https://doi.org/10.21500/20112084.5961 *Factor de impacto según JCR para el año 2021: 1.212 (JCI=0,29)*

Cañavate, G., Meneghel, I., & Salanova, M. (2023). The impact of covid-19 on psychosocial risks in the catering industry: a two-wave study. *Acción Psicológica, (doi pendiente) Factor de impacto según JCR para el año 2020: N/A (JCI=0,26)*

"Esta tesis dispone de la aceptación de los coautores de las publicaciones que el doctorando presenta como tesis y su renuncia expresa a presentarlas como parte de otra tesis doctoral"

Impact of diversity in Organizations

A compendium of studies on the role of diversity in psychosocial risks, workplace violence and the Covid19 pandemic effects perception

Tabla de contenido

PRÓLOGO

En el año 1999 terminé mis estudios de bioquímica y biología molecular. Una carrera eminentemente dedicada a la investigación. Por este motivo, lo primero que hice nada más terminar la carrera fue trabajar en un laboratorio de investigación del CSIC en Torre La Sal, en un proyecto de investigación relacionado con pesticidas y su efecto en el medio acuático. Fue en ese año cuando me di cuenta de que la investigación no era lo mío. Me pareció repetitivo y monótono. Así que di un giro a mi vida y me profesionalicé como técnico de prevención de riesgos laborales.

En los 22 años que llevo ejerciendo esta profesión, he intentado desarrollar la tesis doctoral hasta en tres ocasiones. Es como una asignatura pendiente que me quedó tras mi experiencia con la investigación. Las dos primeras veces, me decanté por temas relacionados con la salud laboral por exposición a contaminantes ambientales. Pero seguramente no era mi momento: no elegí el tema apropiado, o no tuve la suficiente motivación para llevarlas a cabo.

En el año 2012 tuve la oportunidad de conocer al Equipo WANT de la UJI y empezar a trabajar con ellos en temas de evaluación de riesgos psicosociales, dada mi relación con el mundo empresarial al que tenía acceso por mi trabajo en consultoría de riesgos laborales. Fue en aquel entonces cuando descubrí una nueva vocación: la psicología de las organizaciones. Parece ser que por fin había encontrado un tema que me apasionaba lo suficiente como para desarrollar un proyecto de investigación y desarrollar mi tesis doctoral. En los siguientes años seguí trabajando duro desarrollando evaluaciones de riesgos psicosociales con varias metodologías y cursé un máster de postgrado sobre "psicología positiva aplicada" (MAPPA).

Por fin, en el año 2018, me decidí a elaborar una tesis doctoral, relacionada con mi trabajo del día a día, lo que me permite acceder a una fuente de datos e información suficientemente amplia como para desarrollar una investigación sobre la psicología de las organizaciones.

CAPÍTULO 1

Introducción general

En España, todas las empresas deben disponer una evaluación de riesgos laborales, según el artículo 16 de la Ley de Prevención de Riesgos Laborales (Ley 31/1995, de 8 de Noviembre, de Prevención de Riesgos Laborales, 1995). Entre los riesgos que deben ser evaluados, están los riesgos psicosociales, contemplados dentro de la disciplina de ergonomía y psicosociología aplicada (Real Decreto 39/1997, de 17 de Enero, Por El Que Se Aprueba El Reglamento de Los Servicios de Prevención., 1997).

Los riesgos psicosociales hacen referencia a aquellos aspectos del diseño, de la gestión del trabajo, del contexto social y organizativo, que son susceptibles de afectar tanto al bienestar como a la salud física, psíquica y social. Según la *Agencia Europea para la Seguridad y Salud en el Trabajo* los riesgos psicosociales provocan daños psicológicos y físicos como son el estrés relacionado con el trabajo, el agotamiento y la depresión (European Agency for Safety and Health at Work, 2022).

Mi actividad laboral se desarrolla en una consultora de prevención de riesgos laborales (OTP-Oficina Técnica de Prevención, S.L.) lo que me permite desarrollar este tipo de evaluaciones de riesgos psicosociales prácticamente a diario, en multitud de empresas de ámbito nacional. A esto también se debe sumar mi colaboración en las evaluaciones psicosociales que realiza el Equipo WANT – Evaluación Psicosocial y organizaciones saludables de la Universidad Jaume I de Castellón, así como en el proyecto de la Fundación Hospital Optimista (Peláez et al., 2017) donde se realizan anualmente evaluaciones de factores de riesgos psicosociales en multitud de hospitales españoles.

Como técnico de prevención he sido testigo de primera mano de los efectos negativos que los riesgos laborales tienen en la salud y el bienestar de las personas trabajadoras. Muchos de los accidentes graves y mortales que he tenido que investigar, he comprobado que tienen un origen en la organización del trabajo. Efectivamente, una gran cantidad de accidentes en materia de seguridad, tienen un origen psicosocial subyacente que a menudo es difícil de demostrar (Osca et al., 2014)

Esta ha sido una de las principales motivaciones que me han llevado a desarrollar esta tesis doctoral, lo que me ha dado la oportunidad de investigar en profundidad cómo los riesgos psicosociales pueden afectar la salud y al rendimiento de las personas, y cómo estos riesgos se pueden manifestar de muchas formas, no solamente con daños psíquicos y emocionales, sino también traducirse en daños físicos generando accidentes y lesiones por distracciones debidas al estrés, malas relaciones laborales, etc.… (García-Layunta et al., 2002).

Además de la organización del trabajo, pueden existir algunos factores individuales que pueden afectar en mayor o menor medida en los riesgos psicosociales, como puede ser el sexo (Cifre & Vera, 2019), la edad (Beier et al., 2022), la antigüedad en el puesto (Shapiro et al., 2022) o incluso el nivel de responsabilidad dentro de la organización (Danet Danet, 2021). Es por este motivo que surgió la idea de este proyecto de tesis doctoral: "*Impacto de la diversidad en las organizaciones. Un compendio de estudios sobre el papel de la diversidad en la percepción de riesgos psicosociales, violencia laboral y efectos de la pandemia del Covid19*"

Las variables demográficas estudiadas (i.e., sexo, edad, antigüedad en el puesto o el nivel de estudios) entran dentro de las definiciones más aceptadas de diversidad organizacional. Podemos distinguir entre dos tipos de diversidad organizacional, la "visible" y la "invisible" (Pelled, 1996). La diversidad visible, se refiere a diferencias fácilmente observables como son el sexo, la raza, la edad o el idioma, que pueden llegar a desencadenar estereotipos y clasificación social pudiendo socavar la comunicación en algunos entornos organizacionales. La diversidad invisible, está relacionada con el trabajo, como puede ser el nivel de responsabilidad, la educación o la antigüedad (Mor-Barak, 2022).

Una organización que apuesta por la diversidad es aquella que incluye de forma proactiva la inclusión de personas distintas y diversas en todos los puestos de la organización (Management Association, 2017). Una plantilla diversa mejora los niveles de aceptación, influye en el desempeño, en la satisfacción y en los resultados organizacionales. La diversidad en el trabajo es más que reconocer y aceptar a personas diferentes dentro de la organización, se trata de incluir políticas de inclusión para fomentar la gestión de la diversidad. El objetivo de estas políticas

de inclusión es convertir estas diferencias en activos y en fuentes de fortaleza, no en pasivos y debilidades (Hays-Thomas, 2016).

El estudio de la diversidad en las organizaciones se ha convertido en un tema de gran importancia por dos razones principales. En primer lugar, por los avances legislativos que se están implantando en los países desarrollados que incluyen normativa sobre igualdad de oportunidades y diversidad en las organizaciones. Este imperativo legal está siendo el motor de cambio para que, cada vez más empresas incluyan la diversidad en sus plantillas, promoviéndose la inclusión en el lugar de trabajo. Por ejemplo, en el caso de España, con la implantación de los Planes de Igualdad desde el año 2007 (Ley Orgánica 3/2007, de 22 de Marzo, Para La Igualdad Efectiva de Mujeres y Hombres, 2007). En segundo lugar, la diversidad en el entorno laboral se ha convertido en una preocupación creciente para las empresas debido al impacto positivo que tiene en los resultados organizacionales (Mor-Barak, 2022). En resumen, el estudio de la diversidad en las organizaciones es importante porque promueve la inclusión y mejora los resultados organizacionales. Al comprender y gestionar adecuadamente la diversidad, las organizaciones pueden aprovechar las diferencias individuales como una fuente de fortaleza y valor en lugar de verlas como debilidades. La diversidad en las organizaciones es esencial para impulsar el progreso y el éxito empresarial en un entorno laboral cada vez más diverso (Gomez & Bernet, 2019).

La presente tesis doctoral podrá contribuir al avance del conocimiento en este campo a través de la investigación y el análisis de las tendencias actuales y futuras en el área de los riesgos psicosociales en el trabajo en relación con la diversidad. De esa manera se podrán detectar áreas de mejora en la prevención de riesgos psicosociales en el trabajo para una eficaz implementación de medidas de intervención para reducirlos. En resumen, mi motivación para elaborar una tesis doctoral se basa en la necesidad de aumentar la conciencia sobre este tema tan importante y en el deseo de contribuir al avance del conocimiento y la práctica en este campo.

Marco teórico de referencia

El marco teórico en el que se ha desarrollado esta tesis doctoral es el modelo JD-R (Job and Demands Resources) (Bakker & Demerouti, 2007; Demerouti et al., 2001). Se trata de uno de los modelos más relevantes en la actualidad para explicar el impacto de las condiciones de trabajo en la salud y el rendimiento de las personas. Este modelo permite comprender, explicar y pronosticar la salud de las personas trabajadoras y su rendimiento laboral. Según el modelo, las características del trabajo pueden tener consecuencias sobre la salud psicosocial. Los dos elementos fundamentales son las demandas y los recursos laborales: las **demandas laborales**, definidas como aquellos aspectos físicos, psicológicos, sociales y/u organizacionales que requieren un esfuerzo físico y/o psicológicos; y los **recursos laborales**, definidos como aquellos aspectos físicos, psicológicos, sociales y/u organizativos que conducen a la consecución de logros y metas laborales, estimulando el crecimiento y el desarrollo personal. Adicionalmente, se incluyen los recursos personales como variable que tienen una relación reciproca con los recursos laborales y son considerados como autoevaluaciones positivas relacionados con la capacidad de controlar e influir en el entorno (Bakker et al., 2023).

El modelo plantea que las demandas y los recursos dan lugar a dos procesos diferenciados (Ilustración 2). Un nivel elevado de **demandas laborales** genera tensión, dando lugar a un proceso de **deterioro de la salud**, incluyendo el *Burnout* Por otro lado, niveles elevados de **recursos laborales** y personales estimulan la **motivación**, dando lugar a un proceso motivacional, del que se derivan consecuencias positivas para la salud, entre los que destaca el *Work engagement*, como el grado en que existe una sensación positiva de plenitud o ilusión de cada persona ante su trabajo.

Aunque las demandas y recursos inician procesos distintos y contrapuestos, se ha visto que pueden tener un efecto conjunto. Según el modelo JD-R, los recursos laborales y personales pueden amortiguar el impacto de las demandas en el proceso de deterioro de la salud. Así, por ejemplo, recursos laborales como la autonomía, la calidad del liderazgo o las oportunidades de desarrollo pueden mitigar el impacto de las demandas (como son la carga de trabajo, demandas emocionales, etc.).
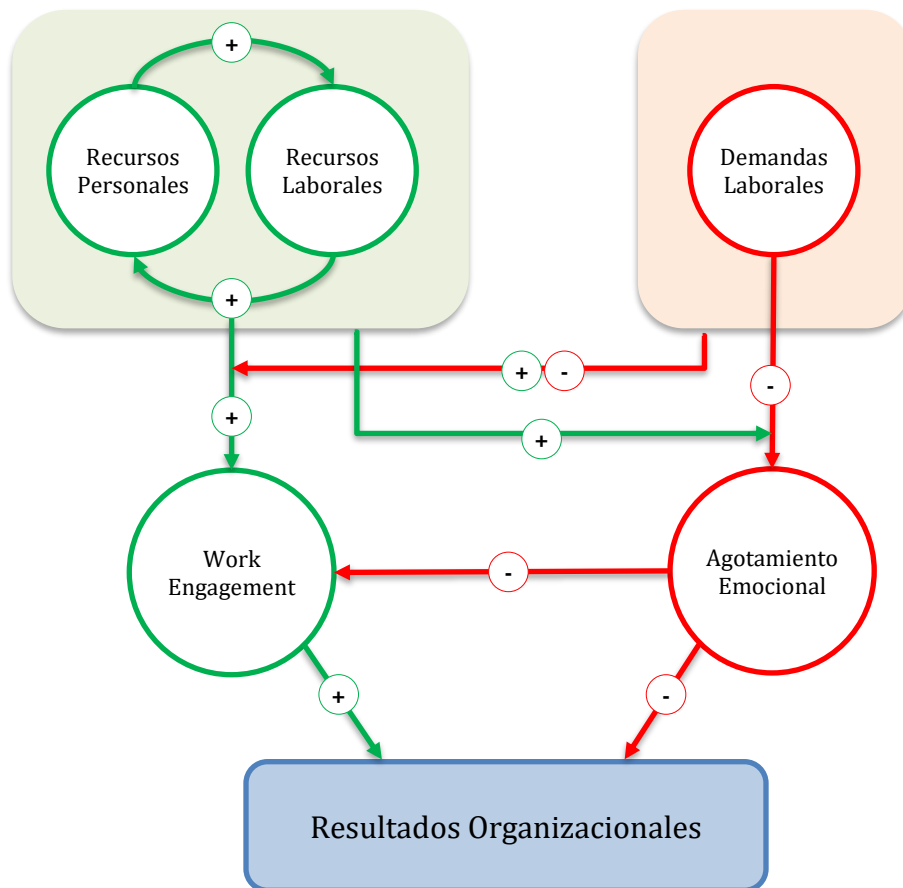
Figura 1. El modelo JD-R (Bakker et al., 2023; Bakker & Demerouti, 2007)

De acuerdo con este marco teórico, la presente tesis doctoral pretende valorar el impacto de la diversidad, a través de variables demográficas comunes como son el sexo, la edad, la antigüedad y el nivel de responsabilidad o profesión, en los niveles de demandas y recursos laborales de forma transversal, ya sea en un sector de actividad concreto como es el sanitario, respecto a cómo afecta la violencia laboral o cuál ha sido el impacto psicosocial de la pandemia.

El primer estudio empírico (capítulo 2) utiliza la metodología HERO-HOS (Salanova et al., 2012) para analizar los recursos y las demandas laborales, así como su impacto en el *Work engagement* de los profesionales sanitarios. Al hacerlo, se tiene cuenta la diversidad, a través del análisis de las diferencias entre sexos y grupos de edad. A pesar de la relevancia de los factores psicosociales en el ámbito sanitario (Sullivan & Germain, 2020; Vévoda et al., 2018) no se habían encontrado artículos publicados que realicen un análisis tan detallado del modelo JD-R de acuerdo con la diversidad organizacional en este sector.

El segundo y tercer artículo de la tesis miden factores de riesgos psicosociales mediante la aplicación de la metodología PFSICO (Ferrer Puig et al., 2011). Las escalas del método PFSICO se pueden enmarcar dentro del Modelo JD-R como **recursos laborales**: i.e.: tiempo de trabajo, autonomía, participación / supervisión, apoyo social, *feedback* positivo o plan de carrera; y otras variables se pueden enmarcar como **demandas laborales**: i.e.: carga de trabajo, demandas psicológicas, rutina o conflicto de rol.

En la siguiente tabla (Tabla 1) se desglosan las 9 escalas del método FPSICO, las subescalas que lo componen y su clasificación según el Modelo JD-R:

Tabla 1. Variables del método FPSICO y clasificación según modelo JD-R

Factor de riesgo	Subescalas / Descripción	Clasificación según JD-R
Tiempo de trabajo (TT)	Conciliación	Recurso
Autonomía (AU)	Temporal Decisional	Recurso
Carga de trabajo (CT)	Presión de tiempos Esfuerzo de atención Cantidad y dificultad de la tarea	Demanda
Demandas psicológicas (DP)	Demandas cognitivas Demandas emocionales	Demanda
Variedad / Contenido (VC)	Rutina *Feedback* positivo	Demanda / Recurso
Participación/Supervisión (PS)	Participación Supervisión	Recurso
Interés por el trabajador / Compensación (ITC)	Desarrollo profesional Equilibrio esfuerzo / recompensa	Recurso
Desempeño de rol (DR)	Ambigüedad de rol Conflicto de rol Sobrecarga de rol	Demanda
Relaciones y apoyo social (RAS)	Apoyo social Calidad de las relaciones Violencia laboral	Recurso / Demanda

El segundo artículo de la tesis (capítulo 3) valora la diferencia en la percepción de la violencia laboral según diversos factores de diversidad organizacional: el sexo, la edad y el nivel de antigüedad en la empresa. La violencia laboral es uno de los factores de riesgos que más preocupan en las organizaciones dada su relevancia y repercusión negativa en la salud de las personas trabajadoras (Sancini et al., 2012). De acuerdo con la bibliografía analizada, se sabe que algunos factores de riesgo psicosocial, como son los conflictos interpersonales, el conflicto y la claridad de rol tienen relaciones significativas con la violencia laboral (Figueiredo-Ferraz et al., 2012).

Finalmente, en el último estudio, (capítulo 4) se analiza cómo han evolucionado la percepción de factores de riesgos psicosociales antes y después de la pandemia del Covid-19, en función de la diversidad de las organizaciones, como son el sexo, la edad y nivel de responsabilidad. Desde hace varios años, vengo desarrollando un proyecto de evaluación de riesgos psicosociales en una conocida franquicia de comida rápida. Se trata de proyectos donde se realizan informes de diagnóstico y se propone un plan de acción, y pasados un par de años se vuelve a reevaluar. En mitad de este proceso, en el año 2020 llegó la crisis del Covid19, que ha resultado ser la mayor emergencia sanitaria a nivel mundial con un efecto social y económico devastador (World Health Organization, 2021). Por lo que se paralizaron todos los proyectos desde esa fecha hasta el año 2022, fecha en la que se retomaron de nuevo las evaluaciones. Fue en ese momento en el que me di cuenta de que disponía de información suficiente para elaborar una comparación de la percepción de riesgos psicosociales antes y después de la pandemia. Al tratarse de una franquicia de restaurantes de comida rápida, se puede considerar que el sistema de organización del trabajo, como los turnos, horarios, el liderazgo o la retribución, son los mismos para todos los centros. Esto nos permite suponer que los cambios que se produzcan en la salud psicosocial, antes y después de la pandemia por Covid19, estarán mayoritariamente motivados por la propia pandemia, más que por causas organizativas internas. Este artículo me ha parecido especialmente interesante, dado que de toda la bibliografía analizada es el único que está enfocado al sector de la hostelería, uno de los más afectados por la pandemia y es uno de los pocos estudios que hay en este ámbito.

Los distintos aspectos de diversidad organizacional analizados en los tres artículos incluyen tanto diversidad visible, como son el sexo y la edad como diversidad invisible como es el nivel de responsabilidad o la antigüedad en la empresa. (Mor-Barak, 2022). Respecto a la edad, cabe destacar que en el segundo artículo se realizó una agrupación por edades en décadas (<20, de 20 a 30 años, de 30 a 40 años, de 40 a 50 años, de 50 a 60 años y más de 60 años) que ha servido en este caso en concreto a realizar un análisis de regresión. Sin embargo, en el primer y tercer artículo se hizo una agrupación dicotómica entre jóvenes y mayores (hasta 39 años y de 40 años o más). Esta división ha permitido simplificar en gran medida los análisis y se corresponde con las recomendaciones que hacen otros autores, que fijan la división en ≤ 39 años para jóvenes, según un análisis sociodemográfico de inserción laboral. (Martín Ruiz, 2005).

Esquema de tesis

El proyecto de tesis presentado analiza en qué nivel afecta el sexo, la edad, la antigüedad o el cargo de responsabilidad en la percepción de los riesgos psicosociales y de violencia en el trabajo. Por tanto, en el marco teórico JD-R (Bakker & Demerouti, 2007), este conocimiento nos permitirá desarrollar planes de acción e intervención psicosocial específicos para cada colectivo, en base a las fortalezas y debilidades de cada grupo demográfico.

Con este objetivo se desarrollaron tres estudios empíricos que conforman tres capítulos de esta tesis. Los objetivos específicos abordados en la tesis se presentan en la Tabla 1.

Tabla 1. Objetivos específicos de estudio.

ESTUDIO	OBJETIVO	CAPÍTULO		
		2	3	4
1	¿Existen diferencias en la percepción de los riesgos psicosociales según el sexo o la edad en el sector sanitario?	X		
2	¿Los recursos laborales se relacionan positivamente con el *work engagement*, independientemente del sexo y la edad, en el sector sanitario?	X		
3	¿Las demandas laborales se relacionan negativamente con el *work engagement*, independientemente del sexo y la edad, en el sector sanitario?	X		
4	¿El *work engagement* actúa como mediador entre las demandas y recursos laborales con el rendimiento, independientemente del sexo y la edad, en el sector sanitario?	X		
5	¿Qué riesgos psicosociales tienen mayor impacto en la violencia laboral?		X	
6	¿Existen diferencias en la percepción de la violencia laboral según el sexo, la edad o la antigüedad laboral?		X	
7	¿Han aumentado los riesgos psicosociales después de la pandemia Covid19 en el sector de la hostelería?			X
8	¿El impacto de los riesgos psicosociales es distinto en función del sexo, edad o nivel de responsabilidad en el sector hostelería?			X

Capítulo 2. The influence of psychosocial factors according to sex and age in hospital care workers

A pesar de que los riesgos psicosociales en las empresas afectan tanto a mujeres como a hombres, múltiples estudios demuestran que en España las mujeres presentan mayor exposición a los riesgos psicosociales (Artazcoz et al., 2006; Cifre & Vera, 2019). Esto puede ser debido a la mayor probabilidad de tener peores condiciones de empleo, así como a las desigualdades sociales entre sexos. Por otra parte, los riesgos psicosociales influyen de manera diferente en las personas según la edad (Buendía, 1998) probablemente debido a que la experiencia les dota de mayores recursos para afrontar las demandas laborales (Garnés Ros, 2001; Olmedo Montes et al., 2001). Este estudio investiga las diferencias demográficas en personas trabajadoras de la salud en cuanto a su percepción de riesgos psicosociales y los efectos de las demandas y recursos laborales en el *Work engagement* y el rendimiento laboral.

Esta investigación tiene un objetivo doble, en primer lugar, conocer si las diferencias demográficas, como el sexo y la edad, conducen a diferencias en la percepción de los riesgos psicosociales y, en segundo lugar, identificar las demandas y recursos laborales con mayor impacto en el compromiso y *Work engagement*. Para ellos, se analizó una muestra de 4.451 personas del sector sanitario, pertenecientes a 75 hospitales españoles, para probar las hipótesis.

Capítulo 3. Analysis of some demographic and psychosocial factors that influence in the perception of the workplace violence.

Investigaciones previas indican que la violencia laboral es uno de los factores de riesgo más preocupantes en las organizaciones (Sancini et al., 2012), dada su relevancia y repercusión negativa, con gran impacto en la satisfacción laboral, el compromiso organizacional y el desempeño. Los estudios demuestran que las personas que sufren acoso laboral tienen niveles significativamente superiores de estrés laboral, problemas físicos y psíquicos y abandonan con mayor frecuencia el lugar de trabajo (Chan et al., 2008a).

Por este motivo es importante conocer la relación que existe entre la percepción de violencia laboral y variables demográficas como la edad, el sexo y la antigüedad en la empresa. Y la relación entre los riesgos psicosociales y la violencia laboral.

El objetivo de este estudio es evaluar el impacto de los riesgos psicosociales según la diversidad organizacional como el sexo, la edad y la antigüedad en la percepción de la violencia laboral en trabajadores y trabajadoras. Se analizaron los datos de 22 empresas españolas con un total de 26.741 personas para el desarrollo de esta investigación.

Capítulo 4. The impact of covid-19 on psychosocial risks in the catering industry: a two-wave study.

El objetivo de este estudio fue analizar el impacto de la pandemia de Covid-19 en el sector de la hostelería, considerando la diversidad organizacional en variables demográficas como el sexo, la edad y el nivel de responsabilidad dentro de la organización.

Se ha reconocido que la pandemia ha provocado un impacto psicológico negativo en la población en general (González-Sanguino et al., 2020) además de aislamiento social por el miedo al contagio (Kelly, 2020). El sector sanitario, como primera barrera de atención al ciudadano, ha sido uno de los sectores más castigados y por lo tanto de los más estudiados durante todo este período. (Chen et al., 2020; Dosil-Santamaría, et al., 2021; Giménez-Espert et al., 2020). Sin embargo, hay otros sectores de actividad, como es la hostelería, que también han sufrido las consecuencias de esta pandemia sin contar con una investigación tan profusa.

Este estudio pre-Covid19 y post-Covid19 fue posible gracias a que estaba realizando un análisis de los riesgos psicosociales de esta reconocida franquicia de comida rápida antes de la pandemia. La recogida de datos fue truncada por la pandemia en el año 2020 y fue necesario esperar 2 años para retomar el proceso de recogida de datos, lo que sirvió para analizar un mismo grupo demográfico antes y después del Covid19.

La investigación se llevó a cabo en dos fases, una inicial prepandemia en los años 2018 y 2019, en la que participaron 2.045 personas, y otra postpandemia en el año 2022 con un total de 2.049 personas. El estudio se realizó en una reconocida cadena de restaurantes de *Fast Food*, distribuida por toda España. Al tratarse de una franquicia, el sistema de organización del trabajo, los turnos, horarios, liderazgo o remuneración, se pueden considerar idénticos para todos los restaurantes. Esto sugiere que los cambios en la salud psicosocial antes y después de la pandemia de

Covid19 serán mayoritariamente debidos a la propia pandemia, más que a causas organizativas.

Aprovechando la línea de mi tesis doctoral, el análisis de riesgos psicosociales se realizó en base a las distintas variables demográficas como el sexo, la edad y el nivel de responsabilidad dentro de la organización.

Capítulo 5. Conclusiones generales

En este último capítulo se hace un resumen de las conclusiones de toda investigación realizada en los capítulos anteriores y se proponen nuevas líneas de investigación a futuro que podrían ser interesantes para su desarrollo. También se incluyen las limitaciones encontradas y las implicaciones prácticas que se pueden desprender de toda la investigación.

CAPÍTULO 2

The influence of psychosocial factors according to sex and age in hospital care workers[1]

Abstract

Even though psychosocial risks can affect the entire working population regardless of demographic variables, multiple publications claim that women are more exposed to psychosocial risks (Artazcoz et al., 2006; Cifre & Vera, 2019) and that psychosocial risks affect people in a different way, depending on their age (Buendía, 1998). This study aims to investigate demographic differences (i.e., sex and age) in health care workers, with an aim which is twofold: i) to know if these geographic differences lead to differences in perception of psychosocial risks; and ii) to identify the job demands and resources with the highest impact on work engagement and performance. A sample of 4.451 people from the sanitary sector, pertaining to 75 Spanish hospitals, was analyzed to test the hypotheses. ANOVA results demonstrated that women show significantly higher impact values in job demands than men, as well as higher values in job resources. Moreover, the group of younger people (<40 years) showed significantly lower levels in demands, and significantly higher in job resources, wellbeing, and organizational outcomes. Finally, multi-group SEM analyses showed that the impact of job demands and resources on work engagement and performance is significant, regardless of sex and age, although there are changes in the coefficients. The differences in the perception of job demands and resources of the different demographic groups can be used to develop specific psychosocial intervention in health care workers.

Keywords: Psychosocial risks, job demands, sex, age, health care workers.

---

[1] Chapter 2 is based on: Cañavate, G., Meneghel, I., & Salanova, M. (2023). The Influence of Psychosocial Factors according to Gender and Age in Hospital Care Workers. *The Spanish Journal of Psychology*, 26, E1. https://doi.org/10.1017/SJP.2023.1.

Introduction

According to the European Risk Observatory, psychosocial risks can be defined as those aspects from work design and management, as well as their social and organizational context, susceptible to affect physical, psychological, and social health and wellbeing of individuals (Brun & Milczarek, 2007). Recent publications show that psychosocial risk factors are the main contributors to health issues such as depression, stress, and anxiety (Tomaschek et al., 2018). The occupational stress, violence and workplace harassment or mobbing are the aspects with the highest impact on people's mental health (EU-OSHA, 2007). Other studies have demonstrated that psychosocial risk management is an efficient way to increase job satisfaction and to minimize conflict at work (Sureda et al., 2019). Positive personal and organizational aspects (e.g., autonomy, work climate, leadership, social support climate) are also related to productivity, creativity and quality of work performed with healthy organizational results (Garrosa Hernández & Carmona Cobo, 2011).

It is interesting to note that psychosocial risks have an uneven impact on people, as risks are interfered by sex and age differences, not only due to biological, but also sociocultural differences (Benavides et al., 2007). Moreover, when working in a specific occupational sector, such as the sanitary sector, professionals are affected in a transversal way due to both psychosocial risk factors of the sector as well as inequalities, generated by gender and age. For that reason, it has been a topic of interest in the investigation to identify the levels of mental health and their antecedents, in professions that include dealing with people, as in the case of the sanitary field (Wieclaw et al., 2006).

Thus, the aim of this study is to analyze the differences in the perception of psychosocial risk in healthcare workers, according to age and sex, by identifying the impact these have on people's work engagement and performance. The Job Demands-Resources Model (Demerouti et al., 2001; Schaufeli & Bakker, 2004) framework is used as theoretical basis for this study. This model assumes a motivational process where work engagement can be predicted through the combination of both job demands and resources. The model predicts that high job resources (e.g., autonomy or social support climate), increase work engagement and counteract the negative effect of demands (e.g., quantitative overload). The model

also predicts that high levels of work engagement lead to high levels of job performance. Therefore, a virtuous cycle is produced where high levels of job resources increase engagement and this, in turn, increases performance.

This is the first study to separately analyze the impact of psychosocial risk on different demographic groups (i.e., gender and age) among healthcare workers. Therefore, the prior knowledge provided by other similar studies in other sectors of activity is expanded. This analysis makes it possible to find out which labor demands and resources are most relevant, according to each sex and age group, with the aim of establishing guidelines for psychosocial intervention and tailored training plans. It must be taken into account that the health sector has been one of the activity sectors that were affected the most by the Covid19 pandemic (Buselli et al., 2020; Chen et al., 2020; Iob et al., 2020; Moreno Martínez et al., 2022), so it can be very useful to know which resources and demands have the highest influence on each demographic group to develop intervention strategies that can improve wellbeing and performance.

Differences between sexes

Job insecurity in women on the labor market has decreased towards more egalitarian positions between sexes. However, there are still sex differences within the working environment, with women occupying the most precarious job positions, which has a negative impact on their mental health (Messing & Mager Stellman, 2006). Moreover, recent data show that women present a significant probability of having worse employment conditions and a higher exposure to psychosocial risks than men (Artazcoz et al., 2006; Castiblanque & Beneyto Calatayud, 2019; Cifre & Vera, 2019). Although there is still no evidence that women suffer higher work-related stress than men, different studies report that female workers experience a higher exposure to psychosocial risks than men (Benavides et al., 2007).

To understand why gender could be a cause of differences in psychosocial health, social inequalities must be understood. On one hand, the uneven distribution of productive work, on the other hand, the double working day, since women are forced to reconcile paid and unpaid work due to lack of conciliation and co-

responsibility, which leads to an emotional division between job demands and family needs. There is evidence that many women suffer from role conflict as they must juggle work and family life with all that entails. Childcare is still a task mainly performed by women, since they devote more time to child, elder and dependent care (Ruiz-Frutos et al., 2007).

In this sense, both job and family demands may suppose a difference between men and women, and therefore have an impact on their psychological wellbeing scale (Ansoleaga et al., 2016). However, many of the studies that have analyzed the impact of psychosocial risks between men and women are based on horizontal segregation (women usually occupy nursing positions, compared to more men in medical positions) (Pascual, 2008), so that they identify the main cause of the differences in the fact that women are more likely to assume precarious job positions, rather than in other gender-related inequalities. However, there is a total vertical gender segregation in the sanitary sector (i.e., more women in lower-ranking occupations and an unequal distribution of women in the hierarchical scale), so it is expected to observe differences with respect to psychosocial risks, considering the effect of both types of segregation (Moscato et al., 2020).

Differences between age groups

Age acts as a moderating variable in the relationship between work engagement and job satisfaction: as age increases, the work engagement-job satisfaction relationship weakens, "This means that highly engaged workers will not only be more satisfied, but also tend to increase their resources over time, becoming more resilient to stress and adverse working conditions." (Guglielmi et al., 2016). Therefore, the motivational engagement-satisfaction pattern plays a prominent role for younger people, which suggests that stressors (such as job demands) could have a significant impact on them. However, other results indicate that older people are more likely to have higher levels of performance than younger people, partially due to the aging process (e.g., maturity, transformation of personality, etc.) rather than to high levels of effort (Beier et al., 2022; Kanfer & Ackerman, 2004). A recent analysis from multiple meta-analytic studies shows no significant relationship between age and core task performance, this may seem somewhat surprising given the significant relationship between abilities and job performance and the negative

relationship between fluid abilities and age. Despite multiple studies on the relationship between job performance and age, there is still much to be learned about how fluid and crystallized abilities mediate the relationship between age and job. However, differences have been found between older and younger workers on most job attitude measures, including psychosocial well-being measures such as job satisfaction, role conflict, role ambiguity, and commitment, with older workers having more positive well-being outcomes than their younger counterparts. (Beier et al., 2022)

Other studies relate both physical and mental toughness to aging (Prieto Albino et al., 2002; Sapolsky, 2013). There are also studies that indicate a significant activation of the sympathetic nervous system, caused by stress in older people (Prieto Albino et al., 2002), as well as a poorer adaptation to shift works (McMichael, 1978). Job stress seems to decrease with age (Buendía, 1998), because the greater experience of older people seems to provide them with more capacity and resources to face job demands (Garnés Ros, 2001).

Objectives

The objective of this study is twofold. Firstly, it aims to identify the differences in the perception of psychosocial risk (i.e., job demands, job resources, wellbeing, discomfort, and organizational outcomes) in each demographic group (i.e., women/men and younger/older) in the healthcare sector. Secondly, it aims to identify how to replicate the motivational process proposed by the JD-R model in the healthcare sector, and thus identify those job demands and resources that have a higher impact on work engagement and performance for each demographic group (i.e., women/men and younger/older). These findings will allow to design ad hoc intervention strategies for each demographic group, so that sanitary organizations can intervene in the improvement of their employees' psychosocial health.

Starting from this theoretical basis, five hypotheses are raised.

According to the literature analyzed, it seems that women have higher exposure to psychosocial risks and therefore higher levels of job demand (Aparicio García et al., 2008; Catalina Romero et al., 2008; Ruiz-Frutos et al., 2007). For this reason, it is expected that our results go in the same direction. We will also be able

to analyze the differences in relation to job resources which, according to the JD-R model, could compensate for the high demands perceived. Thus, we propose:

H₁. There are differences in the perception of psychosocial risk according to sex, with women having higher job demands and more resources than men.

In relation to age, research obtained contradictory results. While some authors claim that younger people have higher levels of engagement and job satisfaction (Guglielmi et al., 2016), others state that it is more common in older people, due to maturity (Atance Martínez, 1997; Hadjiolova et al., 1994; Prieto Albino et al., 2002). While some authors report that older people have greater physical and mental strength, and therefore greater job resources due to experience (Garnés Ros, 2001; Olmedo Montes et al., 2001), others report just the opposite (Atance Martínez, 1997; Prieto Albino et al., 2002; Sapolsky, 2013). Considering that more literature has been found in favor of greater resources in older people, the following hypothesis is proposed:

H₂. There are differences in the perception of psychosocial risk according to age, with older people perceiving more job resources and wellbeing and less job demands than younger persons.

As observed in the bibliography, older people have greater well-being, commitment, and satisfaction, as well as a lower burden due to conflict and role ambiguity, than their younger counterparts. Therefore, a greater resistance to psychosocial risks could be expected in this group. (Beier et al., 2022)

H₃. Job resources will be positively related to work engagement, regardless of sex and age.

Following the rationale of the previous hypothesis, the JD-R model also predicts that an increase in job demands will have a negative impact on work engagement and therefore on performance. This study intends to prove that the model is fulfilled in this same sense, regardless of age and sex. In this case, it will also be possible to know which demands have the greatest impact on work engagement, which will allow us to establish specific psychosocial intervention plans for each demographic group. Thus, the following hypothesis is proposed:

H4. Job demands will be negatively related to work engagement, regardless of sex and age.

Finally, the mediating role of work engagement in relation between job resources and demands with performance is verified with the last hypothesis. According to the proposed hypothesis, this mediating role will be independent of sex and age.

H5. Work engagement mediates the relationship between demands and resources with performance, regardless of sex and age.

Methodology

Sample and procedures

The sample was collected between 2017 and 2018 through the project *Hospital Optimista* (Peláez et al., 2017). It includes a total of 4,451 employees from 75 Spanish hospitals. 74.5% were women with an average age of 43.5 (*SD* = 10.0), divided into job positions including Nurse (33.6%); Nursing Assistant (17.4%); Administrative Assistant (13.0%); Ward Staff (4.0%), Medical Practitioner (24.8%) and other occupations (6.9%).

The sample was divided into two age groups: the group with younger age ≤39 (37.5%) and the group with older age ≥ 40 (62.5%). This division has been selected since it falls in the middle of the working age interval, considering that there is a later incorporation into the labor market. Moreover, this division at the age of 39 coincides with the recommendations of other authors (Martín Ruiz, 2005).

Before collecting data, we contacted the hospital's leading executives (i.e., Human Resources and Management) to explain the purpose and requirements of the study. In addition, it was explained to everyone that participation was voluntary, that the presentation of the data would be added, and that any identifying information would be eliminated. The surveys were completely confidential, since the questionnaire did not ask for any personal information that could identify the author. Each person received access to the questionnaire in their email, through which they could access the online form. Data were collected over a three-month period.

Materials and Methods

The variables were measured with previously validated scales and grouped in dimensions, using a questionnaire, specifically developed for healthcare workers (Salanova et al., 2012).In general, internal consistency (Cronbach α) for the scales reached the cut-off point of 0.70 (Nunnally & Bernstein, 1994). All items have a 7 points Likert scale, from 0 (*never, strongly disagree*) to 6 (*always*, *strongly agree*).

Job Demands: 8 job demands were measured, all of them evaluated through 3 items: quantitative overload (α = .92) (e.g., "The work we do requires us to work against the clock"), role ambiguity (α = .89), role conflict (α = .89) (e.g., "The work we do requires us to do tasks that are disorganized"), routine (α = .82) (e.g., "The work we do requires us to do routine tasks"), mental overload (α = .74), emotional overload (α = .55) (e.g., "The work we do requires us to deal with difficult or peculiar people"), mobbing (α = .86) (e.g., "We have experienced situations where the work of a colleague has been systematically evaluated negatively") and emotional dissonance (α = .90) (e.g., "How often do you need to express emotions in your work that do not correspond with what you feel at that time").

Job Resources: 8 job resources were measured, all of them evaluated by 3 items: autonomy (α = .62) (e.g., "Within my work team, we do our tasks in the way that we think is most convenient"), feedback (α = .75) (e.g., "In my work team, colleagues exchange information about how we do the work"), social support climate (α = .85) (e.g., "Within my work team, the supervisor shows his / her concern for our personal issues"), coordination (α = .81) (e.g., "Within my work team, we effectively handle unexpected events"), empathy (α = .97) (e.g., "During interpersonal relationships that we have with other colleagues and supervisors, we try to know how they feel"), mental competence (α = .80) and emotional competence (α = .68) (e.g., "In general, I think we are capable of being aware and remembering many things at the same time"). Transformational leadership (α = .98) was measured through 15 items, according to its dimensions (3 items per dimension): vision, communication, stimulation, support, and recognition (e.g., "My immediate supervisor understands perfectly what the team's goals are").

Wellbeing: 1 indicator were measured: engagement (α = .91, 9 items) (e.g., "Within my work team, we enjoy doing the work.

Organizational outcomes: 3 organizational outcomes were measured, all composed of 3 items: intra-role performance (α = .96) (e.g., "Within my work team, we achieve the work objectives"), extra-role performance (α = .95) (e.g., "We perform roles that are not formally required but which improve the organizational reputation"), and organizational commitment (α = .93) (e.g., "Within my work team, the problems of this organization are "our" problems").

Data analysis

To test hypotheses 1 and 2, mean comparison analyses were performed by ANOVA, with the aim of identifying differences between age groups and sex groups in the analyzed variables of demands, job resources, wellbeing, discomfort, and organizational results.

To address hypothesis 3 to 5, structural equation modelling (*SEM*) was carried out to identify which demands and job resources have a more significative impact on engagement and performance, i) between men and women and ii) by age groups. To analyze the hypotheses raised, *SEM* has been carried out by using AMOS 21.0 (Arbuckle, 2012) with the multi-group method. The maximum likelihood estimation method was used for analyses, using absolute and relative indices from the goodness-of-fit index (Marsh et al., 1996). Besides the goodness-of-fit statistic of χ^2 and the Root Mean Square Error of Approximation (*SEM*), the Normed Fit Index (*NFI*), the Incremental Fit Index (*IFI*), the Tucker-Lewis Index (*TLI*) and the Comparative fix index (*CFI*) are included. An *SEM* under .06 indicates a good fit. For most indices, values higher than .90 indicate a good fit, and even higher values such as .95 indicate an excellent fit (Hu & Bentler, 1999). Modification indices were used to improve the fit model, for which previously missing values (*N* = 4.12%) were substituted by the average value of each variable. These missing values correspond to the blank questions of the questionnaires.

Results

Descriptive Analysis

Descriptive results for different demographic groups are displayed in Table 1. The internal consistency (α by Cronbach) of the scales used exceeded the cut-off

point of .70 (Nunnally & Bernstein, 1994), except for the emotional overload scales (.55), autonomy (.62) and emotional competence (.68).

The results of Harman's single factor test Confirmatory Factor Analysis showed a poor fit of the single-factor test model for job resources: $\chi2$ (1260) = 1540,890; *SEM* =.17; NFI < .001; IFI = .00; *TLI* =- .06; *CFI* < .001; and for job demands: $\chi2$ (276) = 71,298; *SEM* = .24; NFI < .001; *IFI* < .001; *TLI* = -.09; *CFI* < .001. To confirm these results, additional analyses were performed (Podsakoff et al., 2003a). This approach means to add a first-order factor to the investigator's theoretical model with all measurements as indicators. Results showed that the model fit improved, even though none of the trajectory coefficients, corresponding to the relationships between the indicators and the general factor method, were significative. This finding suggested that, even though the method bias may be present, it does not significantly affect the results or the conclusions (Conger et al., 2000).

Table **1**. Mean, Standard Deviation (SD) and ANOVA results for different sex and age groups.

| | Differences by sex group | | | | | | Differences by age group | | | | | |
| | Man | | Woman | | | | Younger | | Older | | | |
Job Demands	*Mean*	*(SD)*	*Mean*	*(SD)*	*F*	*p-value*	*Mean*	*(SD)*	*Mean*	*(SD)*	*F*	*p-value*
Quantitative overload	2.89	(1.54)	3.00	(1.41)	4.65	**<.05**	2.67	(1.51)	3.16	(1.37)	117.26	**<.0001**
Role ambiguity	1.47	(1.31)	1.41	(1.26)	1.64	.201	1.19	(1.24)	1.57	(1.28)	92.27	**<.0001**
Role conflict	2.02	(1.38)	2.06	(1.27)	.57	.449	1.77	(1.34)	2.22	(1.25)	13.55	**<.0001**
Routine	3.76	(1.22)	4.02	(1.15)	4.70	**<.0001**	3.90	(1.22)	3.98	(1.15)	4.68	**<.05**
Mental overload	4.51	(1.08)	4.67	(.99)	19.80	**<.0001**	4.71	(.99)	4.58	(1.02)	16.39	**<.0001**
Emotional overload	3.36	(1.05)	3.34	(1.00)	.58	.448	3.24	(1.07)	3.41	(.97)	29.21	**<.0001**
Mobbing	1.13	(1.25)	1.13	(1.19)	.01	.933	.95	(1.16)	1.24	(1.22)	57.70	**<.0001**
Dissonance	1.76	(1.38)	1.79	(1.32)	.32	.571	1.53	(1.34)	1.94	(1.31)	99.06	**<.0001**
Job Resources												
Autonomy	4.73	(1.01)	4.88	(.95)	19.93	**<.0001**	4.87	(.95)	4.82	(.98)	3.34	.068
Feedback	4.27	(1.25)	4.35	(1.18)	3.64	.056	4.57	(1.19)	4.19	(1.18)	102.50	**<.0001**
Climate Social Support	4.00	(1.53)	4.06	(1.44)	1.22	.269	4.30	(1.47)	3.89	(1.44)	78.91	**<.0001**
Coordination	4.61	(1.11)	4.67	(1.00)	2.76	.097	4.85	(1.02)	4.53	(1.02)	96.55	**<.0001**
Empathy	4.48	(1.20)	4.68	(1.05)	28.94	**<.0001**	4.85	(1.09)	4.49	(1.07)	111.06	**<.0001**
Mental Competence	4.90	(.86)	5.01	(.80)	16.59	**<.0001**	5.10	(.79)	4.91	(.82)	53.46	**<.0001**
Emotional Competence	4.12	(1.05)	4.05	(1.02)	3.70	.055	4.11	(1.10)	4.05	(.98)	3.30	.069
Transf. Leadership	4.26	(1.38)	4.29	(1.32)	.34	.560	4.56	(1.30)	4.11	(1.33)	119.31	**<.0001**
Wellbeing												
Vigor	4.27	(1.26)	4.31	(1.17)	.81	.37	4.55	(1.19)	4.15	(1.19)	111.96	**<.0001**
Dedication	4.68	(1.17)	4.79	(1.04)	8.90	**<.01**	4.95	(1.06)	4.65	(1.07)	72.25	**<.0001**
Absorption	4.25	(1.20)	4.44	(1.09)	22.46	**<.0001**	4.50	(1.17)	4.33	(1.09)	22.70	**<.0001**
Total Engagement	4.41	(1.09)	4.52	(.98)	9.78	**<.01**	4.67	(1.03)	4.38	(.98)	82.83	**<.0001**
Organizational Outcomes												
Intra-role Performance	4.04	(1.78)	3.92	(1.87)	3.38	.066	4.41	(1.77)	3.66	(1.84)	168.58	**<.0001**
Extra-role Performance	4.21	(1.66)	4.09	(1.73)	3.61	.057	4.50	(1.65)	3.88	(1.71)	132.57	**<.0001**
Organizational commitment	3.89	(1.72)	3.76	(1.72)	4.40	**<.05**	4.13	(1.71)	3.58	(1.69)	102.63	**<.0001**

Note: variables with statistically significant differences: p<.05 and p<.0001 are shown in boldface type.

Demographic group comparison

In table 1, results of ANOVA are also presented. From the comparison of sex groups, statistically significant differences were observed in the following dimensions. In job demands, it is observed that the female group has significantly higher values than the male group in quantitative overload $F(1, 4,363) = 4.64$, $p < .05$, routine $F(1, 4,347) = 40.70$, $p < .001$ and mental overload $F(1, 4,342) = 19.80$, $p < .001$. In job resources, the female group has significantly higher values in autonomy $F(1, 4,305) = 19.92$, $p < .001$, empathy $F(1, 4,271) = 28.93$, $p < .001$, mental competence $F(1, 4,267) = 16.59$, $p < .001$ and leadership- vision $F(1, 4,242) = 4.65$, $p < .05$. Regarding the results of psychosocial health, it is observed that the female group has significantly higher values in work engagement $F(1, 4,191) = 9.78$, $p < .01$, and higher values in GHQ ineffective coping $F(1, 4,144) = 33.99$, $p < .001$ than the male group. Finally, regarding organizational outcomes, the organizational commitment $F(1, 4,137) = 4.40$, $p < .05$, is significantly lower in the female group.

From the comparison of age groups, statistically significant differences were observed in the following dimensions. The older age group ($\geq$ 40 years) has significantly higher values for all job demands, except for mental overload, where the value is higher for the younger group $F(1, 4,184) = 16.39$, $p < .001$. Moreover, it is observed that the older group (> 40 years) has significantly lower values for practically all the job resource dimensions analyzed: feedback $F(1, 4314) = 102.50$, p<.001; social support climate $F(1, 4,310) = 78.91$, p < .001; coordination $F(1, 4,305) = 96.55$, $p < .001$; empathy $F(1, 4,286) = 111.06$, $p < .001$; mental competence $F(1, 4,281) = 53,46$, $p < .001$; transformational leadership $F(1, 4,256) = 119.31$, $p < .001$. Regarding wellbeing and discomfort, it is observed that the group of older people has significantly lower values in all wellbeing dimensions and higher values in all discomfort dimensions, with a $p < .001$ in all cases. Finally, it is observed that the older group has significantly lower values across all dimensions of organizational outcomes, with a $p < .001$ in all cases.

SEM **Analysis**

Multi-group SEM were raised between job demands, resources, work engagement and performance, following the motivational process proposed by the JD-R Model. First, multi-group analysis was performed across sex groups,

simultaneously using samples with men and women. The model fits the data well, with all fit indexes satisfying their criteria: χ^2 = 5539; df = 342; RMSEA = .059; NFI = .908; IFI = .913; TLI = .894; CFI = .913. For both sexes, job resources are positively related with work engagement which, in turn, is positively related with performance. Moreover, as expected, job demands are negatively related with work engagement. Coefficients are shown in tables 1 and 2 for men and women, respectively. In all cases, the regression coefficients were significant $p < .001$.

Figure 1. CFA analyses JD-R Model concerning organizational outcomes: engagement and performance in **men group**. (n=1137). Note: Only the significant coefficients are displayed. χ^2 = 5539; df = 342; RMSEA = .059; NFI = .908; IFI = .913; TLI = .894; CFI = .913

Figure 2. CFA analyses JD-R Model concerning organizational outcomes: engagement and performance in **women group**. (n=3298). Note: Only the significant coefficients are displayed. χ^2 = 5539; df = 342; RMSEA = .059; NFI = .908; IFI = .913; TLI = .894; CFI = .913

32

Second, multi-group analysis was performed across age groups, simultaneously using younger and older samples. The model fits the data well, with all fit indexes satisfying their criteria: χ^2 = 5645; df = 342; RMSEA = .059; NFI = .906; IFI = .911; TLI = .891; CFI = .911. For both age groups, job resources are positively related with work engagement which, in turn, is positively related with performance. Moreover, as expected, job demands are negatively related with work engagement. Coefficients are shown in tables 3 and 4 for younger and older people, respectively. In all cases, the regression coefficients were significant $p < .001$.
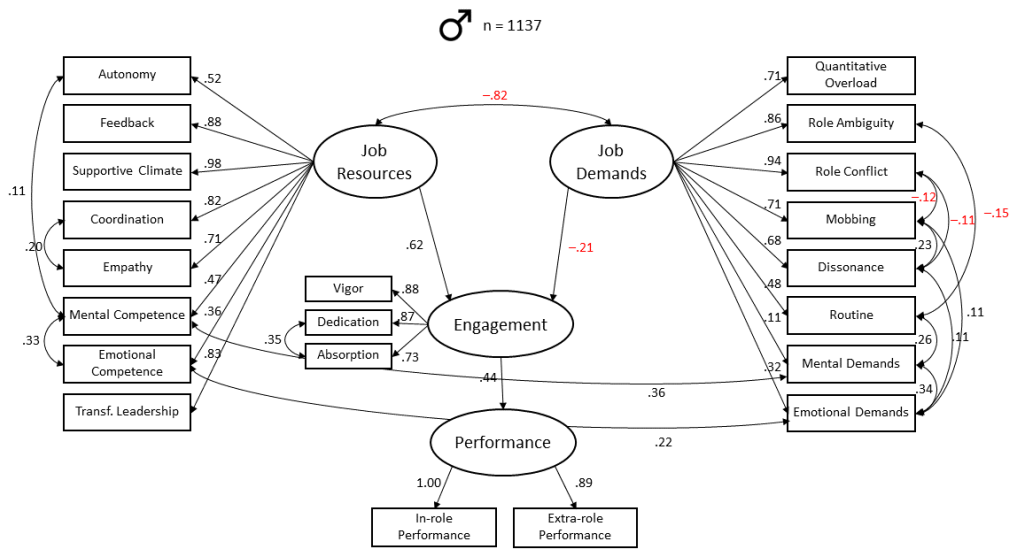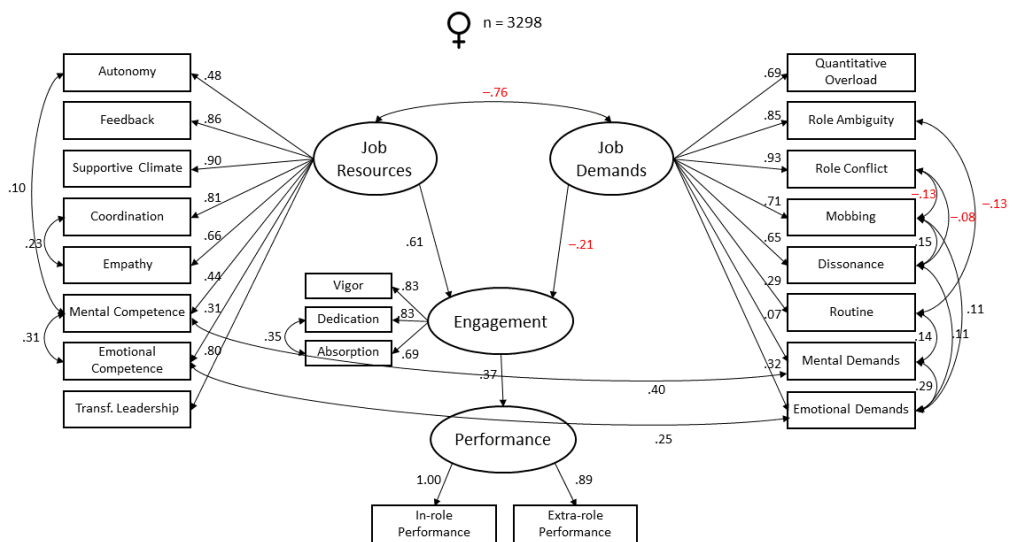

Figure 3. *CFA analyses JD-R Model concerning organizational outcomes: engagement and performance in **young people**. (n=1667). Note: Only the significant coefficients are displayed.* χ^2 = 5645; df = 342; RMSEA = .059; NFI = .906; IFI = .911; TLI = .891; CFI = .911
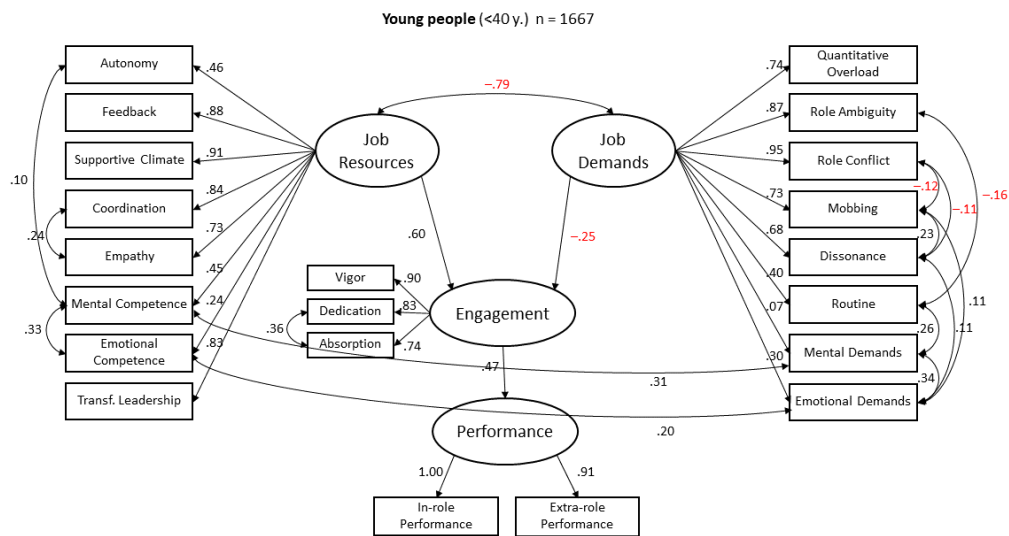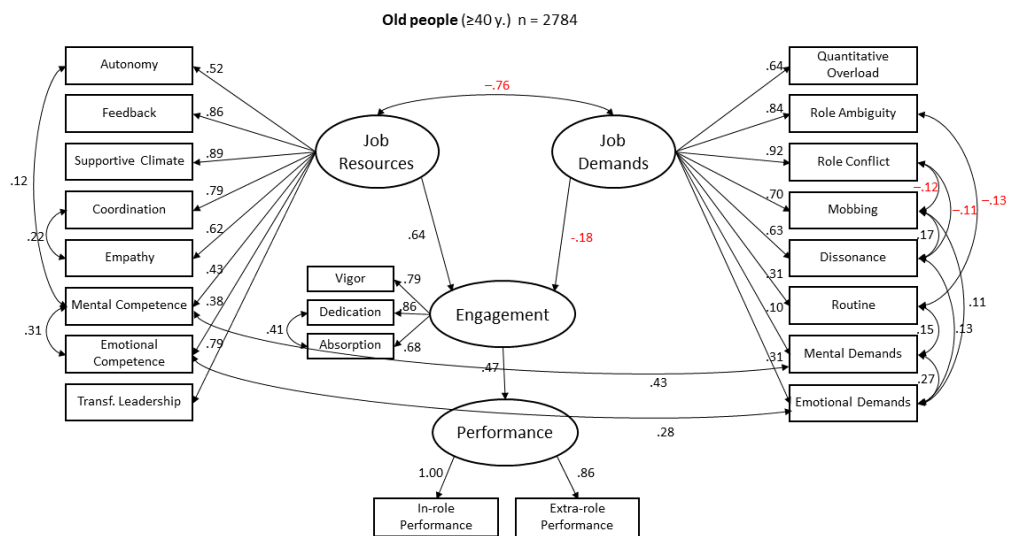

Figure 4. *CFA analyses JD-R Model concerning organizational outcomes: engagement and performance in **old people**. (n=2784). Note: Only the significant coefficients are displayed.* χ^2 = = 5645; df = 342; RMSEA = .059; NFI = .906; IFI = .911; TLI = .891; CFI = .911

Discussion

The purpose of this study was twofold: (1) to analyze the difference in perception of psychosocial risk in healthcare workers from the perspective of sex and age; and (2) to investigate the effect of job demands and resources on work engagement and performance in different demographic groups. To fulfill this research objective, we tested several hypotheses.

Hypothesis H_1 can be considered partially accepted, as significative differences in resources and demands are observed between men and women. It is verified that women perceived more job demands than men (i.e., quantitative overload, routine and mental overload), which is in line with previous studies (Julià et al., 2016), but at the same time, women have more job resources (i.e., autonomy, empathy and mental competence) to combat those demands. When analyzing the dimension of wellbeing and discomfort, it is observed that women show significantly higher values in work engagement, as well as significantly higher values in one variable of workplace discomfort (i.e., ineffective coping). Regarding organizational results, it is observed that the female group is the one which presents significantly lower values in organizational commitment. It should be noted that significant differences in mobbing are not observed between sexes, as some authors suggest (López-Cabarcos et al., 2017), although it could be due to a non-existence of significant differences in stressors such as role conflict and ambiguity. In fact, these stressors are presented as risk factors and play an important role in explaining mobbing (Bowling & Beehr, 2006).

When we analyze the data by age groups, we can observe that, when dividing the sample between younger (<40 years) and older (≥40 years) people, there are statistically significant differences that award the younger group a better position, with more job resources, wellbeing, and organizational outcomes than the older group. And, when analyzing job demands and discomfort levels, those resulted significantly lower in the group of younger people. This could be related to the stimulating and motivating effect that the health profession can exert in the first years of practice, given its recognized vocational nature (Herrera Moya et al., 2018). Thus, hypothesis H_2 is partially accepted, since there are significant differences

34

between age groups. However, younger people perceive more job resources and less demands, and not the other way around, as it was initially proposed.

When doing multi-group *SEM* analysis to test the effect of demands and resources on work engagement and performance, it can be observed that the prediction model of the Motivational Process of the Job-Demands–Resources Model is fulfilled, regardless of sex and age. Then, hypothesis H_3 can be considered as accepted, when verifying that job resources correlate positively with work engagement. In other words, greater job resources have a positive impact on work engagement.

Likewise, hypothesis H_4 can be considered accepted when verifying that job demands correlate negatively with work engagement, regardless of sex and age. That is, higher job demands will have a negative impact on work engagement.

Finally, when the whole model was tested, analysis showed us that the motivational process, proposed by the JD-R model, is fulfilled regardless of sex and age. That is, when employees have more job resources and less job demands, they show higher levels of work engagement which, in turn, is related with higher performance. This means that **hypothesis H_5** can be accepted as well.

At a theoretical level, the JD-R model is confirmed in the healthcare sector, segregated for both sex and age. In the analyzed bibliography, discordant results were observed regarding the implication of job demands, resources and wellbeing between older and younger people, and with the results obtained, it can be observed that in the health sector, it is the group of younger people that has significantly higher levels of job resources, work engagement and performance.

Practical implication

The results obtained show us that the perceptions and needs of healthcare workers can be different, depending on their sex and age. This implies that not all groups should be treated in the same way and that psychosocial interventions should be personalized. Which means that we can take advantage of these differences in the perception of demands and resources of the different demographic groups to develop specific psychosocial intervention actions, and by confirming the JD-R model, we know that these interventions will have the expected positive effect on work engagement and performance. It is therefore possible to

design specific psychosocial intervention programs in the sanitary field, as other authors have successfully developed (Rickard et al., 2012).

For instance, for older people, the variables related to feedback, supportive climate and transformational leadership have been more relevant, therefore, interventions to increase their wellbeing and performance should be aimed at promoting these aspects. However, in young people, it has been observed that demands have a greater impact on engagement and performance, and it may be necessary to reduce conflict and role ambiguity.

Limitation and further studies

Regarding the limitations of the study, the most important is the generalization of the results obtained in a single professional collective, which makes it necessary to separate the study into different professional groups (doctors, nurses, etc.) in future studies. To achieve such differentiation, jobs obtained should be categorized in well-defined professional groups.

Another limitation detected is related to a predominant participation of women in the study, although it should be noted that this distribution represents the reality of the analyzed sector.

Regarding the instruments used, although they are self-reported tests (considering the possible bias that these may represent), those whose validity and reliability are widely documented were chosen.

Another limitation of the present study is that data have been collected in the same temporal timeslot. Although *SEM* analysis provides some information about the possible direction of relationships, cross-sectional studies do not allow to draw conclusions about the causal order between variables. There is a need for longitudinal studies to strengthen causal inferences over these job demands and resources that have a bigger impact on the wellbeing and performance of employees.

Another limitation of the present study is that the questionnaire used the resources and demands related to the work group and, however, the differences regarding age and sex are an individual variable. However, although the questions refer to the team, we can verify that the answer is determined by the sex and age of

the individual, while the results of the study show significant differences for these demographic variables. In this sense, it can be said that the answers that refer to the team are also determined by sex and age and not only by the perception of the situation of their work team.

Lastly, for future research, it would be interesting to study the effect of organizational interventions addressed to reduce the demands and/or to increase the more relevant job resources for the wellbeing and performance of the employees and see if they have a different effect according to sex and different groups of age.

Conclusion

According to the results obtained, we can conclude that there are differences between job demands and resources both for men and women, as well as for younger and older workers in the healthcare sector. This means that resources and demands behave differently, as well as the impact they cause on work engagement and performance of people. Moreover, from the *SEM* analysis, it can be confirmed that the motivational path from the JD-R Model is maintained, regardless of sex and age.

CAPÍTULO 3[2]

Analysis of some demographic and psychosocial factors that influence in the perception of the workplace violence.

Abstract

The objective of this study is to evaluate the impact of psychosocial risks based on the demographic variables of sex, age, and seniority, on the perception of workplace violence in a group of workers from Spanish companies. A total of 22 Spanish companies were analysed between 2016 and 2018 with a total sample of 26,741 people using the FPSICO 3.1 psychosocial assessment method and divided into demographic groups of sex, age, and seniority for subsequent comparison of means and regression analysis. The results confirm the relationship between psychosocial risks and the perception of workplace violence. The analyses by demographic variables position the group of men as the group with the highest perception of workplace violence, except for discrimination, where it was higher in the group of women. The results confirm that the perception of workplace violence increases significantly with age and seniority in the company. Workplace violence is one of the most worrying risk factors today and it is necessary to better understand what risk factors can favour its appearance or its differentiated behaviour according to sex, age, or seniority. This can allow us to develop planned strategies to control this risk and focus on specific demographic groups.

Keywords: psychosocial risks, workplace violence, harassment, sex, age.

---

[2] Chapter 3 is based on: Cañavate, G., Meneghel, I., & Salanova, M. (2023). Analysis of some demographic and psychosocial factors that influence in the perception of the workplace violence. *International Journal of Psychological Research*, 16, E1.

Introduction

Psychosocial risks refer to those aspects of work design and management and the social and organizational context, which are likely to affect well-being as well as physical, mental, and social health. According to the European Agency for Safety & Health at Work (2007), the psychosocial risks that most impact people's health are stress at work, violence and workplace harassment or mobbing.(Brun & Milczarek, 2007).

Since Heinz Leymann (Leymann, 1990) introduced the term workplace harassment in 1990, many definitions of the term finally coined as mobbing have been made. Piñuel and Zabala (2001) related workplace harassment:

"tiene como objetivo intimidar, apocar, reducir, aplanar, amedrentar y consumir emocional e intelectualmente a la víctima, con vistas a eliminarla de la organización o a satisfacer la necesidad insaciable de agredir, controlar y destruir que suele presentar el hostigador, que aprovecha la situación que le brinda la situación organizativa particular (reorganización, reducción de costes, burocratización, cambios vertiginosos, etc.) para canalizar una serie de impulsos y tendencias psicopáticas" [with the aim of intimidating, diminishing, reducing, flattening, intimidating and emotionally and intellectually consuming the victim, with a view to eliminating her from the organization or satisfying the insatiable need to attack, control and destroy that the harasser usually presents , which takes advantage of the situation offered by the particular organizational situation (reorganization, cost reduction, bureaucratization, dizzying changes, etc.) to channel a series of psychopathic impulses and tendencies] (p. 55)

Hirigoyen (2001), defined workplace harassment as "all abusive behaviour (gesture, word, behaviour, attitude...) that attempts, by its repetition or systematization, against the dignity or mental or physical integrity of a person, endangering their employment or degrading the work environment" (p.41). Which means that workplace harassment is workplace violence (WPV) in small doses that has a great destructive capacity. People who suffer from it are deeply destabilized. The characteristics common to these behaviours imply repetitiveness (e.g., with a weekly frequency) and must be prolonged in time (e.g., at least six months); Another particularity is the difficulty that the worker who is the object of the animosity

encounters in defending himself, always observing a clear difference in power in favour of the aggressor(Einarsen & Mikkelsen, 2002). The different hostile behaviours take place within the framework of a work relationship, but it does not respond to the organizational needs of the latter; the purpose is to create a hostile or humiliating environment that disrupts the victim's working life and is both an attack on the dignity of the worker and a risk to their health. It is a model of aggression that varies according to sociocultural circumstances, the higher one goes up the sociocultural scale, the more sophisticated, aggressive, and difficult to notice these aggressions are.

Workplace harassment has been given many labels, including bullying, harassment, workplace violence, mobbing (Schindeler, 2013) and discrimination (Newman et al., 2011). All these concepts are unified in this article as workplace violence (WPV), which will be treated as equal concepts.

Currently, workplace harassment or mobbing is one of the most worrying risk factors in organizations given its relevance and negative impact on the health of workers (Sancini et al., 2012). According to the Cisneros XI barometer, in Spain 13.2% of the working population experience workplace harassment and 21% have suffered it throughout their working life (Instituto de Innovación Educativa y Desarrollo Directivo, 2009).

Sometimes WPV can be confused with stress, pressure at work or even with the existence of conflicts or disagreements with other people in the organization. As Heinz Leymann explains in his book Mobbing (Leymann & Gustafsson, 1996), moral harassment is more than stress, even if it goes through a stage of stress. Stress is destructive if it is excessive, however, bullying is destructive by its very nature. Harassment is far from being an interpersonal conflict, it is an abuse and should not be confused with legitimate decisions that arise from the organization of work. According to the author, the so-called "management mistreatment", sporadic aggressions, poor working conditions or professional coercion are not considered harassment.

The negative effects that workplace bullying causes on health come from both the personal characteristics of the worker and the work environment (Vie et

al., 2012). The authors showed that self-labelling, the belief that a person has that they are effectively the object of bullying and that leads them to recognize themselves as victim, plays a moderating role between exposure to bullying behaviours and health consequences. In summary, the results of different investigations suggest that individual characteristics are important when reacting to possible situations of workplace harassment and can explain, at least partially, the effects on health.

It has also been shown in the healthcare sector that an increase in WPV has a significantly negative influence on job satisfaction. Frequent exposure to violence at work causes greater vulnerability in people, which translates into increased anxiety, nervousness, fearful and full of negative emotions. All this ends up causing a great distraction from the work itself, which makes it difficult to achieve their professional and personal goals, which results in a decrease in job satisfaction (Zhao et al., 2018). It is also known that job engagement is an essential factor of thriving at work and is a very valuable asset to overcome the difficulties of the environment. People with vitality are not susceptible to anxiety and depression (Vinje & Mittelmark, 2008).

In the scope of this study, WPV, discrimination, psychological, physical, and sexual violence are analysed. Regarding sexual violence, it is known that people who have reported being victims have significantly lower levels of job satisfaction, engagement, and performance. Along with a greater tendency to leave the workplace, suffer work stress and physical and psychological problems than those who were not harassed(Chan et al., 2008a).

Psychosocial risk factors and workplace violence

According to Hirigoyen (2001), WPV appears more easily in work environments subject to stress, with poor communication and lack of recognition at work. Recent studies show that in organizations where job insecurity prevails, situations of harassment can appear more easily due to the presence of hypercompetitive attitudes, the control of the impressions that other colleagues have of us and the narcissistic leadership style.(Palma-Contreras & Ansoleaga, 2020) According to Song (2021), there is a causal relationship between psychological anxiety about losing a job and the intention of bullying.

Factors such as time pressure, workload and communication have been shown to be of great importance in the risk of WPV, suggesting that poorly organized workplaces may be more prone to experiencing psychosocial problems such as violence and harassment (Bentley et al., 2014; Skogstad et al., 2011; Zahlquist et al., 2019). Figuereido-Ferraz and colleagues (2012), demonstrates the existence of a significant relationship between interpersonal conflicts and WPV, while some labour resources such as social support and role clarity act as protectors against this WPV. Evidence has also been found that workers' perception of psychosocial risk factors is a good predictor of well-being at work. Observing that high levels of satisfaction and motivation are correlated with low levels of perceived stress (Luceño-Moreno et al., 2017).

Differences between the sexes

From the scientific literature analysed, it has been observed that most research on sexual harassment is more focused on the group of women than on men. In fact, according to a recent study of Canadian public employees, women are 2.2 to 2.5 times more likely to experience workplace discrimination and harassment than their male counterparts (Waite, 2021). Some researchers propose that this is because men may perceive sexual harassment as a compliment or as something reciprocal, so that sexual harassment would not pose a threat to them (Cochran et al., 1997). This could be the reason that men report fewer cases of harassment or even come to accept them (Berdahl et al., 1996). Instead, other authors have reported significantly higher values in WPV in men compared to women. Although when analysed in detail, it is observed that for the dimension of sexual harassment the values are higher in women (Garthus-Niegel et al., 2016; Guay et al., 2016)

To better understand the differences between the sexes, we must also analyse the origin of sexual harassment. In this sense, we know that, for both men and women, sexual harassment is significantly related to various physical and psychological outcomes of work (Harned & Fitzgerald, 2002). Nevertheless, the physical and mental impact may not be the same between the sexes. Some studies show that the relationship between sexual harassment and depression is greater in men than in women (Street et al., 2007). However, in a systematic review on the

physical and psychological effects of harassment, no significant differences were observed between the sexes (Chan et al., 2008b).

With the advent of social media, a new form of WPV has emerged, called cyberbullying. Recent studies show that women have a higher perception of cyberbullying than men, especially as women experience widespread online harassment, including insults, stalking, aggression, threats, and non-consensual sharing of sexual photos (ImJane et al., 2022).

Differences between age groups

Research on how we respond to threats of bullying according to age is related to coping with stress. In this sense, some authors report that older people have a better capacity to regulate the negative effects of stress than young people (Carstensen, 1995) Although there is not a large age difference in the implementation of problem-focused strategies (e.g., eliminating the source of the problem), when faced with everyday stressors, middle-aged people seem to use more proactive strategies focused on emotions that young people (Blanchard-Fields et al., 2004).

Proactive emotion-focused coping involves directly confronting negative emotions caused by stressful events to control them (e.g., reflecting on one's own emotions). Because personal and environmental constraints often prevent harassed workers from taking effective confrontational action, (Fitzgerald et al., 1995), The tendency of middle-aged people to deal with the situation through psychological means can help regulate its impact on work-related problems, both psychologically and physically.

There is another point of view that should be considered regarding the moderating effect that age can have on workplace and sexual harassment, and it is related to the greater dependence that older people have on their work and perceived employability. Harassment may be perceived as a threat to maintaining employment income, potentially negatively affecting job security, employment status, promotion prospects, and interpersonal support system (Lundberg-Love & Marmion, 2003).

Older people generally require more job security and regularity than younger people, as they have greater family and financial responsibilities (Finegold et al.,

2002), and perceive a lower level of occupational mobility (Kuhnert & Vance, 2004). According to this perspective, sexual harassment can have greater impact on older people than on younger people. However, the greater ability to confront negative emotions that older people have seems to give them greater resistance to the negative effects of bullying (Lim, 1996). That is why the consequences of bullying seem to be more negative in young people (Chan et al., 2008b).

It should be noted that there are authors who have not found significant differences between the different age groups (Garthus-Niegel et al., 2016), In contrast, other authors identify the age group of 18-25 years as the one with the lowest perception of WPV (Guay et al., 2016), so the role that age plays in the perception of WPV is not very clear.

Differences between seniority groups

In a recent study carried out during the Covid-19 pandemic in healthcare workers, it was observed that seniority lowers the chance of being exposed to WPV (Dopelt et al., 2022). Numerous studies show that professional experience improves the ability to manage conflict situations with angry patients (Li et al., 2018; Shapiro et al., 2022; Sharipova et al., 2010).

The present study

Based on the previous studies analysed, the following hypotheses are proposed:

*H*1. The perception of workplace violence (WPV) increases with psychological risks.

As has been observed in all the literature analysed, it is expected that there is a significant relationship between psychosocial risks and the perception of WPV.

*H*2. There are differences in the perception of WPV according to sex, with women having a higher perception compared to men.

Most of the literature analysed places the group of women with the highest probability of suffering WPV, especially that related to sexual violence. Although some authors have observed that they obtain results where the perception is significantly higher in men (Garthus-Niegel et al., 2016), in general it seems that

there is a greater consensus that the female sex is the one that is most exposed to WPV.

H₃. There are differences in the perception of WPV according to age, with younger people being the ones who will perceive more WPV.

The literature analysed is not very conclusive about the effect of age on WPV. Some authors have not found significant differences between the different age groups (Garthus-Niegel et al., 2016), however age plays an important role in regulating emotions such as stress, and the greater experience and autonomy of older people seems that can play a protective role against situations of WPV.

H₄. There are differences in the perception of WPV according to seniority in the company, with people with less seniority being the ones who will perceive more WPV.

If age plays an important role in the perception of WPV, it is due to greater experience and autonomy. It is for this reason that it is also expected that the greater the seniority in the organization, there will also be less perception of workplace violence.

Methodology

Sample and procedures

This quantitative-based cross-sectional designs research was carried out between 2016 and 2018 in a total of 22 Spanish companies, SMEs, and large companies, distributed in 14 autonomous communities. For each company participating in the study, the questionnaire was distributed to the entire workforce. The only exclusion criteria were being on sick leave, having worked for the company for less than 3 months and understanding Spanish, since the validated version of the questionnaire in this language was used. The sample is made up of a total of 26,741 people, of which 57.1% were women, distributed in the following sectors of activity: 32.8% administration; 3.0% waitresses, 25.7% management; 22.4% sellers; 14.3% commercial cashiers; 1.9% health personnel.

The sample was divided into six age groups: less than 20 years old (.4%), between 20 and 30 years old (7.9%); between 30 and 40 years old (27.4%); between 40 and 50 years old (49.5%); between 50 and 60 years old (14.5%) and over 60

years old (.4%). In five groups for seniority: less than 1 year (3.3%); between 1 and 2 years (6.0%); between 2 and 5 years (6.1%); between 5 and 10 years (35.3%) and more than 10 years (49.3%).

Before data collection, we contacted the heads of each company (e.g., Human Resources and Management) to explain the purpose and requirements of the study. Likewise, it was explained to all the people that the participation was voluntary, that the presentation of the data would be aggregated, and that any identifying information would be eliminated. The surveys were completely confidential, since the questionnaire did not ask for any personal information that could identify the author. Each person received access to the questionnaire in their email, through which they could access the online form. Data were collected over a one-month period.

Instruments

The variables were measured with previously validated scales and grouped into dimensions using the **FPSICO 3.1**(Ferrer Puig et al., 2011), with a 3-point Likert-type response scale (no information, insufficient, adequate); 4 points (always, often, sometimes, never or almost never) or 5 points (always, often, sometimes, never, I don't have/I don't try).

From the FPSICO questionnaire, 9 risk factors are obtained: **working time** (α=.78) p. e.g. "Do you work Sundays and holidays?"; **autonomy** (α=.87) p. e.g. "Can you make decisions regarding the distribution of tasks throughout your day?"; **workload** (α=.84) p. e.g. "How often should you pick up the pace of work?"; **psychological demands** (α=.78) p. e.g. "To what extent does your work require taking initiatives?"; **variety and content** (α=.69) p. e.g. "The work you do, do you find it routine?"; **participation and supervision** (α=.82) p. e.g. "What level of involvement do you have in the following aspects of your work…"; **worker's interest / compensation** (α=.86) p. e.g. "Does the company provide you with professional development (promotion, career plan…)?"; **role performance** (α=.88) p. e.g. "You receive instructions that are contradictory to each other (some send you one thing and others another)"; **social support relationships** (α=.74) p. e.g. "How do you consider the relationships with the people you have to work with?".

To assess the perception of **WPV**, an additional dimension (α=.74) was employed using questions 18b "how often do situations of physical violence occur at your job", 18c "situations of psychological violence (threats, insults, making emptiness, personal disqualifications...)", 18d "situations of sexual harassment" with a Likert-type response scale of 4 points (rarely, frequently, constantly, do not exist) and question 20 "in your work environment, do you feel discriminated? (By reason of age, sex, religion, race, education, category...)", with a 4-point Likert-type response scale (always or almost always, often, sometimes, never). It has been considered to evaluate WPV with a 4-item construct, since it is more appropriate psychometrically to assess different forms of perception of mobbing than not using a single-item. (Garthus-Niegel et al., 2016)

In the actuality has of two approximations to measure the **WPV**, an objective measurement and a subjective measurement or also known as self-labelling that measures the perception to be victim of WPV (López & González-Trijueque, 2022). According to Niedl (Niedl, 1995) the subjective assessment originates a big interpersonal variability. However, in the present study, the method used bases on four items that measure the exhibition to specific behaviours of harassment of objective form. These items do not do reference to the bullying specifically to avoid victimization or sociocultural biases (Giorgi et al., 2011).

Analysis of data

Internal consistency analyses (Cronbach's alpha) and descriptive analyses (means, standard deviations, asymmetry, and kurtosis) of the variables considered in the study were performed using the statistical package IBM SPSS Statistics 24.0.

To verify the hypotheses, mean comparison analyses were performed using ANOVA, to identify differences between age groups, seniority, and sex. Simple linear regression analyses were performed to try to explain the possible relationship between age and the perception of WPV and seniority and the perception of WPV.

Results

Internal consistency

The internal consistency (Cronbach's α) of the scales used exceeded the cut-off point of .70 (Nunnally & Bernstein, 1994) except for the scales of WPV (α=.63) and variety and content (α=.69), being in both cases very close to this value.

The results of Harman's single factor test Confirmatory Factor Analysis showed a poor fit of the single-factor test model for all psychosocial risk factors analyzed, including WPV: $\chi2$ (35) = 32,310; *SEM* =.19; NFI < .001; IFI = < .001; *TLI* < .001; *CFI* < .001. To confirm these results, additional analyses were performed (Podsakoff et al., 2003b). This approach means to add a first-order factor to the investigator's theoretical model with all measurements as indicators. Results showed that the model fit improved, even though none of the trajectory coefficients, corresponding to the relationships between the indicators and the general factor method, were significative. This finding suggested that, even though the method bias may be present, it does not significantly affect the results or the conclusions (Conger et al., 2000)

Hypothesis test

Differences in perception of workplace violence between the sexes

The perception of WPV between both sexes through the ANOVA test is significantly higher in men (M = 6.31, SD = 7.82) than in women (M = 5.58, SD = 7.34) $F_{(1, 26739)}$ = 60.79, p<.001. (Figure 1)

Figure 1. Values of perception of workplace violence between sex.

Perception of Workplace Violence between sexes
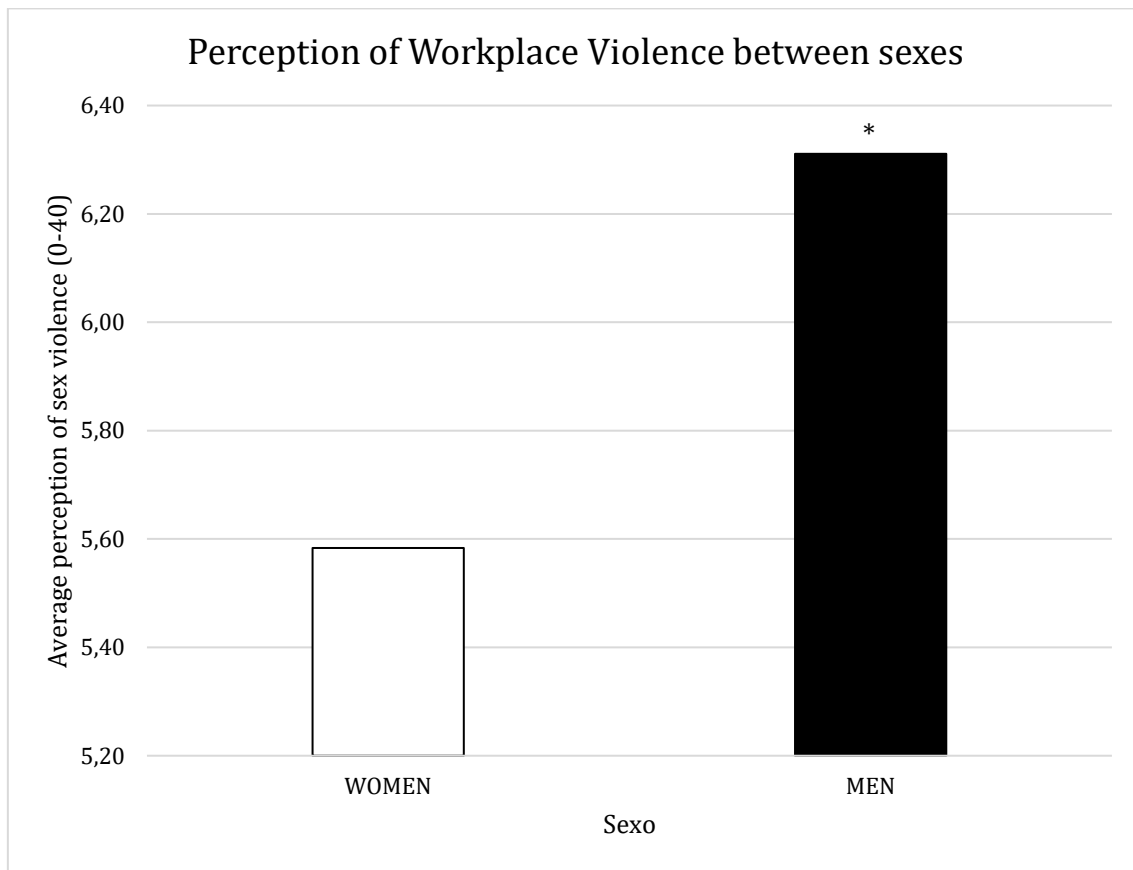
Note: (*) Analysis ANOVA with significant difference p<.05

According to the scale proposed by the FPSICO (Ferrer Puig et al., 2011) method to determine the risk levels of psychosocial factors, it is considered that there is a high risk with scores above the 75th percentile. From the results of perception of WPV (M = 5.90, SD = 7.56), it is concluded that 73% of the sample does not present risk (below the 75th percentile), compared to the remaining 27% with an elevated risk of being exposed to WPV. Based on this scale, it has been possible to calculate that the probability of suffering workplace harassment is 11% higher in men than in women (OR = 1.11 95% CI 1.04-1.19).

Likewise, it can be seen that men have a significantly higher perception of **physical violence** $F_{(1, 26739)}$ = 157.68, p<.001, **psychological** $F_{(1, 26739)}$ = 90.28, p<.001 and **sexual** $F_{(1, 26739)}$ = 22.32, p<.001. However, it is women who perceive significantly higher values in **discrimination** $F_{(1, 26739)}$ = 38.35, p<.001. (Figure 2)

Figure 2. Values of perception of physical, psychological, and sexual violence and discrimination between the sexes.

Perception of workplace violence between sexes
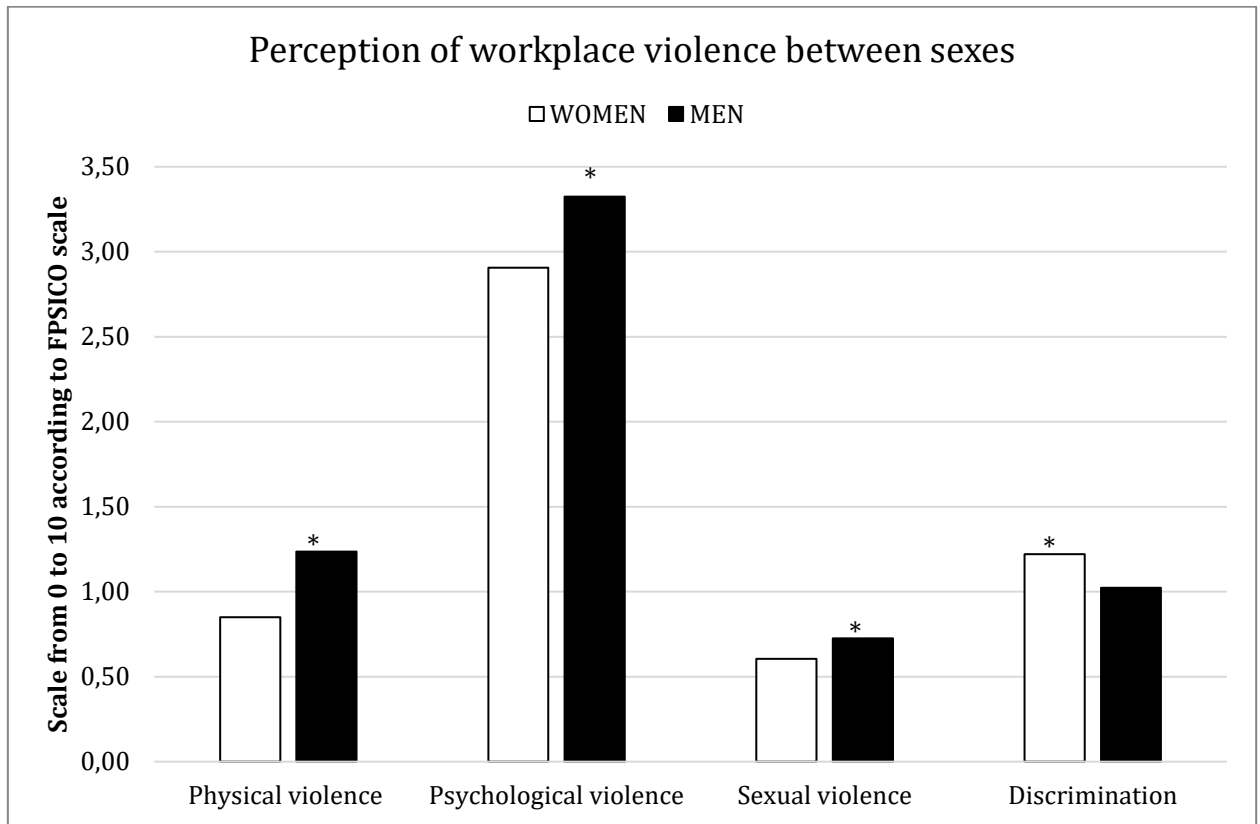
Note: (*) Analysis ANOVA with significant difference p<.001

Differences in perception of WPV between age groups

When analysed by **age groups**, we observe that the perception of WPV increases significantly with age, $F_{(5, 16247)}$ = 17.87, p<.001. In the comparison between sexes and ages, we observe that the difference is significant in the groups between 30 and 40 years old, where the perception is greater in men than in women $F_{(1, 4447)}$ = 19.91, p<.001, and without However, in the group between 50 and 60 years old, this perception is reversed, being higher in women than in men $F_{(1, 2350)}$ = 4.77, p=.029. (Figure 3)

Figure 3. Values of perception of workplace violence between sex by age groups
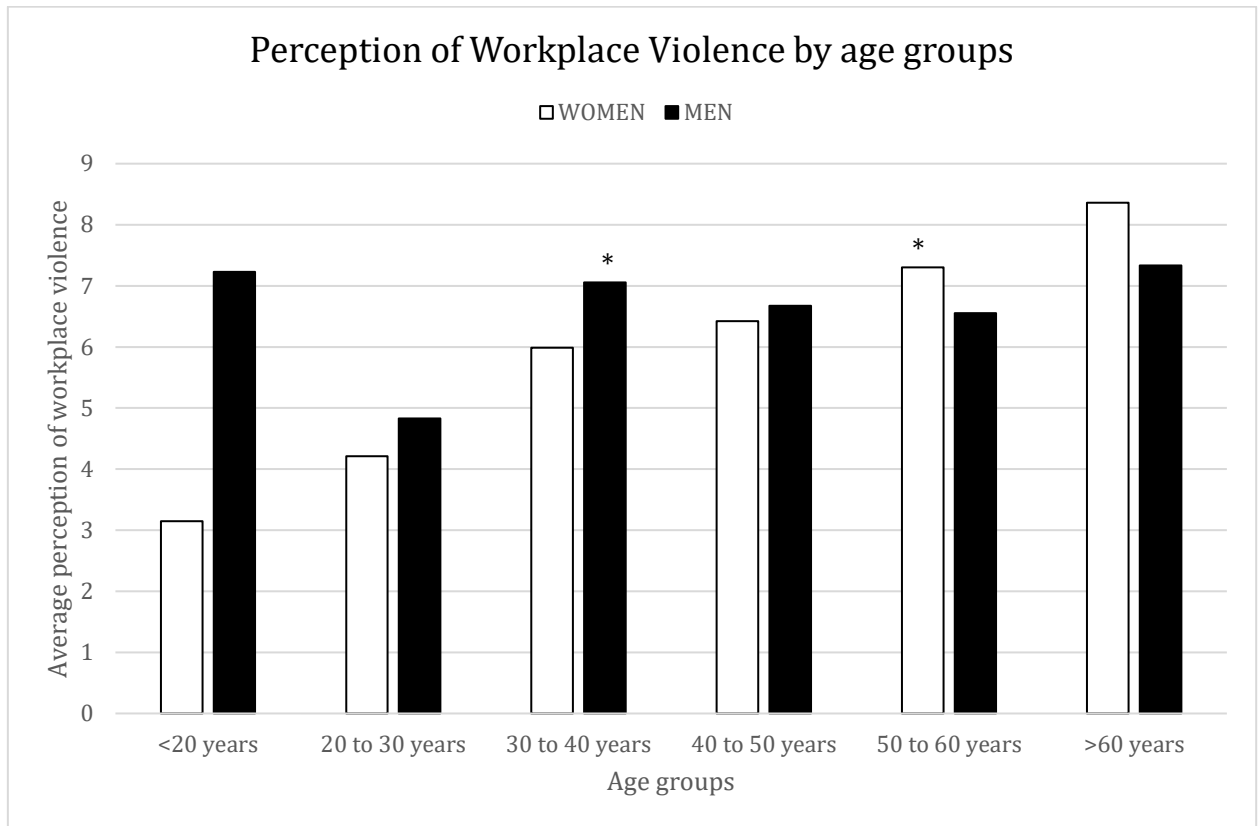
Perception of Workplace Violence by age groups

Note: (*) Analysis ANOVA with significant difference p<.05

A linear regression analysis was performed to predict the perception of WPV based on age. Obtaining a significant regression equation $F_{(1, 16251)} = 49.79$, p<0.001. The R^2 value was .003, which indicates that 99.7% of the change in the perception of WPV can be explained by the regression model that includes age. The regression equation was 4.49+.52*(Age Group). Where the perception of WPV increases .52 points for every additional 10 years of age.

Differences in perception of WPV between seniority groups

When analysed by **seniority groups**, we observe that the perception of WPV increases significantly with seniority in the organization, $F_{(4, 16169)} = 17.98$, p<.001. In the comparison between sexes and seniority, we observe that the difference is significant in the groups of <1 year $F_{(1, 532)} = 5.61$, p=.018; in the group between 1 and 2 years old $F_{(1, 962)} = 9.34$, p=.002 and in the group between 5 and 10 years old $F_{(4, 5705)} = 13.47$, p=<.001, being in the 3 cases higher perception in men. (Figure 4).

Figure 4. Values of perception of workplace violence between sex by seniority groups

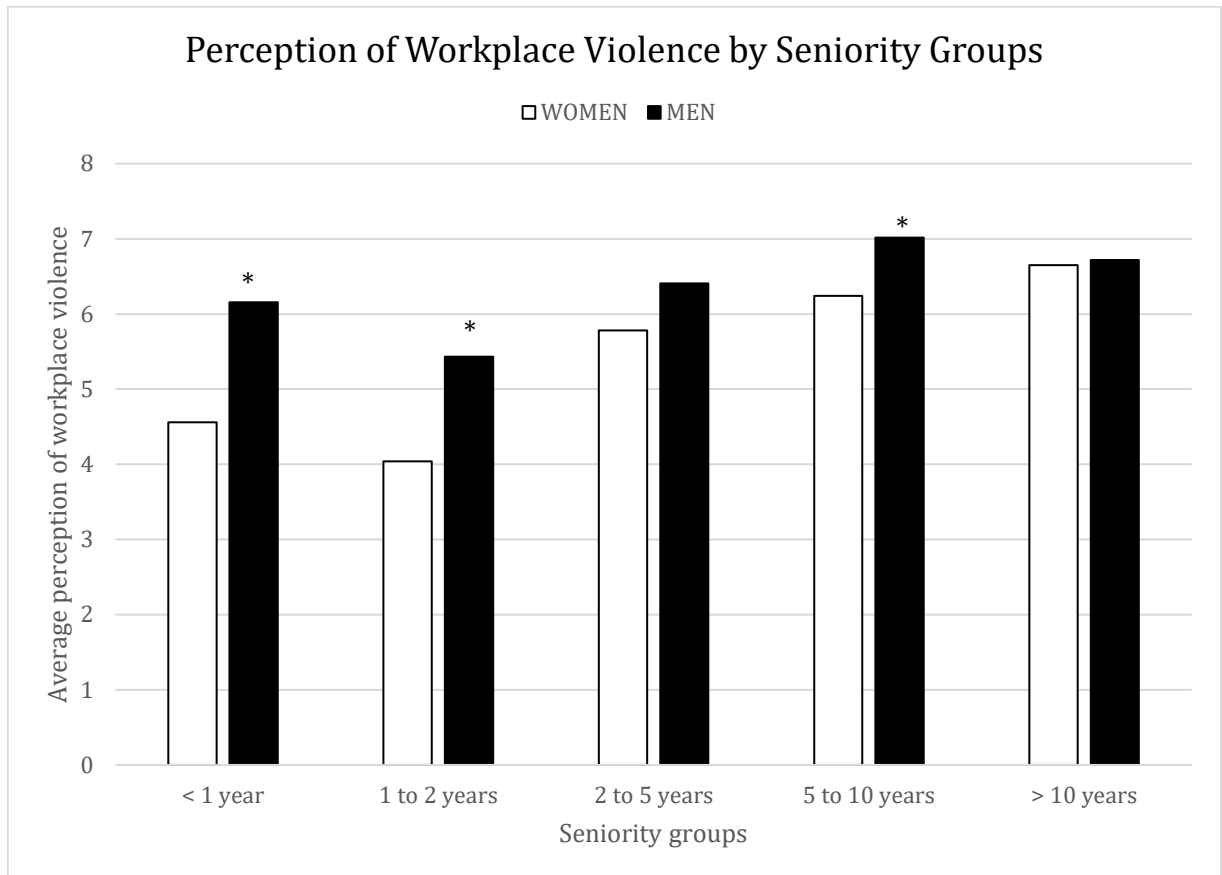Perception of Workplace Violence by Seniority Groups

□ WOMEN ■ MEN

Note: (*) Analysis ANOVA with significant difference p<.05

A linear regression analysis was performed to predict the perception of WPV based on seniority. Obtaining a significant regression equation $F_{(1, 16251)}$ = 52.69, p<0.001. The R^2 value was .003, which indicates that 99.7% of the change in the perception of WPV can be explained by the regression model that includes age. The regression formula was 4.61+.44*(Antiquity Group). Where the perception of WPV increases .44 points for each additional rank of seniority.

Differences in the perception of WPV according to the level of psychosocial risks

The nine psychosocial risk factors obtained with the FPSICO (Ferrer Puig et al., 2011), method was added, and a linear regression analysis was performed between total psychosocial risks and the perception of WPV (dependent variable), obtaining a significant regression equation $F_{(1, 26738)}$ = 7653.63, p<0.001. The value

of R^2 was .223, which indicates that 77.7% of the change in the perception of WPV can be explained by the regression model that includes psychosocial risks. The regression equation was -5.96+.03*(Psychosocial Risk). Where the perception of WPV increases .03 points as the total sum of psychosocial risk factors increases. The Tolerance and the variance inflation factor (VIF) was compute, to determine multicollinearity, obtaining values of VIF=1 and tolerance=1, so the existence of multicollinearity is ruled out.

A correlation analysis was performed between WPV and psychosocial risk factors (Table 1), observing a significant correlation with all of them. The risk factors with the greatest impact on WPV are role performance, social support relationships, and variety and content (routine). These results agree with those obtained by other authors, who associate WPV with the lack of interpersonal communication(Bentley et al., 2014), with role conflict, interpersonal relationships and job demands (Zahlquist et al., 2019)

Table 1. Pearson's correlation between psychosocial risk factors and perception of workplace violence.

Correlations

		WV	WT	AU	WL	PD	VC	PS	WIC	RP	SSR
Workplace violence	Pearson's correlation	1	.052**	.295**	.268**	.275**	.313**	.327**	.275**	.404**	.395**
	Sig. (Bilateral)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	26,741	26,741	26,741	26,741	26,740	26,741	26,741	26,741	26,741	26,741

**. The correlation is significant at the .01 level (bilateral).

WV: Workplace Violence; WT: Work Time; AU: Autonomy; WL: Workload; PD: Psychological Demands; VC: Variety and Content; PS: Participation and Supervision; WIC: Worker's Interest / Compensation; RP: Role Performance; SSR: Social Support Relationships (without workplace violence questions)

Discussion

Regarding the impact of psychosocial risks on workplace violence (WPV), it is observed that there is a significant linear relationship between the two, thus accepting hypothesis H_1. It is confirmed that WPV manifests itself more easily in environments subject to stress, with poor communication, lack of recognition

(Hirigoyen, 2001) and there are interpersonal conflicts (Figueiredo-Ferraz et al., 2012).

According to the results obtained, we can reject the first hypothesis H_2 raised in the study, since it is observed that it is the group of men who has significantly higher values in perception of WPV compared to women. In fact, men are 11% more likely to perceive WPV than women. It should be noted that this result is consistent with the results obtained in a cross-sectional study carried out in Canada, where more men declared being victims of WPV than women. According to this study, income level is negatively associated with reporting violence. One possible explanation is that people with lower salaries may be afraid to declare violent acts for fear of being fired (Azaroff et al., 2002). It has also been observed that for men, the fact of having been a victim of WPV predisposes them to make complaints of violence in the future, however this result has not been observed in women (Sato et al., 2013). In relation to the WPV received by clients, it has also been reported to be higher in men than in women, because male workers are more likely to wield aggression against clients and therefore to draw aggression and violence toward themselves (Enosh & Tzafrir, 2015). Breaking down WPV into physical, psychological, sexual violence and discrimination, we observed the same trend except for discrimination, which turned out to be significantly higher in women. This finding agrees with the results obtained by other authors, who report that discrimination against women goes beyond the workplace, extending to their personal sphere. Surely this is the reason why women have higher perceptions of discrimination than men.(van de Griend & Messias, 2014)

In the analysis by age groups, we observe that the perception of WPV increases significantly with age and not the other way around, as proposed in hypothesis H_3, therefore this second hypothesis is also rejected. It must be considered that this study is only assessing the perception of violence and not coping strategies, which according to previous studies turns out to be higher in middle-aged groups (Blanchard-Fields et al., 2004), as well as a greater resistance of older people against negative effects of harassment (Lim, 1996). However, it could be related to the greater job security requirements of older people due to family and financial burdens (Finegold et al., 2002; Kuhnert & Vance, 2004). In such a way that

this greater perception of WPV with increasing age could be more related to the emotional impact than to a greater frequency of WPV.

In the analysis by seniority groups, we observe the same trend as by age. In such a way that with greater seniority in the organization there is a significantly greater perception of WPV, thus rejecting the third hypothesis H_4. It seems that seniority plays an important role in managing conflicts with patients (Dopelt et al., 2022). However, the sample analysed in this study has a minority of healthcare workers, so this trend cannot be appreciated. In this case, it seems that the seniority results are equated with the age results, where the greater the age, and therefore the greater the seniority, the perception of WPV is more intense.

Limitations and future studies

Regarding the instruments used, although they are self-reported tests (with the possible bias that these may entail), those whose validity and reliability are widely documented were chosen.

For the evaluation of workplace violence, a 4-item scale extracted from a psychosocial risk survey has been used. Although the reliability of the scale used is good (α=.74), and it is known that it is a good option to use scales with four items as opposed to one with only one (Garthus-Niegel et al., 2016), the method employed has not yet been validated as other methods of recognized prestige (e.g., Gutenberg scale). For this reason, it is considered highly relevant to carry out a psychrometric validation of this 4-item scale used.

An additional limitation is based on the existence of some underrepresented demographic groups within the sample, such as the groups <20 and >60 years of age. It is very possible that the lack of significant differences in these two groups is due to the small sample size, and therefore this limitation must be taken into account.

Finally, for future research it would be interesting to study the effect of organizational interventions aimed at reducing WPV, and to see if they also have a different effect depending on sex and different age groups.

It would also be interesting to be able to delve deeper into the risk factors that impact WPV, which will also allow us to develop intervention programs aimed at reducing or eliminating WPV.

Conclusion

Workplace violence (WPV) is one of the most worrying risk factors in organizations, given its relevance and negative impact, with a great impact on job satisfaction, engagement, and performance. Studies show that people who experience WPV have significantly higher levels of job stress, physical and psychological problems and leave the workplace more frequently (Chan et al., 2008a).

For this reason, it is important to know the relationship between the perception of WPV and demographic variables such as age, sex, and seniority in the company, or if there is any relationship with psychosocial risks.

The results show that there is a direct relationship between psychosocial risks and the perception of WPV. Thus, coinciding with other authors, (Bentley et al., 2014; Figueiredo-Ferraz et al., 2012; Hirigoyen, 2001; Song, 2021; Zahlquist et al., 2019) it is shown that WPV appears more frequently in environments subject to stress, poor interpersonal relationships, lack of role clarity or toxic leadership styles.

Previous studies show that women are more likely to suffer WPV than men (Waite, 2021), In the other hand, in the present study an inverse relationship is observed, positioning the group of men with significantly higher values in perception of WPV than women. Men obtained higher values in perception of physical, mental, and sexual violence. However, discrimination remains significantly higher in women.

Coping with threats of harassment according to age seems to be related to coping with stress. Some authors show that older people have a better capacity to regulate the negative effects of stress (Carstensen, 1995), and can apply proactive coping strategies, which gives them greater resistance to the negative effects of WPV (Blanchard-Fields et al., 2004). However, it is also observed that older people may perceive workplace bullying as a greater threat than young people, given that they have greater responsibilities and family burdens (Lundberg-Love & Marmion,

56

2003). This study shows that the perception of workplace bullying increases significantly with age and seniority in the company. It is possible that it is related to the fear of job loss that these threats entail, or that greater seniority implies greater permanence in the organization and therefore more interpersonal relationships that can cause WPV.

Practical implication

The results obtained show us that the perceptions of WPV can be different, depending on their sex, age, and seniority. This implies that not all groups should be treated in the same way and that psychosocial interventions should be personalized. We can also base the psychosocial intervention on reducing the risk factors present in the organization, especially on improving the work environment, reducing role conflict and routine, which are the factors that have been shown to have the greatest impact on WPV.

CAPÍTULO 4

The impact of covid-19 on psychosocial risks in the catering industry: a two-wave study. [3]

Abstract

The impact on psychosocial health due to the coronavirus pandemic is a subject that has been widely studied on health and social-health professionals. The objective of this study is to analyze the impact of the pandemic on psychosocial health in a sector that has not been studied so far, namely the catering industry. A psychosocial risk assessment (FPSICO 4.0) and UWES9 engagement survey were used to collect data for this two-wave study. Data collection was conducted in a fast-food franchise before and after the pandemic. The t-student results showed a significant increase in psychosocial risk factors after the pandemic, especially in this psychosocial factor: working time, autonomy, variety and content, participation, and supervision. In the analysis according to demographic variables, it is observed that the groups including women and younger people suffered a bigger impact of psychosocial risks and general health. Whereas risk factors had been significantly reduced in the older group, they increased in younger people, who had also seen a reduction in their engagement. Regarding the level of responsibility, the impact was higher in team members than in managers. This study allows us to fully understand the mechanisms that intervened in generating stress and discomfort, as well as the factors that provided resistance and immunity against psychosocial damage due to the pandemic. To the best of our knowledge, this is the first study addressing the impact of Covid-19 in the catering industry.

Keywords: psychosocial risks, covid-19, catering industry, sex, age.

Introduction

The coronavirus pandemic (Covid-19) has emerged as the world's biggest health emergency, with a devastating social and economic impact (World Health Organization, 2021) In Spain, the confinement of the entire population, except for essential services, was declared for the first time in March 2020 to stem the tide of contagions and deaths. Studies, triggered by the pandemic, have shown that Covid-19 has had a psychological impact on the general population (González-Sanguino et al., 2020; Planchuelo-Gómez et al., 2020; Salari et al., 2020; Sandín et al., 2020; Vindegaard & Benros, 2020; Wang et al., 2020a; Xiong et al., 2020), increasing stress and reducing its subjective wellbeing (Kelly, 2020). Recent studies show that a large part of the population has suffered adaptive responses due to fear of contagion, confinement, and isolation (Wang et al., 2020b). All this suggests that the damage caused by fear of contagion and social isolation will extend beyond the pandemic (Brooks et al., 2020).

Psychosocial risks refer to those aspects of work design and management, as well as the social and organizational context, that are likely to affect wellbeing as well as physical, mental, and social health. According to the European Agency for Safety & Health at Work (2007), the psychosocial risks with the highest impact on people's health are stress at work, violence, and workplace harassment or mobbing (Brun & Milczarek, 2007). In this context, work engagement has been used as a way of estimating wellbeing at work.

This research represents a step forward with respect to previous results since it analyzes, in a two-wave study, the effects of the pandemic in a sector that, to the best of our knowledge, has not been analyzed to date, namely the catering industry. However, this sector represented 6.4% of the Spanish GDP in 2019 and 9.8% of the total affiliations to the social security system, which means it plays a relevant role in the economic development of this country. Moreover, it is also one of the sectors that has suffered the biggest impact during the pandemic, with a drop in affiliations of 13.7% between 2019 and 2021, which started to recover in 2022 (CC.OO., 2021). Moreover, this study considers different demographic (i.e., sex and age) and work (i.e., job position) variables to provide an in-depth explanation of the impact of Covid-19 on psychosocial health. Therefore, the results will provide us

with sufficient information to establish specific action and intervention plans in this activity sector.

Impact of Covid-19 According to Demographic Variables

The psychological impact of Covid-19 showed significant differences, depending on demographic variables (i.e., sex and age). For example, in a sample of the Spanish population, collected after the Covid-19 outbreak, it was found that the female sex was associated with higher levels of depression, anxiety and post-traumatic stress disorder (González-Sanguino et al., 2020). Along this line, a systematic review by Xiong et al. (2020) reported similar results in the general population during the Covid-19 pandemic in China, Spain, Italy, Iran, the US, Turkey, Nepal, and Denmark. This review found a higher trend in women regarding their vulnerability to develop symptoms of various forms of mental disorders during the pandemic, including depression, anxiety, PTSD, and stress. Finally, in the healthcare sector, one of the most studied sectors, it was also observed that the female group suffers the biggest impact due to secondary traumatic stress (Danet Danet, 2021) and the highest levels of anxiety and stress (Dosil Santamaría et al., 2021). This can be explained by the fact that women generally tend to assume a caregiving role, which means they deliver a bigger effort in balancing caregiving with work and, usually, household tasks, which converts them into a group at risk that is more vulnerable in situations of psychological overload, such as the pandemic(González-Sanguino et al., 2020). For this reason, the female group is expected to be the most vulnerable and therefore the one suffering the most substantial psychosocial effect after the pandemic.

Regarding age differences, the systematic review by Xiong et al. (2020) identifies people at the age of 40 as the group that is most vulnerable to the effects of the pandemic, with higher depression, anxiety, and stress rates than older people. This may be due to the threat it posed to their life projects (e.g., studies or finding a job) or uncertainty regarding their future during the pandemic (Nekane et al., 2020; Sandín et al., 2020). Some authors point out that the higher resilience capacity of older people has acted as a mediating factor on the negative effects of the pandemic (Wang et al., 2020a). Other strategies that potentially acted as protectors were reported as well, such as effective coping strategies (Petzold et al., 2020), optimism

about the future (Yıldırım & Arslan, 2020), family support (Prime et al., 2020), healthy lifestyle habits, confidence in health recommendations(Killgore et al., 2020), or proper access to the healthcare system (Soonthornchaiya, 2020). This higher resilience of the older group suggests that they have experienced the smallest harmful effect at the psychosocial level after the pandemic.

Impact of Covid-19 According to Job Position

Although maintaining a professional activity may have had a protective effect during the pandemic (López-Núñez et al., 2021), there are no extensive studies on the impact of the pandemic according to job position. Some studies have been performed in the healthcare sector, where the observed levels of stress were higher in nurses than in other professional categories(Danet Danet, 2021). The influence of roles within the nursing sector has also been studied. It was observed that the roles in positions of higher responsibility had received more training and possessed better knowledge of Covid-19, since they were required to train their staff, and this training seems to have played an important role in reducing the stress caused by the pandemic (Giménez-Espert et al., 2020). Thus, we can expect that workers in positions of responsibility suffered lower psychosocial impact due to the pandemic.

The Present Study

Building on previous studies, the overall objective of this research is to test the effect of the pandemic on psychosocial risks in the catering industry.

Therefore, the following hypotheses are put forward:

H_1. When comparing pre- and post- pandemic situation, the psychosocial risks will increase in the post- pandemic.

H_2. When comparing pre- and post- pandemic situation, the impact of psychosocial risks will be bigger on women than on men.

H_3. When comparing pre- and post- pandemic situation, the impact of psychosocial risks will be bigger on young people (≤ 40 years) than on older people (> 40 years).

H_4. When comparing pre- and post- pandemic situation, the impact of psychosocial risks will be higher on team members than on managers.

Methodology

Sample and Procedures

The research was carried out from 2018 to 2022 in a well-known chain of fast-food restaurants, distributed throughout Spain. The sample is composed of a total of 4,094 people, of which 2,045 (49.95%) were collected over the years 2018 and 2019 (pre-covid) in a total of 48 restaurants, and 2,049 (50.05%) over the years 2021 and 2022 (post-covid) in a total of 50 restaurants.

As this concerns a franchise of fast-food restaurants, the work organization system, such as shifts, schedules, leadership, or remuneration, can be considered identical for all restaurants. This suggests that the changes in psychosocial health before and after the Covid19 pandemic are driven by the pandemic itself, rather than by internal organizational causes.

The pre-covid sample (n=2,045) consisted of 41% men (n=836) and 53% women (n=1,074), 84% were 40 years old or younger (n=1,725), and 9% were older than 40 (n=188). This division has been selected since it falls in the middle of the working age interval, considering a later incorporation into the labor market. Moreover, it coincides with the recommendations of other authors (Martín Ruiz, 2005; Xiong et al., 2020). 80% held the position of team members (n=1,639) whereas 20% worked as managers (n=406).

In the post-covid sample (n=2,049), the percentage of men fell to 30% (n=618) against 59% of women (n=1,218), while 78% were under 40 (n=1,589) and 14% were older than 40 (n=281). 74% held the position of team members (n=1510) and 26% worked as managers (n=539).

In terms of procedure, prior to data collection, the managers of each restaurant (i.e., Human Resources and general manager) were contacted to explain the purpose and requirements of the study. Consent was sought from all participants, and it was explained to all respondents that participation was voluntary, that data would be aggregated, and that any identifying information would be removed. Data were collected through an online survey over a period of 1 month for each restaurant.

Variables

Psychosocial risks were measured with previously validated scales and grouped into dimensions using FPSICO 4.0 (Ferrer Puig et al., 2011). The following 9 risk factors were obtained from the FPSICO questionnaire: **working time** (rest time, work on holidays and conciliation; e.g., "Do you work on Sundays and holidays?"); **autonomy** (temporary and decisional; e.g., "Can you make decisions concerning the distribution of tasks throughout your working day?"); **workload** (time pressure, attention effort and quantity/difficulty; e.g., "How often do you have to speed up your work pace?"); **psychological demands** (cognitive and emotional demands; e.g., "To what extent does your job require you to take initiatives?"); **variety and content** (routine, meaning and contribution to work, recognition; e.g., "Do you find your job monotonous?"); **Participation and supervision** (degree of participation and leadership; e.g., "What is your level of participation in the following aspects of your job: introducing changes in the way of working"); **employee interest/compensation**, (information, career development, training plan and remuneration; e.g., "Does your company foster your professional development (promotion, career plan, …)?"); **role performance** (ambiguity, conflict and role overload; e.g., "State how often the following situations occur at your job: you receive contradictory instructions (different people ask you to do opposite tasks)"); **social support relationships** (social support, quality of relationships, discrimination and violence; e.g., "How do you rate your relationship with your co-workers?"). These risk factors were measured with a Likert scale of 3 points (no information, insufficient, adequate); others of 4 points (always or almost always, often, sometimes, never, or hardly ever) or 5 points (always or almost always, often, sometimes, never or hardly ever, I don't have anyone, there is no one else).

Work engagement was measured with the UWES-9 questionnaire (Schaufeli et al., 2006) using 9 items to analyze the level of work engagement in three subscales (three items each): **vigor** (e.g., "I feel full of energy in my work"), **dedication** (e.g., "My work inspires me"), and **absorption** (e.g., "I am immersed in my work"). The survey was measured with a Likert scale of 7 points (never, almost never, rarely, sometimes, often, very often, always).

Data Analysis

Analysis was performed using the IBM SPSS Statistics 22.0 statistical package (Arbuckle, 2013). First, descriptive analyses (minimum/maximum value; means and standard deviation), skewness, kurtosis, and internal consistency analyses (Cronbach's α) were computed for pre- and post-covid. Subsequently, the correlations of the study variables, considered in the study.

For the verification of the hypotheses, mean comparison analyses were performed using t-student to identify differences between pre- and post-covid with regard to sex, age groups, and job position.

Results

Descriptive and Internal consistency

Table 1 includes the main descriptive statistics of the observed variables where, in view of the values, it is understood that the data show univariate normality, since all of them have an asymmetry value lower than 2, and the kurtosis values are lower than 7 (Curran et al., 1996).

The internal consistency (α Cronbach's) of the scales used exceeded the cut-off point of .70 (Nunnally & Bernstein, 1994), except for the working time scale (α<.60), which is the risk factor made up of the lowest number of elements (N=4) and therefore, the reliability obtained should be considered questionable for subsequent data analysis.

Table 1. Pre-covid19 and post-covid-19 descriptive statistics and reliability.

Risk Factors	Descriptive statistics Pre - Covid19 (n=2,045)							Descriptive statistics Post - Covid19 (n=2,049)						
	N	Min / Max.	Mean	SD	Asim.	Curt.	α Cronb.	N	Min / Max.	Mean	SD	Asim.	Curt.	α Cronb.
WT	2045	0-37	21.46	6.289	-. 362	1.003	.435	2049	0-37	22.85	6.780	-. 422	0.534	.501
AU	2045	0-113	63.51	27.758	-. 394	-0.739	.866	2049	0-113	66.56	28.214	-0.607	-0.524	.860
WL	2045	0-106	51.31	19.259	. 011	-0.360	.779	2049	0-106	51.50	19.597	0.033	-0.434	.792
DP	2045	13-110	59.25	19.327	. 259	-0.426	.755	2049	12-110	59.36	19.999	0.172	-0.526	.756
VC	2045	0-69	25.46	13.722	. 277	-0.434	.687	2049	0-67	27.07	14.040	0.214	-0.513	.683
PS	2045	4-87	39.48	14.816	. 720	0.439	.824	2049	4-87	40.91	16.407	0.438	0.172	.851
WIC	2045	0-73	29.28	20.596	. 281	-1.181	.873	2049	0-73	31.71	22.664	0.180	-1.328	.898
RP	2045	1-109	31.72	21.556	. 749	0.224	.883	2049	1-109	32.58	23.292	0.815	0.248	.902
SSR	2045	0-91	19.73	16.726	. 956	0.559	.780	2049	0-90	19.44	17.687	1.058	0.711	.810
ENG	199	1-6	3.95	1.34	-.251	-.975	.887	2049	0-6	3.86	1.495	-.441	-.664	.928

Note: Min: minimum value; Max: maximum value; SD: standard deviation; Skewness: skewness; Kurtosis: kurtosis; α Cronb.: Cronbach's α. WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.

Correlation Analysis

Table 2 includes a Pearson correlation analysis showing a significant positive correlation between all the risk factors, as well as a significant negative correlation between all these factors and engagement.

Table 2. Pearson correlaltion of risk factors and engagement: pre-covid (top diagonal) and post-covid (bottom diagonal)

Risk Factors + Engagement			Pre-Covid correlation									
			WT	AU	WL	DP	VC	PS	WC	RP	SSR	ENG
	WT	Pearson correl.	1	.384**	.376**	.228**	.370**	.340**	.377**	.410**	.352**	-.365**
		Sig. (bilateral)		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
		N	2049	2045	2045	2044	2045	2045	2045	2045	2045	199
	AU	Pearson correl.	.456**	1	.344**	.050*	.449**	.553**	.462**	.454**	.360**	-.441**
		Sig. (bilateral)	<.0001		<.0001	0.023	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
		N	2049	2049	2045	2044	2045	2045	2045	2045	2045	199
	WL	Pearson correl.	.435**	.363**	1	.481**	.417**	.421**	.509**	.627**	.475**	-.437**
		Sig. (bilateral)	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
		N	2049	2049	2049	2044	2045	2045	2045	2045	2045	199
	DP	Pearson correl.	.259**	.089**	.499**	1	.186**	.189**	.238**	.336**	.354**	-.193**
		Sig. (bilateral)	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	0.006
Post – Covid correlation		N	2049	2049	2049	2049	2044	2044	2044	2044	2044	199
	VC	Pearson correl.	.412**	.470**	.453**	.241**	1	.460**	.565**	.556**	.515**	-.629**
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001
		N	2049	2049	2049	2049	2049	2045	2045	2045	2045	199
	PS	Pearson correl.	.395**	.575**	.466**	.213**	.516**	1	.565**	.559**	.465**	-.440**
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001
		N	2049	2049	2049	2049	2049	2049	2045	2045	2045	199
	WIC	Pearson correl.	.442**	.514**	.549**	.268**	.611**	.603**	1	.639**	.500**	-.511**
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
		N	2049	2049	2049	2049	2049	2049	2049	2045	2045	199
	RP	Pearson correl.	.461**	.439**	.667**	.383**	.594**	.580**	.683**	1	.652**	-.489**
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001
		N	2049	2049	2049	2049	2049	2049	2049	2049	2045	199
	SSR	Pearson correl.	.383**	.367**	.544**	.401**	.565**	.503**	.583**	.699**	1	-.430**
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001
		N	2049	2049	2049	2049	2049	2049	2049	2049	2049	199
	ENG	Pearson correl.	-.361**	-.441**	-.467**	-.220**	-.629**	-.482**	-.558**	-.551**	-.486**	1
		Sig. (bilateral)	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
		N	2049	2049	2049	2049	2049	2049	2049	2049	2049	2049

** Correlation is significant at the . 01 level (bilateral).
* Correlation is significant at the . 05 level (bilateral).

Note*: WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.*

Hypothesis Testing

Evolution of Psychosocial Risk Factors Before and After Covid19

From the comparison of the results for each risk factor before and after Covid19, shown in Table 3, a significant increment can be observed in the psychosocial risk factors of working time (9.7% increase in the number of people at

high or very high risk), autonomy (4.9%), variety and content (3.4%), participation and supervision (2.8%), and worker interest/compensation (5.8%).

Table 3. t-Student of psychosocial risk factors before and after Covid19.

Risk factors	Pre-Covid (n=2,045)		Post-Covid (n=2,049)		t-Student		
	Mean	SD	Mean	SD	GL	F	Sig.
WT	21.46	6.29	22.85	6.78	4,070	8.269	**<. 000****
AU	63.51	27.76	66.56	28.21	4,092	.1180	**<. 000****
WL	51.31	19.26	51.50	19.60	4,092	1.734	. 756
DP	59.25	19.33	59.36	20.00	4,091	3.800	. 860
VC	25.46	13.72	27.07	14.04	4,092	1.344	**<. 000****
PS	39.48	14.82	40.91	16.41	4,051	17.574	**. 003***
WIC	29.28	20.60	31.71	22.66	4,056	43.492	**<. 000****
RP	31.72	21.56	32.58	23.29	4,068	9.793	. 218
SSR	19.73	16.73	19.44	17.69	4,080	4.142	. 589
ENG	3.95	1.34	3.86	1.495	2,246	2.891	.384

* Values significantly different at p< .01

** values significantly different at p< .001

Note: *WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.*

This significant increase seems to indicate that the pandemic has had a negative effect on people's psychosocial health, with working time being the risk factor that suffered the biggest increase. On the other hand, work engagement had decreased, although this difference is not statistically significant. See Table 1.

Changes in Psychosocial Risk Factors Before and After Covid19 According to Sex

When comparing each risk factor before and after Covid19 according to sex, Table 4 shows that the risks of working time (9.0% increase in the number of people at high or very high risk) and worker interest/compensation (7.3%) increased significantly for the men's group. On the other hand, in the women's group, significant increase was found in the risk factors of working time (10.9%), autonomy (4.8%), variety and content (4.0%), participation and supervision (5.5%), and worker interest / compensation (5.2%).

Table 4. t-student of psychosocial risk factors before and after Covid19 according to gender.

Risk factor	MAN (n=1,454)							WOMAN (n=2,292)						
	Pre-Covid (n=836)		Post-Covid (n=618)		t-student			Pre-Covid (n=1,074)		Post-Covid (n=1,218)		t-student		
	Mean	SD	Mean	SD	DF	F	Sig.	Mean	SD	Mean	SD	DF	F	Sig.
WT	21.90	5.62	22.88	6.77	1,180	23.320	.003*	20.78	6.64	22.57	6.81	2,290	.674	<.000*
AU	61.91	27.34	62.40	28.89	1,452	2.461	.740	63.38	28.00	66.70	27.80	2,290	.241	.005*
WL	51.73	19.49	52.32	2.41	1,452	2.695	.573	49.61	18.92	49.45	19.02	2,290	.066	.845
DP	56.78	19.57	55.70	2.44	1,452	1.880	.307	60.40	18.99	60.54	19.49	2,289	1.462	.859
VC	25.83	13.72	27.13	13.86	1,452	.093	.076	24.13	13.48	25.98	14.05	2,290	1.990	.001*
PS	39.68	14.61	39.39	16.64	1,226	8.867	.731	38.19	14.15	40.56	15.64	2,288	10.848	<.000*
WIC	30.08	20.40	32.64	23.16	1,229	29.277	.026*	27.04	20.22	29.57	22.16	2,287	20.007	.005*
RP	32.03	21.20	33.56	24.36	1,219	10.845	.202	29.78	21.19	30.25	22.14	2,290	2.053	.608
SSR	18.64	16.12	18.81	17.66	1,259	4.240	.850	19.50	16.67	18.58	17.19	2,290	.388	.195
ENG	4.089	1.281	3.810	1.511	702	3.119	.103	3.958	1.353	3.980	1.462	1,314	.392	.884

Values significantly different at p< .05

Note: *SD: Standard deviation; DF: Degrees of freedom; Sig: Significance; WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.*

When separating men and women, we found that engagement levels did not differ significantly before and after the pandemic.

According to these results, the negative effect of the pandemic has affected the female group more than the male group and, in both groups, the risk factor with the highest increase was working time.

Evolution of Psychosocial Risk Factors Before and After Covid19 According to Age

When comparing each risk factor before and after Covid19 according to age, Table 5 shows that the **younger group** (<40 years) had seen a significant increase in almost all risk factors: working time (12.2% increase in the number of people at high or very high risk), autonomy (6.9%), variety and content (4.5%), participation and supervision (6.6%), worker interest/compensation (7.8%), and role performance (3.7%). However, in the **older group** (≥40 years), an opposite trend was observed: there was a statistically significant reduction in the risk factors of

autonomy (-10.6%), workload (-12.0%), participation and supervision (-14.9%), worker interest/compensation (-5.1%), role performance (-1.9%), and social support relationships (-4.9%).

Table 5. t-student of psychosocial risk factors before and after Covid19 according to age.

Risk factor	YOUNG [<40 years] (n=3,314)							OLDER [≥40 years] (n=469)						
	Pre-Covid (n=1,725)		Post-Covid (n=1,589)		t-student			Pre-Covid (n=188)		Post-Covid (n=281)		t-student		
	Mean	SD	Mean	SD	DF	F	Sig.	Mean	DF	Mean	SD	GL	F	Sig.
WT	22.66	5.98	24.66	6.25	3,312	2.418	<.001*	20.00	7.50	20.64	7.49	467	.345	.758
AU	69.31	25.95	74.20	24.66	3,301	4.056	<.001*	67.05	28.64	60.01	29.92	467	.404	.003*
WL	55.60	18.69	56.89	19.18	3,312	.899	.112	53.89	20.60	49.98	20.03	467	.237	.017*
DP	62.56	19.54	63.19	19.60	3,312	1.740	.650	58.08	19.96	58.66	20.76	466	.295	.870
VC	28.41	13.58	30.88	13.47	3,312	.008	<.001*	25.65	12.77	24.40	14.34	467	.652	.059
PS	42.45	15.07	45.36	16.04	3,229	9.996	<.001*	41.02	16.09	39.27	18.46	439	4.717	.028*
WIC	33.85	20.37	38.74	22.09	3,209	35.505	<.001*	31.90	21.16	28.83	23.69	467	.012	.018*
RP	37.01	22.41	40.26	24.86	3,216	11.517	.002*	34.24	20.77	30.55	23.31	467	.153	.009*
SSR	23.26	17.66	24.02	19.07	3,312	3.789	.666	23.19	17.22	19.45	17.82	467	.847	.002*
ENG	4.001	1.322	3.752	1.482	1,757	3.055	.035*	4.074	1.394	4.624	1.269	297	.443	.077

Values significantly different at p< .05

Note: *WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.*

Regarding the work engagement results between younger and older people using the t-student test, a significant reduction in total work engagement was observed in the **younger group**. In the older group, although this was the only group where engagement increased after Covid-19 rather than decreased, this difference was not statistically significant.

According to these results, **young people** have seen their psychosocial situation significantly worsened after the pandemic. In the group of **older people**, however, the trend has been rather the opposite, with significant improvements in all risk factors. Particularly significant is the reduction in the risk factors of autonomy, workload, and supervisory participation in the older group.

Evolution of Psychosocial Risk Factors Before and After Covid19 According to Job Position

When comparing each risk factor before and after Covid19 according to the job position, Table 6 shows that, in the group of **team members**, the risks of working time (10.2% increase in the number of people at high or very high risk), autonomy (7.0%), variety and content (3.5%), and worker interest/compensation (5.8%) increased significantly. However, in the group of **managers**, significant increase was only found in autonomy (5.1%) and role performance (3.7%).

Based on these results, the negative effect of the pandemic has affected team members more than managers.

Table 6. t-student of psychosocial risk factors before and after Covid19 according to job.

Risk factors	Room staff (n=3,149)							Staff in charge (n=893)						
	Pre-Covid (n=1,639)		Post-Covid (n=1,510)		t-student			Pre-Covid (n=354)		Post-Covid (n=539)		t-student		
	Mean	SD	Mean	SD	DF	F	Sig.	Mean	SD	Mean	SD	DF	F	Sig.
WT	21.74	6.20	23.46	6.35	3,147	.166	<.001*	20.49	6.44	21.17	7.61	928	15.471	.068
AU	69.09	25.23	73.69	24.13	3,143	9.084	<.001*	43.05	26.18	46.58	29.23	917	9.123	.002*
WL	51.06	18.95	51.80	19.05	3,147	.817	.270	51.79	20.39	50.65	21.06	943	.346	.216
DP	57.66	18.97	57.61	19.26	3,147	.739	.949	65.70	19.57	64.24	21.21	906	6.706	.283
VC	26.40	13.66	28.42	13.60	3,147	.102	<.001*	22.47	13.35	23.29	14.57	909	6.515	.081
PS	41.73	14.28	44.14	14.59	3,147	1.696	<.001*	30.93	13.52	31.88	17.80	943	3.602	.160
WIC	30.99	20.61	34.11	22.11	3,076	13.893	<.001*	23.27	19.32	24.97	22.86	933	31.587	.069
RP	33.27	21.57	34.02	23.15	3,075	5.887	.342	26.07	20.78	28.54	23.24	921	6.457	.034*
SSR	20.48	16.90	20.11	17.81	3,147	2.577	.556	17.60	16.16	17.57	17.21	943	3.352	.443
ENG	3.780	1.345	3.374	1.478	1,654	1.417	.715	4.436	1.222	4.210	1.488	68	4.760	.284

Values significantly different at p< .05

Note: *WT: working time; AU: autonomy; WL: workload; PD: psychological demands; VC: variety and content: PS: participation and supervision; WIC: worker interest and compensation; RP: role performance; SSR: social support relationships; ENG=Engagement total.*

Conclusion

The main objective of this study was to determine the psychosocial impact of the passing of the pandemic in the catering industry and to see if any demographic (i.e., sex, age) and work-related variables (i.e., job position) may have played a role.

According to the results of this two-wave study, we observe that **psychosocial risks** have increased significantly due to the pandemic, which means we can confirm our first hypothesis H_1. The risk factors with the biggest impact are related to work-life balance (working time), autonomy, routine and recognition (variety and content), lack of information and participation in company decisions and leadership style (participation and supervision), and finally, career planning, training, and salary compensation (employee interest and compensation). Previous studies have also shown that the psychological impact of Covid-19 has increased people's distress (Kelly, 2020) and, based on the results of this study, we observe that psychosocial risks have also increased significantly due to the pandemic.

When analyzing the impact of the pandemic according to sex, we observe that, as demonstrated by previous studies (González-Sanguino et al., 2020; Xiong et al., 2020), the **female** group has suffered the biggest psychological impact. We therefore accept hypothesis H_2, observing that psychosocial risks and work engagement have had a bigger impact on this group than on **men**. In the analysis by risk factor, we see a significant impact on men regarding work-life balance (working time) and career plan, training, and compensation. However, in the female group, the increase occurs in work-life balance, autonomy, routine, and recognition (variety and content), lack of information and participation in the decisions taken by the company and leadership style (participation and supervision), and career plan.

Regarding the differences in the psychological impact of the pandemic according to age, multiple studies are analyzed in which **young people** appear to be the most affected group (Planchuelo-Gómez et al., 2020; Xiong et al., 2020).The present study supports this same conclusion, observing that the group of younger people (≤ 40 years) is the one that suffered the biggest psychosocial and general health impact, increasing the risk factors of reconciliation (WT), autonomy (AU), variety and content (VC), participation and supervision (PS), worker interest and compensation (WIC), and role performance (RP). Therefore, we can accept hypothesis H_3. Some authors point out that the higher resilience level of **older people** may play a mediating role by providing them with a protective capacity against the effects of the pandemic (Wang et al., 2020a). This could explain the

results obtained in the present study, where older people did not suffer any mild or minor impact, but instead came out of the pandemic stronger, significantly reducing their psychosocial risks in practically all risk factors.

Finally, some studies show that supervisors benefited from increased training on Covid-19, due to their role as trainers within the teams they oversaw, and that this increased training may have been a protective factor against the pandemic (Giménez-Espert et al., 2020). We can also observe that, in the sample analyzed, managers were on average older than team members and, as we have seen above, older age makes them more resilient to the impact of Covid-19. The results obtained positioned the group of **team members** as the group that is affected the most by psychosocial risks and general health, thus accepting hypothesis H_4. While the **managers** showed an increase in lack of autonomy (AU) and role performance (RP), the staff in the dining room was affected by the risk factors of conciliation (WT), autonomy (AU), routine and recognition (VC), lack of information and participation in the decisions taken by the company and leadership style (PS), and finally with career plan, training, and salary compensation (WIC).

CAPÍTULO 5

Conclusiones generales

En el marco teórico JD-R (Bakker et al., 2023; Bakker & Demerouti, 2007), la presente tesis doctoral se centra en el análisis de los distintos riesgos psicosociales en función de indicadore de diversidad organizacional como son las variables: sexo, edad, antigüedad y nivel de responsabilidad en el puesto de trabajo. Para ello, se han llevado a cabo tres estudios y los correspondientes artículos que abordan cuestiones distintas pero relacionadas entre sí.

Primer artículo. Influencia de los factores psicosociales en función del sexo y la edad en personal sanitario

El primer artículo (capítulo 2) se ha realizado en el sector sanitario, donde se analizaron las diferencias en la percepción de las demandas y los recursos laborales, en función del sexo y la edad, así como el impacto que éstos tienen en el *work engagement*. Los resultados muestran que, la percepción de las demandas y recursos laborales, así como del bienestar y del desempeño es distinta en función del sexo y edad. Sin embargo, del análisis SEM, se puede confirmar que las relaciones propuestas por el Modelo JD-R (modelo de demandas y recursos laborales) (Bakker & Demerouti, 2007) se mantienen independientemente del sexo y la edad.

De acuerdo con los resultados, las mujeres perciben niveles significativamente superiores en demandas laborales respecto a los hombres, lo que coincide con los resultados de otros autores (Julià et al., 2016). Sin embargo, estas demandas se ven compensadas por niveles significativamente superiores de recursos laborales. En cuanto a resultados de bienestar laboral, se observan percepciones significativamente más elevadas de *Work engagement* en el grupo de mujeres que en el de hombres.

En el análisis por grupos de edad, se confirma que el grupo de personas más jóvenes (< 40 años) perciben niveles significativamente inferiores en demandas, y significativamente superiores en recursos laborales. Estos resultados vienen acompañados de valores significativamente superiores de bienestar laboral (i.e., *Work engagement*). Esto se puede deber seguramente, al carácter vocacional que tienen las profesiones sanitarias, que les confiere un mayor compromiso con la profesión y que se ha demostrado aumenta los intereses cognoscitivos, habilidades

comunicativas, cualidades individuales, valores y actitudes (Herrera Moya et al., 2018).

También se realizaron diversos análisis, no incluidos en el artículo publicado, que amplían la información obtenida en los resultados del estudio. La combinación sexo y edad, permite valorar los resultados entre hombre joven / mayor y mujer joven / mayor.

Tabla 2. Comparación de medias mediante *t-student* entre hombre joven / mayor y mujer joven / mayor

	Hombre		Mujer	
	Joven (n=401)	Mayor (n=736)	Joven (n=1,263)	Mayor (n=2,035)
Demandas laborales				
Sobrecarga cuantitativa	2.49_a	**3.11_b**	2.73_a	**3.17_b**
Ambigüedad de rol	1.17_a	**1.63_b**	1.20_a	**1.54_b**
Conflicto de rol	1.73_a	**2.18_b**	1.77_a	**2.24_b**
Rutina	3.70_a	3.79_a	3.97_a	**4.05_b**
Sobrecarga mental	4.55_a	**4.49_a**	4.76_a	4.61_b
Sobrecarga emocional	3.20_a	**3.45_b**	3.25_a	**3.39_b**
Mobbing	$.97_a$	**1.22_b**	$.95_a$	**1.25_b**
Disonancia	1.46_a	**1.93_b**	1.55_a	**1.94_b**
Recursos laborales				
Autonomía	4.77_a	4.71_a	**4.91_a**	4.86_a
Feedback	**4.50_a**	4.15_b	**4.59_a**	4.20_b
Clima apoyo social	**4.28_a**	3.85_b	**4.30_a**	3.91_b
Coordinación	**4.81_a**	4.49_b	**4.86_a**	4.55_b
Empatía	**4.66_a**	4.37_b	**4.91_a**	4.54_b
Competencia mental	**5.01_a**	4.83_b	**5.13_a**	4.94_b
Competencia emocional	4.10_a	4.13_a	**4.11_a**	4.02_b
Liderazgo Transformacional	4.59_a	4.08_b	**4.56_a**	4.12_b
Bienestar				
Engagement Total	**4.61_a**	4.29_b	**4.69_a**	4.41_b

Nota: los valores de la misma fila y subtabla que no comparten el mismo subíndice son significativamente diferente en p< .05 en la prueba bilateral de igualdad para medias de columna. En negrita se marcan las diferencias estadísticamente significativas y en gris cuando no las hay.

Como se puede observar de los resultados, el grupo de hombres mayores tienen, en general más demandas y menos recursos que sus homólogos jóvenes. Este mismo resultado se repite para el grupo de mujeres. Por lo que se puede decir que

la edad juega un papel importante en el equilibrio de demandas y recursos en el sector sanitario, independientemente del sexo.

También se dispone de un análisis según las distintas profesiones sanitarias, tampoco incluido en la publicación original, que puede aportar información relevante en el estudio:

Tabla 3. Comparación de recursos y demandas mediante ANOVA según profesión sanitaria.

	(A) Enfermero/a (n=1,117)	(B) Auxiliar Enfermería (n=578)	(C) Personal Administ. (n=431)	(D) Celador/a (n=134)	(E) Médico/a (n=825)
Demandas laborales					
Sobrecarga cuantitativa	3.11_a	2.70_b	3.24_a	$2.66_{b,c}$	$3.02_{a,c,d}$
Ambigüedad de rol	1.58_a	1.22_b	1.89_c	$1.60_{a,c,d}$	$1.39_{b,d}$
Conflicto de rol	2.24_a	1.97_b	2.29_a	$2.24_{a,b}$	1.87_b
Rutina	3.93_a	4.18_b	$4.11_{a,b}$	$4.17_{a,b}$	3.57_c
Sobrecarga mental	4.74_a	4.68_a	4.63_a	3.93_b	4.67_a
Sobrecarga emocional	3.47_a	$3.33_{a,b}$	$3.31_{a,b}$	$3.35_{a,b}$	$3.38_{a,b}$
Mobbing	1.23_a	$1.09_{a,b}$	1.30_a	$1.36_{a,b}$	1.05_b
Disonancia	$1.83_{a,b}$	$1.78_{a,b}$	1.99_a	$2.01_{a,b}$	1.67_b
Recursos laborales					
Autonomía	4.83_a	4.83_a	4.63_b	4.33_c	4.94_a
Feedback	$4.31_{a,c,d}$	4.50_a	4.02_b	$4.07_{b,c,d}$	4.28_d
Clima apoyo social	$4.03_{a,d,e,f}$	$4.18_{a,b}$	3.61_c	$3.65_{c,d}$	$4.13_{b,e}$
Coordinación	4.59_a	4.78_b	4.37_c	$4.47_{a,b,c}$	$4.70_{a,b}$
Empatía	$4.59_{a,c}$	$4.63_{a,b}$	$4.42_{a,c}$	$4.42_{a,c}$	4.77_b
Competencia mental	5.01_a	5.03_a	$4.96_{a,c}$	4.58_b	5.06_a
Competencia emocional	$4.07_{a,c,d,e}$	$4.16_{a,b}$	$4.02_{a,c,d,e}$	3.80_c	$4.17_{b,d}$
Liderazgo Transformacional	4.22_a	4.38_a	3.88_b	$4.20_{a,b}$	4.31_a
Bienestar					
Engagement Total	$4.38_{a,c}$	4.60_b	4.24_a	$4.40_{a,b}$	$4.51_{b,c,d}$

Nota: los valores de la misma fila y subtabla que no comparten el mismo subíndice son significativamente diferente en p< .05 en la prueba bilateral de igualdad para medias de columna.

Del análisis de las demandas y recursos por profesión sanitaria, se puede observar de forma resumida, que el personal de enfermería junto con el personal administrativo son los que mayores demandas perciben. Y el personal auxiliar de

enfermería junto con el colectivo de médicos/as son los que mayores recursos laborales y *Work engagement* perciben.

Estos resultados, refuerzan la idea de que las percepciones de los recursos y demandas laborales en el sector sanitario pueden ser distintas en función de la edad, el sexo y la profesión, indicando diferencias en las necesidades de cada colectivo. En este sentido, es fundamental elaborar políticas de recursos humanos y acciones formativas específicas para cada colectivo, de manera que se pueda maximizar el impacto positivo de estas.

Segundo artículo. Análisis de algunos factores demográficos y psicosociales que influyen en la percepción de la violencia laboral

En el segundo artículo (capítulo 3) se analizan los factores psicosociales que tienen un mayor impacto con la percepción de la violencia laboral y el efecto que tiene la diversidad organizacional (sexo, edad y cargo) en esta percepción.

Dentro del modelo JD-R se ha estudiado el papel de la diversidad como generador de conflictos interpersonales, ya que un grupo muy diverso puede hacer que las personas se categoricen en subgrupos según las similitudes y diferencias de sus miembros, como puede ser el sexo, la edad o sus valores personales (Meyer et al., 2014). Esta categorización social de las organizaciones puede aumentar la desconfianza, reducir el apoyo social y consecuentemente aumentar el nivel de competitividad entre distintos grupos. En este sentido, la diversidad puede conllevar un proceso de categorización social que sería fuente de conflictos entre sus miembros y aumentar con ello la violencia laboral (Jehn & Bezrukova, 2010; Thatcher & Patel, 2011). Sin embargo, los conflictos laborales no sólo pueden provenir de una categorización social, sino también puede considerarse como un resultado organizacional negativo (*Outcome*) resultado de un desequilibrio entre las demandas y los recursos laborales en relación con el modelo JD-R (Byon et al., 2017). En cualquier caso, la violencia laboral puede acabar provocando cansancio emocional o burnout (Schulte et al., 2020)

Los resultados demuestran que hay una relación significativa entre la percepción de los riesgos psicosociales y la percepción de violencia laboral. De forma que, coincidiendo con otros autores (Bentley et al., 2014; Skogstad et al.,

2011; Zahlquist et al., 2019), se demuestra que la violencia laboral aparece con mayor frecuencia en entornos con altos niveles de demandas o bajos niveles de recursos, como pueden ser las malas relaciones interpersonales, falta de claridad de rol, estilos de liderazgo tóxicos, baja participación, elevada carga de trabajo, falta de autonomía, falta de conciliación, demandas emocionales, rutina, ausencia de un plan de carrera o mala remuneración.

Estudios previos demuestran que las mujeres tienen mayor probabilidad de sufrir acoso que los hombres (Waite, 2021), sin embargo, en el presente estudio se observa una relación inversa, posicionando al grupo de hombres con valores significativamente superiores en percepción de acoso laboral que el grupo de mujeres. Los hombres obtuvieron valores superiores en percepción de violencia física, psíquica y sexual. No obstante, la discriminación se percibe significativamente superior en el grupo de mujeres. Estos hallazgos son importantes, ya que sugieren que la violencia laboral no es exclusiva de un sexo, y que deberían tomarse medidas para prevenir y abordar la violencia laboral en todas sus formas y colectivos.

Para analizar más detalladamente las percepciones de violencia en hombres y mujeres, se desglosaron los resultados de cada sexo en función de la edad y de la antigüedad en la empresa. En cuanto a la edad se ha observado que los hombres de 30 a 40 años perciben niveles más altos de violencia en comparación con las mujeres, mientras que son las mujeres de 50 a 60 años las que reportan niveles superiores de violencia en comparación con los hombres. En los demás grupos de edad, no se observan diferencias significativas. El presente estudio demuestra que la percepción del acoso laboral aumenta significativamente con la edad y la antigüedad en la empresa. Es posible que esté relacionado con el miedo a la pérdida del empleo que suponen estas amenazas, o que una mayor antigüedad supone mayor permanencia en la organización y por tanto más relaciones interpersonales que puedan provocar acoso laboral (Finegold et al., 2002; Kuhnert & Vance, 2004).

Adicionalmente se realizó un análisis de los factores de riesgos y la violencia laboral según sectores obteniendo la siguiente tabla de resultados:

Tabla 4. Comparación de medias mediante ANOVA por sectores de actividad

Factor de riesgo	(A) Comercio (n=11,845)	(B) Transp. (n=635)	(C) Hostel. (n=945)	(D) Banca (n=12,378)	(E) Investig. (n=278)	(F) Admin. Pública (n=97)	(G) Sanitario (n=514)
Violencia laboral	5.03a,d	14.65b	5.08a,d	6.20c	4.05a	6.75c,d	10.12e
Suma total de factores de riesgos psicosociales	332a	450b	325a	346c	315a	310a	370d
Tiempo de trabajo	24.33a	23.22b	21.23c	7.89d	11.90e	4.63f	13.54e
Autonomía	54.90a	87.07b	62.50c	53.75d	39.74e	38.76e	65.47c
Carga de trabajo	47.77a	58.35b	49.88c	68.85d	60.37b	48.87a,c	56.79b
Demandas psicológicas	52.83a	62.52b	58.20c	63.61b	52.49a	54.05a,c	58.87c
Variedad y contenido	23.98a	28.40b	23.85a	22.12c	21.93a,c	20.61a,c	21.59c
Participación / Supervisión	39.46a	58.24b	37.61c	44.68d	38.88a,c	41.52a,c,d	41.31a
Interés del trabajador y compensación	35.19a	48.68b	26.91c	24.54d	40.24e	45.33b,e	41.69e
Desempeño de rol	33.35a	47.66b	28.44c	42.68d	34.73a	38.32a,d	44.24b,d
Relaciones de apoyo social	5.03a,d	14.65b	5.08a,d	6.20c	4.05a	6.75c,d	10.12e

Nota: *los valores de la misma fila y subtabla que no comparten el mismo subíndice son significativamente diferente en p< .05 en la prueba bilateral de igualdad para medias de columna.*

Según se puede observar, el sector que tiene significativamente factores de riesgo y violencia laboral más elevados es el sector de transporte público (B), seguido del sector sanitario (G) y el sector de la banca (D). Si se analiza cada factor de riesgo por separado, se observa que la falta de **conciliación** (tiempo de trabajo) es más elevada en aquellos sectores del sector servicios como son el comercio, el transporte y la hostelería. Existe mayor falta de **autonomía** en el sector transporte, seguido del sanitario. La **carga de trabajo** es mayor en la banca, seguido del sector de investigación y transporte. Las **demandas psicológicas** son más elevadas en el sector de la banca, seguido del sector transporte y sanitario. La falta de **variedad y contenido** son más elevadas en el sector transporte, seguido del comercio y la hostelería. La falta de **participación y supervisión** más elevada está en el sector transporte, seguido de la banca. La falta de **interés y compensación** está más elevada en el sector transporte seguido de la administración pública y sanitario. El **desempeño de rol** está más elevado en el sector transporte seguido del sector

sanitario y banca. Y, por último, la falta de **relaciones de apoyo social** son más elevadas en el sector transporte, seguida del sector sanitario.

Tercer artículo. El impacto del covid-19 en los riesgos psicosociales en el sector de la hostelería.

El tercer artículo de la tesis (capítulo 4) analiza el impacto de la pandemia de Covid19 en la salud psicosocial del sector de la hostelería, analizando dichos factores antes y después de la pandemia. El objetivo principal es determinar el impacto de la pandemia sobre las demandas, recursos laborales y el *Work engagement* en la hostelería según la diversidad en las organizaciones, a través de variables de demográficas (i.e., el sexo y la edad) y variables relacionadas con el trabajo (i.e., el nivel de responsabilidad), encuadradas respectivamente como diversidad visible e invisible (Mor-Barak, 2022).

El modelo JD-R ha sido ampliamente estudiado en el contexto de la pandemia por Covid19. Se sabe que un aumento de las demandas laborales puede provocar agotamiento y pérdida del compromiso laboral (Bakker et al., 2005), sin embargo, esto no acaba de explicar el motivo por el cual la pandemia provocó estos síntomas en algunos sectores de actividad que se quedaron prácticamente paralizados: i.e.: sector de la hostelería y turismo (Chi et al., 2021; Vo-Thanh et al., 2021). Es por este motivo, que algunos autores apuntan a que la **inseguridad laboral** provocada por la pandemia ha jugado un papel importante en el modelo JD-R (Cao et al., 2023).

Según los resultados de este estudio, se observa que los riesgos psicosociales han aumentado significativamente debido a la pandemia, coincidiendo con otros autores (González-Sanguino et al., 2020; Planchuelo-Gómez et al., 2020; Salari et al., 2020; Sandín et al., 2020; Vindegaard & Benros, 2020; Wang et al., 2020a; Xiong et al., 2020). Los factores de riesgo que se ha observado que tienen mayor impacto fueron, en este orden, la falta de conciliación con la vida personal, la falta de autonomía, la rutina, la ausencia de reconocimiento laboral, la falta de información y participación en las decisiones de la empresa, un estilo de liderazgo tóxico, la falta de plan de la carrera y la baja remuneración.

Cuando se analiza el impacto de la pandemia según el sexo, se observa que, como han demostrado estudios anteriores (González-Sanguino et al., 2020; Xiong et al., 2020), las mujeres han sufrido un mayor impacto psicosocial que los hombres.

Seguramente sea debido a que las mujeres han tenido que lidiar su trabajo durante la pandemia con el rol del cuidado familiar y las tareas del hogar (González-Sanguino et al., 2020), lo que las ha hecho más vulnerables a los efectos psicosociales que ha provocado la pandemia.

En cuanto a las diferencias en el impacto psicológico de la pandemia según la edad, varios estudios analizados indican que el colectivo de jóvenes parece ser el grupo más afectado (Xiong et al., 2020). Esta investigación apoya esta misma conclusión, observando que el grupo de personas más jóvenes (< 40 años) es el que ha sufrido el mayor impacto psicosocial y de salud en general. Seguramente las personas mayores han resistido mejor el paso de la pandemia debido a una mayor resiliencia, tal y como indican algunos autores (Wang et al., 2020a).

Se realizaron adicionalmente dos análisis no incluidos en la publicación inicial, para observar las diferencias entre sexos según la edad, obteniendo los siguientes resultados:

Tabla 5. Comparación de medias mediante *t-student* entre hombre joven / mayor y mujer joven / mayor antes y después de la pandemia por covid19

Factor de riesgo	Joven				Mayor			
	HOMBRE		MUJER		HOMBRE		MUJER	
	Pre-Covid (n=761)	Post-Covid (n=534)	Pre-Covid (n=912)	Post-Covid (n=978)	Pre-Covid (n=53)	Post-Covid (n=74)	Pre-Covid (n=133)	Post-Covid (n=205)
Tiempo de trabajo	22.04$_a$	**23.35$_b$**	21.06$_a$	**23.32$_b$**	19.00$_a$	19.59$_a$	18.91$_a$	18.85$_a$
Autonomía	62.20$_a$	64.57$_a$	63.62$_a$	**69.43$_b$**	56.57$_a$	45.77$_a$	**60.35$_a$**	52.87$_b$
Carga de trabajo	52.10$_a$	53.23$_a$	49.56$_a$	50.72$_a$	44.62$_a$	45.35$_a$	**49.44$_a$**	42.73$_b$
Demandas psicológicas	57.10$_a$	55.93$_a$	61.07$_a$	61.64$_a$	50.96$_a$	54.15$_a$	55.86$_a$	54.84$_a$
Variedad y contenido	26.05$_a$	**28.11$_b$**	24.38$_a$	**27.12$_b$**	21.26$_a$	19.36$_a$	22.80$_a$	20.31$_a$
Participación / Supervisión	39.74$_a$	40.45$_a$	38.21$_a$	**41.68$_b$**	36.57$_a$	31.41$_a$	37.14$_a$	34.37$_a$
Interés del trabajador y compensación	30.46$_a$	**34.01$_b$**	26.69$_a$	**31.27$_b$**	23.28$_a$	22.24$_a$	**27.03$_a$**	20.76$_b$
Desempeño de rol	32.25$_a$	34.71$_a$	29.59$_a$	**31.89$_b$**	25.15$_a$	25.31$_a$	**29.48$_a$**	22.18$_b$
Relaciones de apoyo social	18.54$_a$	18.92$_a$	19.43$_a$	19.34$_a$	19.06$_a$	16.62$_a$	**18.80$_a$**	13.65$_b$
Work engagement	**4.17$_a$**	3.72$_b$	3.92$_a$	3.83$_a$	3.72$_a$	4.47$_a$	4.25$_a$	4.69$_a$

Nota*: los valores de la misma fila y subtabla que no comparten el mismo subíndice son significativamente diferente en p< .05 en la prueba bilateral de igualdad para medias*

de columna. En negrita se marcan las diferencias estadísticamente significativas y en gris cuando no las hay.

De este análisis se puede observar que, dentro del grupo de personas jóvenes (<40 años), la pandemia ha provocado una reducción de recursos laborales en materia de conciliación y plan de carrera y han aumento las demandas por rutina en ambos sexos. Además, en el grupo de mujeres, se ha reducido la autonomía, el liderazgo y la participación y se han incrementado los problemas de claridad y conflicto de rol. Es decir, se observa que en el grupo de jóvenes existe un claro desequilibrio entre demandas y recursos, obteniendo peores resultados el grupo de mujeres (6 factores de riesgo afectados) que el de hombres (3 factores afectados).

En cuanto a las personas mayores (≥40 años), en el grupo de hombres no se observan diferencias significativas antes y después de la pandemia (quizás por tratarse de un grupo poco numeroso) y, sin embargo, en el grupo de mujeres mayores se observa un incremento en recursos laborales como la autonomía, el plan de carrera y las relaciones de apoyo social, así como una reducción de demandas como la carga de trabajo, el conflicto y claridad de rol. Por lo que podemos decir, que efectivamente las personas mayores (≥40 años) han percibido una reducción de los factores de riesgos psicosociales después de la pandemia, y en especial, el grupo de mujeres.

Por último, en cuanto al efecto de la pandemia en función del nivel de responsabilidad, observamos que las empresas hicieron un gran esfuerzo en formar y capacitar a sus gerentes sobre Covid-19, para ejercer como formadores dentro de los equipos que supervisaban. Algunos autores afirman que esta formación adicional puede haber ejercido un factor protector contra la pandemia (Giménez-Espert et al., 2020). También se puede observar que, en la muestra analizada, los gerentes eran en promedio de mayor edad que las personas a su cargo y, como hemos visto anteriormente, la edad avanzada los hace más resistentes al impacto de Covid-19. Los resultados obtenidos posicionan al grupo de camareros y camareras, dentro de la hostelería, como el más afectado por los riesgos psicosociales y mayor desequilibrio entre el binomio demandas-recursos laborales. Y, por lo tanto, más susceptibles de sufrir un agotamiento emocional tras la pandemia.

Implicaciones prácticas

En el sector sanitario

El primer artículo examina la relación entre las demandas y los recursos laborales en el sector sanitario, evidenciando que la percepción de estas variables y el *Work Engagement* pueden variar según el sexo y la edad. Por un lado, se confirma el impacto que tiene la diversidad en las organizaciones como ya demuestran otros autores (Gomez & Bernet, 2019; Mor-Barak, 2022) y, por otro lado, se confirma a través de los modelos de ecuaciones estructurales SEM, que el modelo teórico JD-R se cumple y mantiene independientemente del sexo o el grupo de edad.

Los resultados de esta investigación nos muestran que las percepciones y necesidades del personal sanitario pueden variar según su sexo y edad. Esto implica que no se deben tratar todos los grupos de la misma manera y que las intervenciones psicosociales deben ser personalizadas para cada grupo demográfico. Por lo tanto, se pueden diseñar programas específicos de intervención psicosocial en el sector sanitario para promover el bienestar y el rendimiento de la plantilla.

Por ejemplo, para las personas mayores, se ha encontrado que las variables relacionadas con la retroalimentación, el clima de apoyo y el liderazgo transformacional son más relevantes, por lo que las intervenciones para mejorar su bienestar y rendimiento deben enfocarse en promover estos aspectos. Por otro lado, en las personas jóvenes se ha observado que las demandas tienen un mayor impacto en el *Work engagement* y el rendimiento, por lo que es necesario reducir el conflicto y la ambigüedad de rol.

Respecto a la violencia laboral

En el segundo artículo, se analiza el impacto de la violencia laboral y los factores de riesgos psicosociales según la diversidad, observando que tanto hombres como mujeres pueden ser víctimas de violencia laboral de distintas formas y que su efecto puede afectar más a personas mayores que a jóvenes. En relación con el modelo JD-R se ha podido comprobar que la violencia en el trabajo es significativamente más elevada en aquellos colectivos con mayores demandas laborales (i.e.: carga de trabajo, conflicto de rol, etc.), por lo que se puede considerar

como un resultado organizacional negativo (*outcome*) resultado del desequilibrio entre demandas y recursos, tal y como predice el modelo JD-R (Byon et al., 2017).

Se demuestra que las percepciones de la violencia laboral en el lugar de trabajo pueden variar según el sexo, la edad y la antigüedad de las personas. De la misma forma que ocurría en la anterior investigación, esto nos va a permitir personalizar los planes formativos para prevenir la violencia laboral.

Según la matriz de correlación de Pearson, todos los factores de riesgos tienen una correlación significativa (α=.01) con la violencia laboral. Sin embargo, se observa que el **desempeño de rol**, las **relaciones de apoyo social** y la **participación** y **supervisión** son los factores de riesgo con mayor impacto, dado que tienen los coeficientes más altos.

En primer lugar, se sabe que los esfuerzos deben dirigirse en reducir el impacto de los factores de riesgo psicosocial, lo cual implica realizar periódicamente evaluaciones de riesgos psicosociales para identificar los factores que más impactan en la plantilla, teniendo especial atención a la existencia de conflictos de rol, estilos de liderazgo tóxico o malas relaciones interpersonales, que se sabe que son los que mayor impacto tienen.

Atendiendo a los resultados de esta investigación, se pueden desarrollar estrategias de intervención y formaciones específicas para determinados colectivos. Concretamente se puede trabajar con el colectivo de personas mayores (de 40 años en adelante), pues se ha visto que presentan una mayor vulnerabilidad frente a la violencia laboral. Asimismo, se deben diseñar estrategias para reducir la discriminación por razón de sexo en el colectivo de mujeres. Aunque en este caso, se hace necesario trabajar con todos los colectivos (mujeres y hombres), para incrementar la cultura organizacional (Stainback et al., 2011).

En el sector de la hostelería

En el tercer artículo, se evidencia que la pandemia por Covid19 ha tenido un impacto en la salud psicosocial de todas las personas, pero en especial ha tenido un impacto mayor en las mujeres y en las personas jóvenes. La pandemia no ha afectado por igual en todos los sectores de actividad. Concretamente la hostelería fue uno de los sectores donde la actividad laboral quedó paralizada durante un largo período de tiempo (Chi et al., 2021; Vo-Thanh et al., 2021), y por este motivo algunos autores

señalan la inseguridad laboral como posible causa del incremento de las demandas, en relación con el modelo JD-R (Cao et al., 2023). Esto casa con los resultados obtenidos, ya que los jóvenes han sido los más afectados, y este es el colectivo con mayor inseguridad laboral (Nekane et al., 2020), al ver truncado su proyecto vital de trabajo y estudios.

Derivado del análisis realizado sobre el impacto psicosocial que ha tenido la pandemia del Covid19 en el sector de la hostelería, se pueden desarrollar distintas estrategias a futuro:

1) desde el punto de vista de la prevención, se pueden desarrollar estrategias de formación e intervención psicosocial, que nos permitan estar más preparados para futuras pandemias que puedan venir. Aunque no es previsible que esto pueda suceder de nuevo a corto plazo, la lección aprendida nos puede permitir desarrollar estrategias de afrontamiento para futuras generaciones, con relación a mejorar la autonomía, la conciliación, dirigir los estilos de liderazgo hacia un mayor reconocimiento, participación y desarrollo de planes de carrera.

2) por otro lado, los resultados de esta investigación nos pueden permitir trabajar en colectivos concretos, por ejemplo, en el colectivo de personas jóvenes y mujeres, que sabemos que han sufrido un mayor impacto derivado de la pandemia. De esta forma se pueden desarrollar planes de intervención específicos, y desarrollar estrategias a futuro para reducir los efectos emocionales y psicosociales de estos colectivos en una pandemia futura.

Limitaciones

Las principales limitaciones del primer estudio (capítulo 2), sobre los riesgos psicosociales en personal sanitario, son las siguientes:

1) La primera limitación está relacionada con una participación predominantemente femenina en el estudio, aunque debe señalarse que esta distribución representa la realidad del sector analizado.

2) Los datos se recogieron en el mismo intervalo temporal, lo que supone una limitación respecto a estudios de carácter longitudinal, que nos habría permitido sacar conclusiones sobre el orden causal entre las variables.

3) Por último, existe una limitación metodológica debida al cuestionario utilizado: las preguntas realizadas sobre demandas y recursos piden a la persona encuestada que piense en su grupo de trabajo y, sin embargo, se realiza una segregación por sexo o grupos de edad, donde se está individualizando una respuesta colectiva. En este sentido, se puede decir que las respuestas que se refieren al equipo también están determinadas por el sexo y la edad y no solo por la percepción de la situación de su equipo de trabajo.

En cuanto a las limitaciones del segundo estudio (capítulo 3) sobre la violencia laboral, se pueden enumerar las siguientes:

1) Para la evaluación de la violencia en el lugar de trabajo, se ha utilizado una escala de 4 ítems extraída de una encuesta de riesgos psicosociales, y aunque la confiabilidad de la escala utilizada es buena ($\alpha=.74$), el método empleado aún no ha sido validado como otros métodos de reconocido prestigio como la escala Gutenberg, LIPT-60 o NAQ-R (González-Trijueque et al., 2022). Cabe destacar a este respecto, que durante el primer trimestre de 2023 he realizado un estudio de validación para dar respuesta a esta limitación, pasando el cuestionario de 4 preguntas junto con el cuestionario NAQ-R a una población de 200 personas trabajadoras, y los resultados correlacionan perfectamente, por lo que, a falta de la publicación de estos resultados, esta limitación queda resuelta.

2) Una limitación adicional se basa en la existencia de algunos grupos demográficos subrepresentados dentro de la muestra, como los grupos <20 y >60 años. Es muy posible que la falta de diferencias significativas en estos dos

grupos se deba al pequeño tamaño de la muestra, y por lo tanto esta limitación debe tenerse en cuenta.

3) Para determinar las diferencias significativas entre los grupos de hombres y mujeres habría sido más adecuado realizar una *t-student* que el análisis ANOVA realizado. No se consideró cambiarlo al tratarse de un artículo ya publicado.

Respecto al tercer estudio (capítulo 4) sobre el efecto psicosocial de la pandemia por Covid19, las limitaciones se pueden resumir en las siguientes:

1) Aunque se trata de un estudio donde se han obtenido datos antes y después de la pandemia del mismo grupo demográfico, no se trata exactamente de las mismas personas antes y después, por lo que no se puede categorizar como estudio longitudinal.

2) A pesar de que, al tratarse de una franquicia de comida rápida, se puede afirmar que el sistema de organización del trabajo, la retribución, la organización de turnos…, es el mismo en todo el colectivo pre y post pandemia, no se han controlado posibles variaciones que pueden existir en los diferentes restaurantes. En cambio, se ha asumido que las diferencias eran debidas fundamentalmente al efecto de la pandemia.

Futuras de investigación

En la investigación en el sector sanitario, sería interesante realizar un proyecto longitudinal donde se incluyan a las mismas personas antes y después de un período de tiempo, durante el cual se haya desarrollado un programa de intervención específico. De esta manera, se podría recoger información útil por puesto de trabajo y determinar la causalidad de los factores de riesgo que están afectando a este colectivo.

En el caso del estudio de violencia laboral, la primera línea de investigación propuesta es validar la escala de acoso de 4 preguntas que se obtienen del cuestionario FPSICO 4.1 (Ferrer Puig et al., 2011). Línea de investigación que ya está en marcha. Por otro lado, también sería interesante poder profundizar en los factores de riesgo que impactan en la violencia en el lugar de trabajo, lo que nos permitiría desarrollar programas de intervención más específicos.

Por último, en relación con el efecto de la pandemia del Covid19 en el sector de la restauración, sería interesante hacer un tercer análisis para observar cómo evoluciona el impacto emocional y psicosocial del mismo colectivo del tiempo 1 y 2 dos años después de la pandemia: sobre el año 2024. De esta forma podremos saber si han retornado a la situación prepandemia, si han mejorado o por el contrario si se mantienen todavía niveles de riesgo psicosocial y estrés elevados.

Observaciones finales

La presente tesis doctoral se enfoca en el impacto que tiene la diversidad en el modelo teórico de demandas y recursos laborales JD-R (Bakker et al., 2023; Bakker & Demerouti, 2007), considerando el rol de variables demográficas como el sexo, la edad, la antigüedad y el nivel de responsabilidad. Los tres artículos que componen la tesis abordan cuestiones distintas pero relacionadas entre sí y con un modelo teórico común. El primero artículo se centra en el sector sanitario y cómo afecta la diversidad en el *Work engagement* y el desempeño. En el segundo artículo se introduce la violencia laboral como posible consecuencia de las demandas y falta de recursos laborales. Finalmente, en el tercer artículo se valora cómo el incremento de un estresor externo, como ha sido la pandemia por Covid19, ha provocado cambios de las demandas y recursos laborales, atendiendo a la diversidad en el sector de la hostelería.

En los tres artículos que componen la presente tesis, los datos se han analizado atendiendo las diferencias debidas a la diversidad "visible" y la diversidad "invisible".

Así, podemos destacar que, en cuanto al sexo, en el sector sanitario las mujeres perciben mayores demandas laborales que los hombres, aunque cuentan con más recursos personales y laborales para combatirlas. En cuanto a la violencia laboral, los hombres obtienen valores significativamente superiores en percepción de violencia física, psíquica y sexual, aunque en discriminación son las mujeres las que obtienen valores significativamente superiores. Y, por último, respecto al impacto de la pandemia por Covid19, se observa que las mujeres han sufrido un mayor impacto psicosocial que los hombres, debido seguramente al doble rol que han adoptado del cuidado de la familia y trabajo (González-Sanguino et al., 2020).

En cuanto a la edad, en el sector sanitario se ha observado que las personas jóvenes (de menos de 40 años), obtuvieron resultados significativamente mejores que las personas mayores (menos demandas, más recursos laborales y valores superiores de *Work engagement*), lo que podría deberse al carácter vocacional de esta profesión (Herrera Moya et al., 2018). Respecto a la violencia en el trabajo, se ha observado que la percepción del acoso laboral se incrementa significativamente

con la edad y con la antigüedad en la empresa. Y cuando se analizó el impacto psicosocial de la pandemia de Covid19 por grupos de edad, se observó que el grupo más afectado fue el de personas jóvenes, con un incremento significativo de demandas laborales. Y, sin embargo, el grupo de personas mayores obtuvo resultados psicosociales significativamente mejores con el paso de la pandemia, seguramente debido a una mayor resiliencia, tal y como indican algunos autores (Wang et al., 2020a).

Por último, respecto al nivel de responsabilidad o profesión, se observa que en el sector sanitario las profesiones que presentan significativamente mayores recursos laborales son el colectivo de médicos/as y auxiliares de enfermería y, sin embargo, las mayores demandas laborales se observan en el colectivo de enfermería y administración. Respecto a la percepción de violencia laboral, se observa que los sectores que presentan significativamente valores más elevados son el sanitario y el de transporte público. En cuanto al impacto de la pandemia por Covid19, se observa que el colectivo que sufrió un impacto psicosocial significativamente mayor fue el de menor responsabilidad, el personal de sala, frente a un colectivo de gerentes que sufrió un impacto psicosocial más leve, seguramente debido a una mayor formación y antigüedad en la organización, lo que parece haber ejercido un papel protector contra la pandemia (Giménez-Espert et al., 2020).

En general, se puede afirmar que estos resultados sugieren la necesidad de aplicar políticas de recursos humanos y acciones formativas específicas para cada colectivo, con el objeto de maximizar el impacto positivo que tiene la diversidad en el bienestar laboral. Además, se enfatiza en la importancia de tomar medidas para prevenir y abordar la violencia laboral en todas sus formas y colectivos.

REFERENCIAS

Ansoleaga, E., Díaz, X., & Mauro, A. (2016). Associação entre estresse, riscos psicossociais e qualidade do emprego de trabalhadores assalariados chilenos: Uma perspectiva de gênero (Psychosocial risks, quality of employment, and workplace stress in Chilean wage-earning workers: a gender perspective. *Cadernos de Saude Publica*, *32*(7). https://doi.org/10.1590/0102-311X00176814

Aparicio García, M., Sánchez López, M., Dresch, V., & Díaz Morales, J. (2008). *Las relaciones entre la salud física y psicológica según el estatus laboral (Relationships between physical and psychological health according to employment status)*. EduPsykhé: Revista de Psicología y Psicopedagogía. https://dialnet.unirioja.es/servlet/articulo?codigo=2800138

Arbuckle, J. L. (2012). IBM SPSS Amos 21 User ' s Guide. *Crawfordville, FL: Amos Development ….* https://doi.org/10.1111/j.1600-0447.2011.01711.x

Arbuckle, J. L. (2013). IBM SPSS AMOS 22 User Guide. In *IBM Corps*.

Artazcoz, L., Escribà-Agüir, V., & Cortès, I. (2006). Stress in a changing society. *Gaceta Sanitaria*, *20*(SUPPL. 1), 71–78. https://doi.org/10.1157/13086029

Atance Martínez, J. C. (1997). Aspectos epidemiológicos del síndrome de Burnout en personal sanitario (Epidemiological aspects of Burnout syndrome in health care workers). *Revista Española de Salud Pública*. https://doi.org/10.1590/s1135-57271997000300008

Azaroff, L. S., Levenstein, C., & Wegman, D. H. (2002). Occupational Injury and Illness Surveillance: Conceptual Filters Explain Underreporting. *American Journal of Public Health*, *92*(9), 1421. https://doi.org/10.2105/AJPH.92.9.1421

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309–328. https://doi.org/10.1108/02683940710733115/FULL/XML

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*(2), 170–180. https://doi.org/10.1037/1076-8998.10.2.170

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job Demands–Resources Theory: Ten Years Later. *Https://Doi.Org/10.1146/Annurev-Orgpsych-120920-053933*, *10*, 25–53. https://doi.org/10.1146/ANNUREV-ORGPSYCH-120920-053933

Beier, M. E., Kanfer, R., Kooij, D. T. A. M., & Truxillo, D. M. (2022). What's age got to do with it? A primer and review of the workplace aging literature. *Personnel Psychology*. https://doi.org/10.1111/PEPS.12544

Benavides, F., Declós, J., García, A. M., & Ruíz, C. (2007). *Salud Laboral (Occupational health) (3ª ed.)* (Elsevier).

Bentley, T. A., Catley, B., Forsyth, D., & Tappin, D. (2014). Understanding workplace violence: The value of a systems perspective. *Applied Ergonomics*, *45*(4), 839–848. https://doi.org/10.1016/J.APERGO.2013.10.016

Berdahl, J. L., Magley, V. J., & Waldo, C. R. (1996). The sexual harassment of men? Exploring the concept with theory and data. *Psychology of Women Quarterly*, *20*(4), 527–547. https://doi.org/10.1111/J.1471-6402.1996.TB00320.X

Blanchard-Fields, F., Stein, R., & Watson, T. L. (2004). Age differences in emotion-regulation strategies in handling everyday problems. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, *59*(6). https://doi.org/10.1093/geronb/59.6.P261

Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the Victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.91.5.998

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, *395*(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8

Brun, E., & Milczarek, M. (2007). Expert forecast on emerging psychosocial risks related to occupational safety and health. In *European Risk Observatory Report*.

Buendía, J. (1998). *Estrés laboral y salud (Work stress and health)* (Madrid). Biblioteca Nueva.

Buselli, R., Baldanzi, S., Corsi, M., Chiumiento, M., del Lupo, E., Carmassi, C., Dell'Osso, L., & Cristaudo, A. (2020). Psychological care of healthworkers during the COVID-19 outbreak in Italy: Preliminary report of an occupational health department (AOUP) responsible for monitoring hospital staff condition. *Sustainability (Switzerland)*, *12*(12). https://doi.org/10.3390/su12125039

Byon, H. Do, Harrington, D., Storr, C. L., & Lipscomb, J. (2017). Exploring the factor structure of the job demands-resources measure with patient violence on direct care workers in the home setting. *Journal of Nursing Measurement*, *25*(2), 257–274. https://doi.org/10.1891/1061-3749.25.2.257

Cao, J., Liu, J., & Wong, J. W. C. (2023). JD-R model on job insecurity and the moderating effect of COVID-19 perceived susceptibility. *Current Psychology*, *1*, 1–15. https://doi.org/10.1007/S12144-023-04646-6/FIGURES/3

Carstensen, L. L. (1995). Evidence for a Life-Span Theory of Socioemotional Selectivity. *Current Directions in Psychological Science*, *4*(5), 151–162. https://doi.org/10.1111/1467-8721.ep11512261

Castiblanque, R. P., & Beneyto Calatayud, P. J. (2019). Gender inequalities in terms of work conditions, employment and occupational health. *Sociologia y Tecnociencia*, *9*(2), 23–50. https://doi.org/10.24197/st.2.2019.23-49

Catalina Romero, C., Corrales Romeo, H., Cortés Arcas, M., & Gelpi Méndez, J. (2008). Las diferencias de género en el nivel de exposición a riesgos psicosociales entre trabajadores/as de la comunidad Autónoma de Madrid: resultados preliminares del plan de investigación del estrés laboral de Ibermutuamur (Gender differences in the level of . In *EduPsykhé: Revista de psicología y psicopedagogía* (Vol. 7, Issue 2, pp. 185–200). https://dialnet.unirioja.es/servlet/articulo?codigo=2800135

CC.OO. (2021, July 13). *Análisis del Empleo en el Sector de Hostelería 2019-2021: propuestas para un empleo sostenible y de calidad*. https://www.ccoo-servicios.es/archivos/analisis empleo hosteleria 2019-2021.pdf

Chan, D. K. S., Lam, C. B., Chow, S. Y., & Cheung, S. F. (2008a). Examining the job-related, psychological, and physical outcomes of workplace sexual harassment:

A meta-analytic review. In *Psychology of Women Quarterly* (Vol. 32, Issue 4, pp. 362–376). https://doi.org/10.1111/j.1471-6402.2008.00451.x

Chan, D. K. S., Lam, C. B., Chow, S. Y., & Cheung, S. F. (2008b). Examining the job-related, psychological, and physical outcomes of workplace sexual harassment: A meta-analytic review. In *Psychology of Women Quarterly* (Vol. 32, Issue 4, pp. 362–376). SAGE PublicationsSage CA: Los Angeles, CA. https://doi.org/10.1111/j.1471-6402.2008.00451.x

Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L., Sheng, C., Cai, Y., Li, X., Wang, J., & Zhang, Z. (2020). Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*, *7*(4), e15–e16. https://doi.org/10.1016/S2215-0366(20)30078-X

Chi, O. H., Saldamli, A., & Gursoy, D. (2021). Impact of the COVID-19 pandemic on management-level hotel employees' work behaviors: Moderating effects of working-from-home. *International Journal of Hospitality Management*, *98*, 103020. https://doi.org/10.1016/J.IJHM.2021.103020

Cifre, E., & Vera, M. (2019). Editorial: Psychosocial risks and health at work from a gender perspective. *Frontiers in Psychology*, *10*(JUN), 1–2. https://doi.org/10.3389/fpsyg.2019.01392

Cochran, C. C., Frazier, P. A., & Olson, A. M. (1997). Predictors of responses to unwanted sexual attention. *Psychology of Women Quarterly*, *21*(2), 207–226. https://doi.org/10.1111/j.1471-6402.1997.tb00109.x

Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic leadership and follower effects. *Journal of Organizational Behavior*. https://doi.org/10.1002/1099-1379(200011)21:7<747::AID-JOB46>3.0.CO;2-J

Curran, P. J., West, S. G., & Finch, J. F. (1996). The Robustness of Test Statistics to Nonnormality and Specification Error in Confirmatory Factor Analysis. *Psychological Methods*. https://doi.org/10.1037/1082-989X.1.1.16

Danet Danet, A. (2021). Psychological impact of COVID-19 pandemic in Western frontline healthcare professionals. A systematic review. In *Medicina Clinica*

(Vol. 156, Issue 9, pp. 449–458). Ediciones Doyma, S.L. https://doi.org/10.1016/j.medcli.2020.11.009

Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.86.3.499

Dopelt, K., Davidovitch, N., Stupak, A., Ayun, R. ben, Eltsufin, A. L., & Levy, C. (2022). Workplace Violence against Hospital Workers during the COVID-19 Pandemic in Israel: Implications for Public Health. *International Journal of Environmental Research and Public Health*, *19*(8). https://doi.org/10.3390/IJERPH19084659

Dosil Santamaría, M., Ozamiz-Etxebarria, N., Redondo Rodríguez, I., Jaureguizar Albondiga-Mayor, J., & Picaza Gorrochategi, M. (2021). Psychological impact of COVID-19 on a sample of Spanish health professionals. *Revista de Psiquiatría y Salud Mental (English Edition)*, *14*(2), 106–112. https://doi.org/10.1016/j.rpsmen.2020.05.002

Dosil-Santamaría, M., Ozamiz-Etxebarria, N., & Redondo-Rodríguez, I. (2021). Psychological impact of COVID-19 on a sample of Spanish health professionals. *Revista de Psiquiatria y Salud Mental*, *14*(2), 106–112. https://doi.org/10.1016/j.rpsm.2020.05.004

Einarsen, S., & Mikkelsen, E. G. (2002). Individual effects of exposure to bullying at work. In *Bullying and Emotional Abuse in the Workplace* (pp. 127–144). https://doi.org/10.1201/9780203164662.ch6

Enosh, G., & Tzafrir, S. S. (2015). The Scope of Client Aggression Toward Social Workers in Israel. *Http://Dx.Doi.Org/10.1080/10926771.2015.1070233*, *24*(9), 971–985. https://doi.org/10.1080/10926771.2015.1070233

Ley 31/1995, de 8 de noviembre, de prevención de Riesgos Laborales, Pub. L. No. Boletín Oficial del Estado número 269 de 10 de noviembre de 1995 (1995). https://www.boe.es/eli/es/l/1995/11/08/31/con

Real Decreto 39/1997, de 17 de enero, por el que se aprueba el Reglamento de los Servicios de Prevención., Pub. L. No. Boletín Oficial del Estado número 27 de 31 de enero de 1997 (1997).

Ley Orgánica 3/2007, de 22 de marzo, para la igualdad efectiva de mujeres y hombres, Pub. L. No. «BOE» núm. 71, de 23/03/2007 (2007).

EU-OSHA. (2007). *EU-OSHA Annual report 2007: bringing safety and health closer to European workers.* European Agency for Safety and Health at Work. https://osha.europa.eu/en/publications/eu-osha-annual-report-2007-bringing-safety-and-health-closer-european-workers%0Ahttps://osha.europa.eu/en/publications/annual_report/2007full/view

European Agency for Safety and Health at Work. (2022). *Psychosocial risks and workers health - OSHwiki.* https://oshwiki.osha.europa.eu/en/themes/psychosocial-risks-and-workers-health

Ferrer Puig, R., Guilera Ferré, G., & Peró Cebollero, M. (2011). *Propiedades psicométricas del instrumento de valoración de riesgos psicosociales del Instituto Nacional De Seguridad e Higiene En El Trabajo (FPSICO).* http://www.insht.es/InshtWeb/Contenidos/Documentacion/NOVEDADES EDITORIALES/FPsico/Informe justificación.pdf

Figueiredo-Ferraz, H., Gil-Monte, P. R., Grau-Alberola, E., Llorca-Pellicer, M., & García-Juesas, J. A. (2012). Influence of Some Psychosocial Factors on Mobbing and its Consequences Among Employees Working with People with Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities*, *25*(5), 455–463. https://doi.org/10.1111/j.1468-3148.2012.00687.x

Finegold, D., Mohrman, S., & Spreitzer, G. M. (2002). Age effects on the predictors of technical workers' commitment and willingness to turnover. *Journal of Organizational Behavior*, *23*(5), 655–674. https://doi.org/10.1002/job.159

Fitzgerald, L. F., Gelfand, M. J., & Drasgow, F. (1995). Measuring Sexual Harassment: Theoretical and Psychometric Advances. *Basic and Applied Social Psychology*, *17*(4), 425–445. https://doi.org/10.1207/s15324834basp1704_2

García-Layunta, M., Oliver, A., Tomás, J. M., Verdú, F., & Zaragoza, G. (2002). Factores psicosociales influyentes en la ocurrencia de accidentes laborales. *Arch Prev Riesgos Labor*, *5*(1), 4–10.

Garnés Ros, a F. (2001). Estudio de las fuentes de estrés laboral en médicos residentes (Study of the sources of occupational stress in medical residents). In *Centro de Salud* (Vol. 9, Issue 9, pp. 568–572).

Garrosa Hernández, E., & Carmona Cobo, I. (2011). Salud laboral y bienestar: Incorporación de modelos positivos a la comprensión y prevención de los riesgos psicosociales del trabajo (Occupational health and well-being: incorporation of positive models to the understanding and the prevention of psychosoc. *Medicina y Seguridad Del Trabajo*, *57*, 224–238. https://doi.org/10.4321/s0465-546x2011000500014

Garthus-Niegel, S., Nübling, M., Letzel, S., Hegewald, J., Wagner, M., Wild, P. S., Blettner, M., Zwiener, I., Latza, U., Jankowiak, S., Liebers, F., & Seidler, A. (2016). Development of a mobbing short scale in the Gutenberg Health Study. *International Archives of Occupational and Environmental Health*, *89*(1), 137–146. https://doi.org/10.1007/S00420-015-1058-6/TABLES/4

Giménez-Espert, M. del C., Prado-Gascó, V., & Soto-Rubio, A. (2020). Psychosocial Risks, Work Engagement, and Job Satisfaction of Nurses During COVID-19 Pandemic. *Frontiers in Public Health*, *8*. https://doi.org/10.3389/fpubh.2020.566896

Giorgi, G., Arenas, A., & Leon-Perez, J. M. (2011). An operative measure of workplace bullying: The negative Acts questionnaire across Italian companies. *Industrial Health*, *49*(6), 686–695. https://doi.org/10.2486/indhealth.MS1287

Gomez, L. E., & Bernet, P. (2019). Diversity improves performance and outcomes. *Journal of the National Medical Association*, *111*(4), 383–392. https://doi.org/10.1016/J.JNMA.2019.01.006

González-Sanguino, C., Ausín, B., Castellanos, M. Á., Saiz, J., López-Gómez, A., Ugidos, C., & Muñoz, M. (2020). Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain, Behavior, and Immunity*, *87*, 172–176. https://doi.org/10.1016/j.bbi.2020.05.040

González-Trijueque, D., Jurídica, V. L.-A. de P., & 2021, undefined. (2022). Revisión de instrumentos en español para medir el acoso laboral: su utilidad en la evaluación pericial. *Redalyc.Org*. https://doi.org/10.5093/apj2021a16

Guay, S., Goncalves, J., & Marchand, A. (2016). Predictors of Reporting Workplace Violence to an Employer According to Sex: A Cross-Sectional Study. *Https://Home.Liebertpub.Com/Vio*, *3*(3), 157–161. https://doi.org/10.1089/VIO.2015.0042

Guglielmi, D., Avanzi, L., Chiesa, R., Mariani, M. G., Bruni, I., & Depolo, M. (2016). Positive aging in demanding workplaces: The gain cycle between job satisfaction and work engagement. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2016.01224

Hadjiolova, I., Mincheva, L., & Deyanov, C. (1994). Cardiovascular changes in operators on 12-hour shifts. *Reviews on Environmental Health*. https://doi.org/10.1515/REVEH.1994.10.1.67

Harned, M. S., & Fitzgerald, L. F. (2002). Understanding a link between sexual harassment and eating disorder symptoms: A mediational analysis. *Journal of Consulting and Clinical Psychology*, *70*(5), 1170–1181. https://doi.org/10.1037/0022-006X.70.5.1170

Hays-Thomas, R. (2016). Managing Workplace Diversity and Inclusion: A Psychological Perspective. *Managing Workplace Diversity and Inclusion: A Psychological Perspective*, 1–350. https://doi.org/10.4324/9780203127049/MANAGING-WORKPLACE-DIVERSITY-INCLUSION-ROSEMARY-HAYS-THOMAS

Herrera Moya, V. A., Alfonso Tejeda, I., Quintana Uguando, M., Pérez Ineránty, M., Navarro Aguirre, L., & Sosa Fleites, I. M. (2018). *Formación vocacional y motivación: su incidencia en el estudio de la carrera de Medicina (Vocational training and motivation: its incidence in the study of the career of Medicine)*. Edumecentro. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2077-28742018000200009

Hirigoyen, M.-F. (2001). *El acoso moral en el trabajo. Distinguir lo verdadero de lo falso*. *1999*, 300 p.

https://www.bibliopsi.org/docs/carreras/obligatorias/CFP/trabajo/alonzo/ TRABAJO ALONZO/el acoso moral en el trabajo.pdf

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*. https://doi.org/10.1080/10705519909540118

Instituto de Innovación Educativa y Desarrollo Directivo. (2009). *Datos sobre Mobbing. Estudios Cisneros© - Mobbing. Acoso psicológico en el trabajo*. El Mobbing En España 2009 – Liderazgo Tóxico y Mobbing En La Crisis Económica. https://www.acosopsicologico.com/acoso-laboral-mobbing/datos-sobre-mobbing/

Iob, E., Frank, P., Steptoe, A., & Fancourt, D. (2020). Levels of Severity of Depressive Symptoms Among At-Risk Groups in the UK During the COVID-19 Pandemic. *JAMA Network Open*, *3*(10), e2026064. https://doi.org/10.1001/jamanetworkopen.2020.26064

Jehn, K. A., & Bezrukova, K. (2010). The faultline activation process and the effects of activated faultlines on coalition formation, conflict, and group outcomes. *Organizational Behavior and Human Decision Processes*, *112*(1), 24–42. https://doi.org/10.1016/J.OBHDP.2009.11.008

Julià, M., Catalina-Romero, C., Calvo-Bonacho, E., & Benavides, F. G. (2016). Exposure to psychosocial risk factors at work and the incidence of occupational injuries: A cohort study in Spain. *Journal of Occupational and Environmental Medicine*, *58*(3), 282–286. https://doi.org/10.1097/JOM.0000000000000614

Kanfer, R., & Ackerman, P. L. (2004). Aging, Adult Development, and Work Motivation. *The Academy of Management Review*, *29*(3), 440. https://doi.org/10.2307/20159053

Kelly, B. D. (2020). Coronavirus disease: Challenges for psychiatry. *British Journal of Psychiatry*, *217*(1), 352–353. https://doi.org/10.1192/BJP.2020.86

Killgore, W. D. S., Taylor, E. C., Cloonan, S. A., & Dailey, N. S. (2020). Psychological resilience during the COVID-19 lockdown. *Psychiatry Research*, *291*. https://doi.org/10.1016/J.PSYCHRES.2020.113216

Kuhnert, K. W., & Vance, R. J. (2004). Job insecurity and moderators of the relation between job insecurity and employee adjustment. In *Stress & well-being at work: Assessments and interventions for occupational mental health.* (pp. 48–63). American Psychological Association. https://doi.org/10.1037/10116-004

Leymann, H. (1990). Mobbing and psychological terror at workplaces. In *Violence and Victims* (Vol. 5, Issue 2, pp. 119–126). Springer. https://doi.org/10.1891/0886-6708.5.2.119

Leymann, H., & Gustafsson, A. (1996). Mobbing at work and the development of post-traumatic stress disorders. *European Journal of Work and Organizational Psychology*, *5*(2), 251–275. https://doi.org/10.1080/13594329608414858

Li, P., Xing, K., Qiao, H., Fang, H., Ma, H., Jiao, M., Hao, Y., Li, Y., Liang, L., Gao, L., Kang, Z., Cui, Y., Sun, H., Wu, Q., & Liu, M. (2018). Psychological violence against general practitioners and nurses in Chinese township hospitals: Incidence and implications. *Health and Quality of Life Outcomes*, *16*(1). https://doi.org/10.1186/s12955-018-0940-9

Lim, V. K. G. (1996). Job insecurity and its outcomes: Moderating effects of work-based and nonwork-based social support. *Human Relations*, *49*(2), 171–194. https://doi.org/10.1177/001872679604900203

López, V. D., & González-Trijueque, D. (2022). Review of instruments for Spanish-speaking countries to measure workplace harassment: Implications in psychological forensic assessment. *Anuario de Psicologia Juridica*, *32*(1), 11–21. https://doi.org/10.5093/apj2021a16

López-Cabarcos, M. Á., Vázquez-Rodríguez, P., & Gieure, C. (2017). Gender and age differences in the psychosocial risk factors of workplace bullying. *Psychology and Marketing*, *34*(11), 1023–1030. https://doi.org/10.1002/mar.21041

López-Núñez, A., Piqueras, J. A., Falcó, R., & PSICO-RECURSOS-COVID-19, S. G. A. (2021). El papel mediador de las fortalezas psicológicas entre la interferencia académica/laboral y la salud mental durante el confinamiento por COVID-19. *Acción Psicológica*, *18*(1). https://doi.org/10.5944/ap.18.1.29035

Luceño-Moreno, L., Talavera-Velasco, B., Martín-García, J., & Martín, S. E. (2017). Psychosocial risk factors as predictors of occupational well-being: A SEM

analysis. *Ansiedad y Estres*, *23*(2–3), 66–70. https://doi.org/10.1016/J.ANYES.2017.09.001

Lundberg-Love, P., & Marmion, S. (2003). *Sexual harassment in the private sector* (pp. xiii, 230).

Management Association, I. R. (2017). *Discrimination and Diversity: Concepts, Methodologies, Tools, and Applications*. Information Resources Management Association. https://doi.org/10.4018/978-1-5225-1933-1

Marsh, H., Balla, J., & Hau, K.-T. (1996). An Evaluation of Incremental Fit Indices: A clarification of Mathematical and Empirical Properties. In *Advanced Structural Equation Modeling: Issues and Techniques*.

Martín Ruiz, J. F. (2005). Los factores definitorios de los grandes grupos de edad de la población: tipos, subgrupos y umbrales (The defining factors of the large age groups of the population: types, subgroups, and thresholds). *Geo Crítica / Scripta Nova. Revista Electrónica de Geografía y Ciencias Sociales.*, *IX*(190), 1–13. http://www.ub.edu/geocrit/sn/sn-190.htm

McMichael, A. J. (1978). Personality, behavioural, and situational modifiers of work stressors. In R. Payne & C. L. Cooper (Eds.), *Stress at work* (pp. 127–147). New York: Wiley & Sons. http://hdl.handle.net/102.100.100/299960?index=1

Messing, K., & Mager Stellman, J. (2006). Sex, gender and women's occupational health: The importance of considering mechanism. *Environmental Research*. https://doi.org/10.1016/j.envres.2005.03.015

Meyer, B., Glenz, A., Antino, M., Rico, R., & González-Romá, V. (2014). Faultlines and Subgroups. *Http://Dx.Doi.Org/10.1177/1046496414552195*, *45*(6), 633–670. https://doi.org/10.1177/1046496414552195

Mor-Barak, M. E. (2022). *Managing Diversity: Toward a Globally Inclusive Workplace: Vol. Fifth edition*. https://us.sagepub.com/en-us/nam/managing-diversity/book259165

Moreno Martínez, M., Fernández-Cano, M. I., Feijoo-Cid, M., Llorens Serrano, C., & Navarro, A. (2022). Health outcomes and psychosocial risk exposures among

healthcare workers during the first wave of the COVID-19 outbreak. *Safety Science*, *145*. https://doi.org/10.1016/j.ssci.2021.105499

Moscato, G., Apfelbacher, C., Brockow, K., Eberle, C., Genuneit, J., Mortz, C. G., Quecchia, C., Quirce, S., Siracusa, A., Tarlo, S. M., van Kampen, V., Walusiak-Skorupa, J., & Raulf, M. (2020). Gender and occupational allergy: Report from the task force of the EAACI Environmental and Occupational Allergy Interest Group. *Allergy: European Journal of Allergy and Clinical Immunology*, *75*(11), 2753–2763. https://doi.org/10.1111/all.14317

Nekane, B. L., Juana, G. B., María Dolores, H. M., Arantxa, G. M., José Pedro, E. S., & Miguel Ángel, P. G. (2020). *Las consecuencias psicológicas de la Covid-19 y el confinamiento. Universidad del país Vasco*. Universidad del País Vasco. https://www.ub.edu/web/ub/ca/menu_eines/noticies/docs/Consecuencias_psicologicas_COVID-19.pdf

Newman, C. J., de Vries, D. H., d'Arc Kanakuze, J., & Ngendahimana, G. (2011). Workplace violence and gender discrimination in Rwanda's health workforce: Increasing safety and gender equality. *Human Resources for Health*, *9*(1), 1–13. https://doi.org/10.1186/1478-4491-9-19/TABLES/9

Niedl, K. (1995). Mobbing, Bullying am Arbeitsplatz - Eine empirische Analyse zum Phänomen sowie zu personalwirtschaftlich relevanten Effekten von systematischen Feindseligkeiten. In *Personalwirtschaftliche Schriften ; 4*. Hampp.

Nunnally, J., & Bernstein, I. (1994). Psychometric Theory, 3rd edn, 1994. *McGraw-Hill, New York*.

Olmedo Montes, M., Santed Germán, M. A., Jiménez Tornero, R., & Gómez Castillo, D. (2001). El síndrome de Burnout: Variables laborales, personales y psicopatológicas asociadas. *Psiquis*.

Osca, A., López-Araujo, B., Bardera, P., Urien, B., Díez, V., & Rubio, C. (2014). Riesgos psicosociales y accidentabilidad laboral: investigación y propuestas de actuación. *Papeles Del Psicólogo*, *35*(2), 138–143. http://www.papelesdelpsicologo.es

Palma-Contreras, A., & Ansoleaga, E. (2020). Associations between psychosocial risk factors, organizational dimensions, and mental health problems related to workplace violence among workers of three Chilean hospitals of high complexity. *Cadernos de Saúde Pública*, *36*(3). https://doi.org/10.1590/0102-311X00084219

Pascual, M. I. (2008). Sex segregation of occupations under examination: Individual, job and business characteristics associated with male and female occupations. *Revista Espanola de Investigaciones Sociologicas*, *123*, 87–122. https://doi.org/10.2307/40184894

Peláez, M. J., Salanova, M., & Martínez, I. M. (2017). Hospital optimista: juntos podemos cambiar el mundo. *Àgora De Salut*, *IV*, 277–286. https://doi.org/10.6035/agorasalut.2017.4.29

Pelled, L. H. (1996). Demographic Diversity, Conflict, and Work Group Outcomes: An Intervening Process Theory. *Https://Doi.Org/10.1287/Orsc.7.6.615*, *7*(6), 615–631. https://doi.org/10.1287/ORSC.7.6.615

Petzold, M. B., Bendau, A., Plag, J., Pyrkosch, L., Mascarell Maricic, L., Betzler, F., Rogoll, J., Große, J., & Ströhle, A. (2020). Risk, resilience, psychological distress, and anxiety at the beginning of the COVID-19 pandemic in Germany. *Brain and Behavior*, *10*(9). https://doi.org/10.1002/BRB3.1745

Planchuelo-Gómez, Á., Odriozola-González, P., Irurtia, M. J., & de Luis-García, R. (2020). Longitudinal evaluation of the psychological impact of the COVID-19 crisis in Spain. *Journal of Affective Disorders*, *277*. https://doi.org/10.1016/J.JAD.2020.09.018

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003a). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. In *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.88.5.879

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003b). Common Method Biases in Behavioral Research: A Critical Review of the Literature and

Recommended Remedies. In *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.88.5.879

Prieto Albino, L., Robles Agüero, E., Salazar Marténez, L. M., & Daniel Vega, E. (2002). Burnout en médicos de atención primaria de la provincia de Cáceres (Burnout in primary care doctors of the province of cáceres). *Atencion Primaria / Sociedad Española de Medicina de Familia y Comunitaria*, *29*(5), 294–302. https://doi.org/10.1016/S0212-6567(02)70567-2

Prime, H., Wade, M., & Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist*, *75*(5), 631–643. https://doi.org/10.1037/amp0000660

Rickard, G., Lenthall, S., Dollard, M., Opie, T., Knight, S., Dunn, S., Wakerman, J., MacLeod, M., Seiler, J., & Brewster-Webb, D. (2012). Organisational intervention to reduce occupational stress and turnover in hospital nurses in the Northern Territory, Australia. *Collegian*, *19*(4), 211–221. https://doi.org/10.1016/j.colegn.2012.07.001

Ruiz-Frutos, C., García, A. M., Delclós, J., & Benavides, F. G. (2007). Salud laboral: conceptos y técnicas para la prevención de riesgos laborales (Occupational health: concepts and techniques for the prevention of occupational risks). *Revista Española de Salud Pública*, *81*(3). https://doi.org/10.1590/s1135-57272007000300009

Salanova, M., Llorens, S., Martínez, I., & Cifre, E. (2012). Metodología de Evaluación de HERO-HOS. In *Organizaciones sanitarias saludables y resilientes: Un estudio de caso en hospitales de Castellón y provincia*. Fundación Dávalos-Fletcher. https://www.want.uji.es/wp-content/uploads/2017/03/2012_ORGANIZACIONES-SANITARIAS_Cap3Metodologia-Evaluacion-de-HERO-HOS.pdf

Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: A systematic review and meta-analysis. *Globalization and Health*, *16*(1). https://doi.org/10.1186/S12992-020-00589-W

Sancini, A., Fioravanti, M., Andreozzi, G., Di Giorgio, V., Tomei, G., Tomei, F., & Ciarrocca, M. (2012). Meta-analysis of studies examining long-term construction injury rates. *Occupational Medicine*, *62*(5), 356–361. https://doi.org/10.1093/OCCMED/KQS064

Sandín, B., Valiente, R. M., García-Escalera, J., & Chorot, P. (2020). Psychological impact of the COVID-19 pandemic: Negative and positive effects in Spanish people during the mandatory national quarantine. *Revista de Psicopatologia y Psicologia Clinica*, *25*(1), 1–22. https://doi.org/10.5944/RPPC.27569

Sapolsky, R. (2013). *¿Por qué las cebras no tienen úlcera? (Why don't zebras get ulcers?)*. Alianza Editorial. https://books.google.com/books/about/Por_qué_las_cebras_no_tienen_úlcera.html?hl=es&id=qBKpPwAACAAJ

Sato, K., Wakabayashi, T., Kiyoshi-Teo, H., & Fukahori, H. (2013). Factors associated with nurses' reporting of patients' aggressive behavior: a cross-sectional survey. *International Journal of Nursing Studies*, *50*(10), 1368–1376. https://doi.org/10.1016/J.IJNURSTU.2012.12.011

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*(3), 293–315. https://doi.org/10.1002/JOB.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, *66*(4), 701–716. https://doi.org/10.1177/0013164405282471

Schindeler, E. (2013). Workplace violence: Extending the boundaries of criminology. *Http://Dx.Doi.Org/10.1177/1362480613511980*, *18*(3), 371–385. https://doi.org/10.1177/1362480613511980

Schulte, N., Götz, F. M., Partsch, F., Goldmann, T., Smidt, L., & Meyer, B. (2020). Linking Diversity and Mental Health: Task Conflict Mediates Between Perceived Subgroups and Emotional Exhaustion. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.01245

Shapiro, D., Duquette, C. E., Zangerle, C., Pearl, A., & Campbell, T. (2022). The Seniority Swoop : Young Nurse Burnout, Violence, and Turnover Intention in an 11-Hospital Sample. *Nursing Administration Quarterly*, *46*(1), 60–71. https://doi.org/10.1097/NAQ.0000000000000502

Sharipova, M., Hogh, A., & Borg, V. (2010). Individual and organizational risk factors of work-related violence in the Danish elder care. *Scandinavian Journal of Caring Sciences*, *24*(2), 332–340. https://doi.org/10.1111/J.1471-6712.2009.00724.X

Skogstad, A., Torsheim, T., Einarsen, S., & Hauge, L. J. (2011). Testing the work environment hypothesis of bullying on a group level of analysis: Psychosocial factors as precursors of observed workplace bullying. *Applied Psychology*, *60*(3), 475–495. https://doi.org/10.1111/J.1464-0597.2011.00444.X

Song, G. (2021). How Does Job Insecurity Affect Workplace Harassment? The Interaction Effect of Hypercompetitive Attitude, Coworker Impression Management, and Leader Narcissism. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.753061

Soonthornchaiya, R. (2020). Resilience For Psychological Impacts Of COVID-19 Pandemic On Older Adults In Thailand. *Gerontology and Geriatric Medicine*, *6*(2), 1–4. https://doi.org/10.24966/GGM-8662/100053

Stainback, K., Ratliff, T. N., & Roscigno, V. J. (2011). The Context of Workplace Sex Discrimination: Sex Composition, Workplace Culture and Relative Power. *Social Forces*, *89*(4), 1165–1188. https://doi.org/10.1093/SF/89.4.1165

Street, A. E., Gradus, J. L., Stafford, J., & Kelly, K. (2007). Gender Differences in Experiences of Sexual Harassment: Data From a Male-Dominated Environment. *Journal of Consulting and Clinical Psychology*, *75*(3), 464–474. https://doi.org/10.1037/0022-006X.75.3.464

Sullivan, S., & Germain, M. L. (2020). Psychosocial risks of healthcare professionals and occupational suicide. *Industrial and Commercial Training*, *15*(1), 1–14. https://doi.org/10.1108/ICT-08-2019-0081/FULL/PDF

Sureda, E., Mancho, J., & Sesé, A. (2019). Psychosocial risk factors, organizational conflict and job satisfaction in health professionals: A SEM model. *Anales de Psicologia*, *35*(1), 106–115. https://doi.org/10.6018/analesps.35.1.297711

Thatcher, S. M. B., & Patel, P. C. (2011). Group Faultlines. *Https://Doi.Org/10.1177/0149206311426187*, *38*(4), 969–1009. https://doi.org/10.1177/0149206311426187

Tomaschek, A., Lanfer, S. S. L., Melzer, M., Debitz, U., & Buruck, G. (2018). Measuring work-related psychosocial and physical risk factors using workplace observations: a validation study of the "Healthy Workplace Screening." *Safety Science*. https://doi.org/10.1016/j.ssci.2017.09.006

van de Griend, K. M., & Messias, D. A. K. H. (2014). Expanding the Conceptualization of Workplace Violence: Implications for Research, Policy, and Practice. *Sex Roles 2014 71:1*, *71*(1), 33–42. https://doi.org/10.1007/S11199-014-0353-0

Vévoda, J., Vévodová, Š., & Nakládalová, M. (2018). Psychosocial risks in healthcare. *Casopis Lekaru Ceskych*, *157*(8), 411–418. https://europepmc.org/article/med/30754978

Vie, T. L., Glasø, L., & Einarsen, S. (2012). How does it feel? Workplace bullying, emotions and musculoskeletal complaints. *Scandinavian Journal of Psychology*, *53*(2), 165–173. https://doi.org/10.1111/J.1467-9450.2011.00932.X

Vindegaard, N., & Benros, M. E. (2020). COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain, Behavior, and Immunity*, *89*, 531–542. https://doi.org/10.1016/J.BBI.2020.05.048

Vinje, H. F., & Mittelmark, M. B. (2008). Community nurses who thrive: The critical role of job engagement in the face of adversity. *Journal for Nurses in Staff Development*, *24*(5), 195–202. https://doi.org/10.1097/01.NND.0000320695.16511.08

Vo-Thanh, T., Vu, T. Van, Nguyen, N. P., Nguyen, D. Van, Zaman, M., & Chi, H. (2021). COVID-19, frontline hotel employees' perceived job insecurity and emotional exhaustion: Does trade union support matter?

Https://Doi.Org/10.1080/09669582.2021.1910829, *30*(6), 1159–1176. https://doi.org/10.1080/09669582.2021.1910829

Waite, S. (2021). Should I Stay or Should I Go? Employment Discrimination and Workplace Harassment against Transgender and Other Minority Employees in Canada's Federal Public Service. *Journal of Homosexuality*, *68*(11), 1833–1859. https://doi.org/10.1080/00918369.2020.1712140

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020a). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, *17*(5). https://doi.org/10.3390/IJERPH17051729

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020b). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, *17*(5). https://doi.org/10.3390/IJERPH17051729

Wieclaw, J., Agerbo, E., Mortensen, P. B., & Bonde, J. P. (2006). Risk of affective and stress related disorders among employees in human service professions. *Occupational and Environmental Medicine*. https://doi.org/10.1136/oem.2004.019398

World Health Organization. (2021). *WHO Coronavirus Disease (COVID-19) Dashboard With Vaccination Data | WHO Coronavirus (COVID-19) Dashboard With Vaccination Data*. World Health Organization. https://covid19.who.int/

Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, *277*, 55–64. https://doi.org/10.1016/j.jad.2020.08.001

Yıldırım, M., & Arslan, G. (2020). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology*. https://doi.org/10.1007/s12144-020-01177-2

Zahlquist, L., Hetland, J., Skogstad, A., Bakker, A. B., & Einarsen, S. V. (2019). Job Demands as Risk Factors of Exposure to Bullying at Work: The Moderating Role of Team-Level Conflict Management Climate. *Frontiers in Psychology*, *10*, 2017. https://doi.org/10.3389/FPSYG.2019.02017/BIBTEX

Zhao, S. H., Shi, Y., Sun, Z. N., Xie, F. Z., Wang, J. H., Zhang, S. E., Gou, T. Y., Han, X. Y., Sun, T., & Fan, L. H. (2018). Impact of workplace violence against nurses' thriving at work, job satisfaction and turnover intention: A cross-sectional study. *Journal of Clinical Nursing*, *27*(13–14), 2620–2632. https://doi.org/10.1111/JOCN.14311

AGRADECIMIENTOS

Realizar una tesis doctoral es un proyecto de superación personal que requiere un gran esfuerzo, tiempo y dedicación. Sobre todo, si se realiza como actividad extralaboral. Es por este motivo, que las personas que más se merecen mi agradecimiento son mi mujer y mis hijos. Por su paciencia y apoyo durante estos años.

Quiero agradecer también el apoyo que he tenido de mis padres, que se han interesado enormemente por mi progreso. Se que se sentirán muy orgullosos de este logro, así me lo han transmitido con su interés, y esto me ha animado a conseguir esta meta, sobre todo en los momentos más difíciles.

Agradezco especialmente a mi directora de tesis, Isabella Meneghel, por su apoyo y soporte necesarios para llevar a cabo este proyecto. Su experiencia y conocimientos han sido fundamentales para el éxito de mi investigación.

También quiero dar las gracias a la Doctora Marisa Salanova por ayudarme con los artículos publicados. Su colaboración ha sido esencial para el desarrollo de mi trabajo.

Por último, pero no menos importante, quiero expresar mi gratitud hacia Carmen Soler por ser el motor y la persona que me incitó a realizar la tesis doctoral. Gracias por tu confianza en mí y por motivarme para alcanzar mis metas.