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Proceso motivacional del modelo demandas-recursos del trabajo (JD-R)

ENRIQUE ROBLEDO MARTIN

Ingeniero Superior Aeronáutico
Graduado en Psicología

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Directora: Dra. Doña GABRIELA ELBA TOPA CANTISANO

Esta tesis está dedicada a todas las personas importantes de mi vida

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INTRODUCCIÓN

INTRODUCCION

El modelo JD-R es una de las diversas aproximaciones que han surgido para estudiar la motivación de los empleados en su puesto de trabajo, tema de alta importancia en psicología de las organizaciones. Este modelo cubre el estudio de la motivación tanto si el enfoque es de reducción del estrés del empleado y su impacto en salud, propio de la psicología ocupacional, como si el enfoque es desde la psicología positiva y lo que se busca es un empleado que prospere, sobresalga en su desempeño laboral y alcance altas cotas de bienestar (Schaufeli y Taris, 2014). Además, el modelo JD-R es flexible y adaptable a cualquier contexto organizacional, lo que hace que, a pesar de tener sus críticos y detractores, sea un modelo altamente usado en estudios de investigación y tenga muchas aplicaciones prácticas (Bakker y Demerouti, 2016).

Objetivos y preguntas de investigación

Todo lo anterior justifica el uso del modelo JD-R para el propósito general de la presente tesis, que no es otro que contribuir al cuerpo de investigación sobre la motivación del empleado en su puesto de trabajo, con un objetivo final práctico de encontrar elementos concretos que consigan aumentar el bienestar del empleado y maximizar su rendimiento laboral.

Para conseguir este objetivo general, se va a profundizar en el estudio de una de las dos líneas que componen el modelo JD-R, la línea de procesos motivacionales. No obstante, no se pasarán por alto las relaciones con la línea de deterioro de la salud, ya que las interacciones entre las dos líneas hacen que no sea apropiado aislarlas en su estudio.

La profundización en la línea de procesos motivacionales del modelo JD-R, se va a llevar a cabo a través de estudios de investigación que siguen alguna de las tres tendencias de investigación que se verán en el capítulo 1. Cada estudio apuntará a una de las tres variables

más importantes de esta línea de procesos motivacionales que, como se verá a lo largo de la disertación, son el “engagement” laboral, “job crafting” y el clima organizacional. (Los términos de engagement y job crafting se dejarán en ingles en la presente tesis para no perder contenido de los constructos en la traducción).

Cada investigación va a tratar de cubrir temas que o bien no se han tratado en el cuerpo de investigación hasta ahora o bien existe discrepancia sobre ellos y se han propuesto como investigación futura en alguna publicación previa. En concreto las preguntas generales que se plantean en la presente tesis son:

(a) Considerando que el engagement laboral es el más concepto más importante de la línea de proceso motivacional del modelo JD-R, ¿qué se puede extraer de los resultados de las investigaciones publicadas recientemente sobre lo que influye en el engagement, ¿cuáles son sus consecuencias y cuáles son los moderadores de estas relaciones? La necesidad de este estudio fue planteada por Bakker y Albrecht (2018), que llaman a identificar cuáles son las demandas y los recursos más salientes particularizados por demografías, sectores y ocupación, con el objetivo de diseñar las intervenciones más ecológicas y con las mayores oportunidades de ser efectivas.

(b) Sobre job crafting, como elemento dinamizador de las relaciones del modelo y todavía en su infancia de investigación (Demerouti, 2014), ¿puede ser job crafting o alguno de sus componentes un mecanismo explicativo de por qué un empleado motivado rinde mejor en su trabajo? Esta pregunta general está relacionada con la línea de investigación sobre job crafting y en particular demuestra la hipótesis planteada por Bakker (2011) sobre la existencia de una relación causal engagement-job crafting, inversa a la tradicionalmente estudiada hasta entonces. También cubre la línea de investigación futura planteada por Hakanen, Peeters y

Schaufeli (2018), que probaron esta relación causal para algunos de los componentes de job crafting en una muestra de dentistas finlandeses y plantearon la necesidad de extender esta prueba a otras ocupaciones y sectores.

(c) Relacionando con la tendencia de extender el modelo a variables multinivel, y considerando el encaje del clima organizacional dentro del modelo JD-R ¿se puede utilizar el modelo JD-R para encontrar qué mecanismos tienen lugar en la influencia de un clima de apoyo para mejorar el bienestar y el rendimiento laboral? Esto cumple con las sugerencias de investigación futura de Bakker y Demerouti (2018), que indican que se necesita más evidencia empírica sobre si un factor de nivel organizacional actúa consistentemente como amplificador o amortiguador de efectos a niveles individuales.

(d) Dado el enfoque práctico de esta tesis, que ha guiado la selección de los temas de investigación y relacionando con los hallazgos de los tres estudios de investigación, ¿Cuál sería el esbozo de las líneas maestras de un método integral de intervención que genere bienestar en el empleado y aumente su rendimiento laboral? Esta pregunta también se plantea en el cuerpo de investigación del modelo JD-R. Como ejemplo, en la revisión más actual sobre la investigación en engagement, Bakker y Albrecht (2018) indican que es crucial trasladar todo el conocimiento adquirido sobre engagement en aplicaciones prácticas para promover la salud, el bienestar y el rendimiento tanto a nivel individual como organizacional.

(e)

Aportaciones esperadas y significación de esta investigación

Esta tesis está diseñada con ciertos elementos que se espera contribuyan al cuerpo de la investigación del modelo JD-R con aportaciones significativas. La variedad metodológica con la que se han realizado los distintos estudios permitirá enfocar los problemas desde distintos ángulos y por tanto se espera llegar a conclusiones que aporten diversidad y riqueza de contenido. En concreto, además de los tradicionales análisis correlacionales y de regresión, se han utilizado técnicas de meta-análisis, técnicas de ecuaciones estructurales aplicadas en una muestra longitudinal y análisis mediacional aplicado en una muestra trasversal.

Como primera aportación significativa, hay que resaltar que se espera que el meta-análisis aporte una dimensión cuantitativa en el conocimiento de las demandas y recursos y sus relaciones con antecedentes y consecuentes. Con ello se espera cubrir un hueco dejado en los últimos siete años de investigación prolífica del concepto de engagement sin que se haya hecho un meta-análisis de dichas investigaciones en estos siete años.

En segundo lugar, el hecho de utilizar un estudio con metodología longitudinal tiene un valor por sí mismo, dado que existen muy pocas pruebas del modelo JD-R con muestras longitudinales y muchas menos que toquen el tema de job crafting. Además, el estudio enfoca job crafting como consecuente de engagement y no en el otro sentido, como hace la mayoría de la investigación tradicional en job crafting.

En tercer lugar, introducir en el modelo JD-R variables de nivel organizacional es una tendencia que va a ir a más en los próximos años y en esta tesis se hace una tentativa de apuntar el valor que puede tener el nivel organizacional, al introducir elementos de clima organizacional dentro del modelo, aunque sea de una manera simple y no elaborada con metodologías multinivel.

Por último, se espera que todos los hallazgos encontrados se puedan integrar en una visión global de lo que debe contener una intervención práctica que busque aumentar la motivación del empleado, basada el modelo JD-R y que lleve a un incremento de su bienestar y su rendimiento laboral.

Estructura de la tesis

La columna vertebral de la tesis está formada por tres estudios originales de investigación. El primero de ellos se recoge en el capítulo 2 y consiste en un meta-análisis sobre engagement laboral. El segundo estudio forma el capítulo 3 y consiste en un análisis longitudinal de la mediación de job crafting entre engagement y bienestar y rendimiento. El tercer estudio integra el capítulo 4 y recoge un estudio de los mecanismos que relacionan un clima de apoyo con conductas de ciudadanía organizacional (OCB).

A estos capítulos, además de esta introducción, se añade un capítulo uno que es una breve revisión teórica del modelo JD-R en aspectos relevantes para la presente tesis y un capítulo 5 que es una publicación en sí misma, orientada como un resumen de los tres trabajos de investigación y enfocada a una aplicación práctica concreta: la construcción de organizaciones saludables enfocadas en aumentar el bienestar y rendimiento laboral de los trabajadores,

Por último, a modo de conclusión en español, se relacionan las principales aportaciones de la tesis con los objetivos inicialmente planteados.

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CAPÍTULO 1

REVISIÓN TEÓRICA DEL MODELO JD-R

CAPITULO 1

REVISION TEORICA DEL MODELO JD-R

Evolución del modelo JD-R

Modelo inicial JD-R de burnout

El modelo JD-R tiene sus orígenes en una investigación dentro del campo del burnout, en concreto, la tesis doctoral de Evangelina Demerouti, supervisada por Friedhelm Nachreiner. El trabajo consistió en una clasificación de diferentes tipos de demandas y recursos del trabajo y su relación con burnout. El estudio se basó en el meta-análisis de Lee y Ashforth´s (1996), en el cual 18 “demandas laborales” y 13 “recursos laborales” se identificaban como causas de burnout. También se basó en el “modelo estructural de burnout” de Maslach, Jackson y Leiter (1996).

El resultado indicaba que las demandas del trabajo están relacionadas con el componente de agotamiento emocional del constructo burnout, mientras que los recursos se relacionan más con el componente de cinismo (en aquel momento se llamaba dis-engagement). La primera publicación académica internacional del modelo de demandas-recursos laborales fue en 2001 (Demerouti, Bakker, Nachreiner, y Schaufeli, 2001), con el nombre de modelo JD-R del burnout según indica la Figura 1.

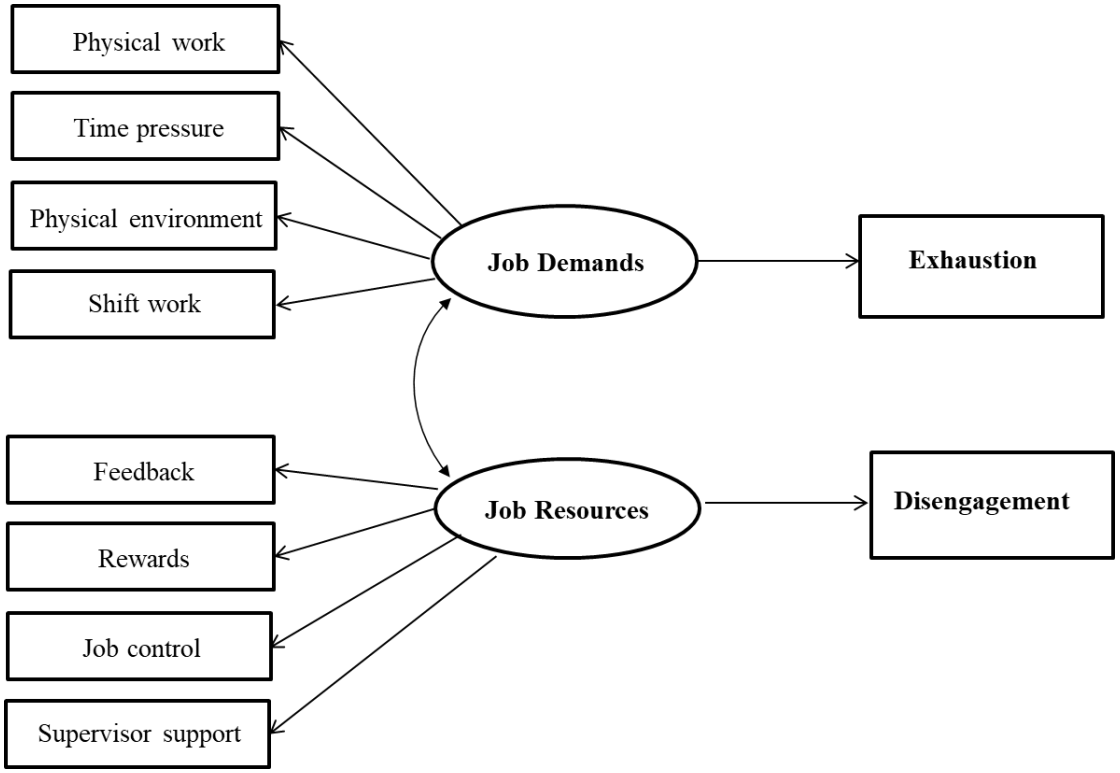

Figura 1. Elaboración propia basada en modelo JD-R del burnout (Demerouti et al., 2001)

Modelo JD-R revisado

El modelo revisado fue introducido por Schaufeli y Bakker (2004). Significó un cambio de orientación del modelo, ya que dio un giro hacia la psicología positiva, al pasar de explicar únicamente un estado psicológico negativo (burnout) a incluir también su contrapartida positiva (engagement laboral). El modelo revisado consideró el burnout y el engagement como mediadores entre demandas-recursos y salud, actitudes y rendimiento laboral.

Una de las variables principales para entender el modelo es el concepto de engagement laboral, que se refiere al estado mental en el cual los empleados se sienten llenos de energía (componente vigor), entusiastas con el contenido de su trabajo y la cosas que hacen (dedicación) y están tan inmersos en las actividades de su trabajo que el tiempo les

parece que vuela (absorción). La escala más popular para medir este constructo es el cuestionario Utrecht Work Engagement Scale (UWES; Schaufeli y Bakker, 2003).

La mayor seña de identidad del modelo consiste en clasificar todas las características del trabajo en dos grandes grupos: demandas y recursos. Las demandas corresponden a todos aquellos aspectos físicos, psicológicos, sociales y/o organizacionales del trabajo, que requieren esfuerzos físicos y/o psicológicos y por tanto tienen un coste físico y/o psicológico (Demerouti et al., 2001). Como ejemplos podemos encontrar la alta presión del trabajo o interacciones exigentes con clientes. El termino recursos se refiere a todos aquellos aspectos físicos, psicológicos, sociales y/u organizacionales del trabajo que ayudan a conseguir objetivos laborales, reducir demandas laborales y sus costes fisiológicos y/o psicológicos o a estimular un crecimiento personal, aprendizaje y desarrollo (Bakker y Demerouti, 2007). Ejemplos pueden ser la autonomía en el trabajo, la variedad de habilidades, el feedback de desempeño y las oportunidades de crecimiento.

Este modelo revisado delimita claramente dos líneas de procesos diferentes: una línea de deterioro de salud y una línea de proceso motivacional. En el modelo original de Demerouti et al., (2001) se veían de alguna manera estas dos líneas: la de deterioro de salud en la que las demandas se asociaban con agotamiento y la de motivación en la que los recursos se asociaban con dis-engagement. Sin embargo, el modelo JD-R revisado da un paso más y define claramente una línea de salud en la cual actúa burnout y demandas y una línea motivacional en la cual intervienen recursos y engagement. Numerosos estudios han probado la existencia de estas dos líneas, como por ejemplo Hakanen, Schaufeli and Ahola (2008), que en un estudio longitudinal de tres años con dentistas fineses, probaron que los recursos laborales influenciaban el engagement futuro en el trabajo, mientras que las demandas predecían el burnout a lo largo del tiempo, que por su parte, predecía la depresión a futuro.

Estas dos líneas tienen efectos distintos sobre el rendimiento laboral. La línea de motivación tiene un efecto positivo en el rendimiento laboral mientras que la línea de deterioro de salud tiene un efecto negativo en el rendimiento laboral. Taris (2006) puso de relieve en un meta-análisis que el burnout está asociado negativamente al rendimiento. Por su parte Bakker, Van Emmeerik y Van Riet (2008) demostraron que los empleados que puntúan más altos en engagement tienen mayor rendimiento laboral.

El modelo se fue enriqueciendo posteriormente con la profundización en la interacción entre las dos líneas. En concreto se encontró que los recursos amortiguan el efecto de las demandas en el burnout. Un ejemplo de estudio que demuestra este efecto es Xanthopoulou, Bakker, Demerouti, y Schaufeli (2007), que encontraron en una muestra de empleados de la salud que algunos recursos laborales como autonomía, soporte social, feedback de rendimiento y oportunidades de desarrollo profesional, podrían amortiguar la relación entras las demandas del trabajo y el burnout.

Otra línea de investigación en la interacción entra las dos líneas se enfocó en investigar los efectos moderadores de recursos y demandas, descubriendo que los recursos laborales tienen una mayor influencia en la motivación cuando las demandas son altas. Por ejemplo, en el estudio de Bakker, Hakanen, Demerouti y Xanthopoulou, (2007) se ve que los recursos tales como el agradecimiento, la innovación y la variedad de habilidades predecían más el engagement cuando las demandas laborales eran altas.

En la Figura 2 se ve esquemáticamente este modelo JD-R revisado (Schaufeli y Bakker, 2004), en el cual están representadas las relaciones entre variables anteriormente descritas.

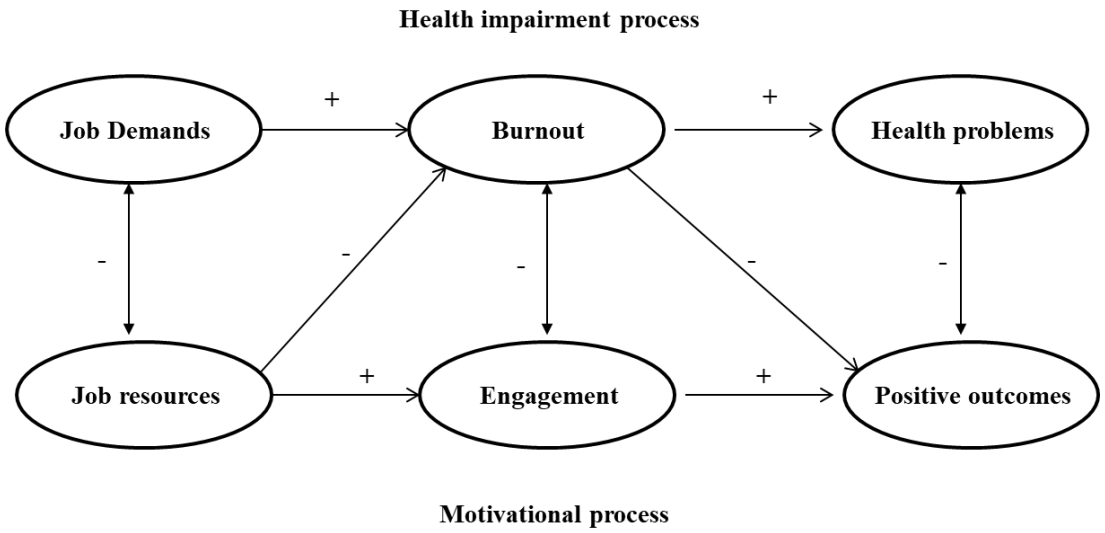

Figura 2. Elaboración propia basada en modelo JD-R revisado (Schaufeli y Bakker, 2004)

Modelos JD-R extendidos

Un factor diferencial entre el modelo JD-R y otros modelos de estrés en el trabajo como el modelo de demandas-control (Karasek, 1979) o el modelo de desequilibrio esfuerzo-recompensa (Siegrist, 1996), es que el modelo JD-R no está simplemente enfocado a demandas y recursos específicos del contexto de trabajo (características del trabajo). Al contrario, el modelo concibe cualquier demanda y recurso como un factor potencialmente capaz de influir en los resultados personales y profesionales de los empleados. La extensión formal del modelo a variables adicionales más allá de las meras características del trabajo era cuestión de tiempo. De esta manera se introdujeron en el modelo variables personales (recursos personales) y de liderazgo.

El concepto de recursos personales se refiere a las creencias que la gente tiene sobre qué grado de control tiene sobre su entorno. Los recursos personales más estudiados son optimismo, resiliencia y autoeficacia. La investigación ha situado los recursos personales en varios lugares distintos del modelo:

(a) Actuando como un recurso más, con influencia en engagement, actitudes y rendimiento laboral. Ejemplo de estos estudios incluyen Lorente, Salanova, Martinez y Schaufeli (2008) y Xanthopoulou, Bakker, Demerouti y Schaufeli (2009).

(b) Moderando la relación entre las características del trabajo y el bienestar. Ejemplos de estos estudios son Van den Broeck, Van Ruysseveldt, Smulders y De Witte (2011) y Brenninkmeijer, Demerouti, Le Blanc y Van Emmerik (2010).

(c) Mediando entre las características del trabajo y el bienestar. Ejemplos de estos trabajos son Vink, Ouweneel y Le Blanc (2011) y Van den Broeck, Vansteenkiste, De Witte y Lens (2008).

(d) Como un antecedente de demandas y recursos, de forma que los recursos personales influencian las percepciones que las personas tienen de las características del trabajo. Ejemplo de investigaciones en este sentido son Xanthopoulou, Bakker, Demerouti y Schaufeli (2007) y Bakker, Boyd, Dollard, Gillespie, Winefi y Stough (2010).

Todo lo anterior demuestra que los recursos personales juegan un papel importante sin que haya un único lugar donde colocarlos, porque probablemente los recursos personales impregnen el modelo desde todos los ángulos anteriormente indicados.

Otra de las variables que se introdujo en la extensión del modelo JD-R fue el liderazgo. Los líderes pueden influir en el entorno de trabajo de los empleados y de esta manera influir indirectamente en el bienestar y rendimiento del empleado (Bakker y Demerouti, 2016). El tipo de liderazgo que más se ha estudiado y que más se ha encontrado influye positivamente es el liderazgo transformacional (eg: Breevaart, Bakker, Demerouti, y Derks, 2016; Fernet, Trépanier, Austin, Gagné y Forest, 2015). Los líderes transformacionales, usando motivación inspiracional, consideración individual y estimulación

intelectual, pueden motivar a sus empleados a usar sus habilidades y aumentar su rendimiento.

Pero la extensión del modelo no solamente consistió en introducir variables personales y de liderazgo. También se creó un nuevo paradigma al unir dos líneas de investigación que surgieron: por un lado, se empezó a observar que hay efectos causales entre las variables que son inversos a los reflejados inicialmente en el modelo y por otro se iniciaron aproximaciones de abajo arriba al modelo en lugar de las tradicionales aproximaciones de arriba abajo.

Con respecto a lo primero, se encontró que no solo los recursos generaban engagement, sino que también el engagement podía generar cierto tipo de recursos con el tiempo (Hakanen, Perhoniemi y Toppinen-Tanner, 2008).

Con respecto a lo segundo, el enfoque original del modelo JD-R era de arriba a abajo en el sentido en que eran los managers y los departamentos de recursos humanos quienes creaban el entorno de trabajo para sus empleados, estableciendo objetivos, diseñando el contenido del trabajo y suministrando recursos laborales (Bakker y Demerouti, 2016). Sin embargo, se sabía que los empleados son a menudo proactivos y toman la iniciativa de cambiar el statu quo (Frese y Fay, 2001). De hecho, Wrzesniewski y Dutton (2001) dieron el nombre de job crafting a todos aquellos cambios que los empleados producen en su entorno físico, en el contenido de su trabajo, en su social laboral y en la manera de pensar sobre el trabajo. Ese concepto se trasladó al modelo JD-R por Tims, Bakker y Derks (2012), definiendo job crafting como los cambios que los empleados generan en sus demandas y recursos laborales.

Las investigaciones sobre job crafting (eg: Tims, Bakker y Derks, 2013; Vogt, Hakanen, Brauchli, Jenny y Bauer, 2016) demostraron que los empleados que están más

motivados por su trabajo (alto engagement), tienden más a usar comportamientos de job crafting, lo que les lleva a incrementar sus recursos laborales y personales y con el tiempo generar aún más engagement. Esto se conoce en la literatura como espiral de ganancia motivacional.

De manera paralela a lo anterior, se encontró otro ciclo de ganancia, pero esta vez negativa, de forma que no sólo las demandas generan stress, sino que éste con el tiempo puede generar demandas más altas que posteriormente incrementarán el nivel de estrés y la degradación de la salud (Bakker y Costa, 2014).

El modelo de la Figura 3, representa esquemáticamente la visión de este modelo extendido según Bakker y Demerouti (2016), en el que se pueden ver las variables y relaciones explicadas anteriormente

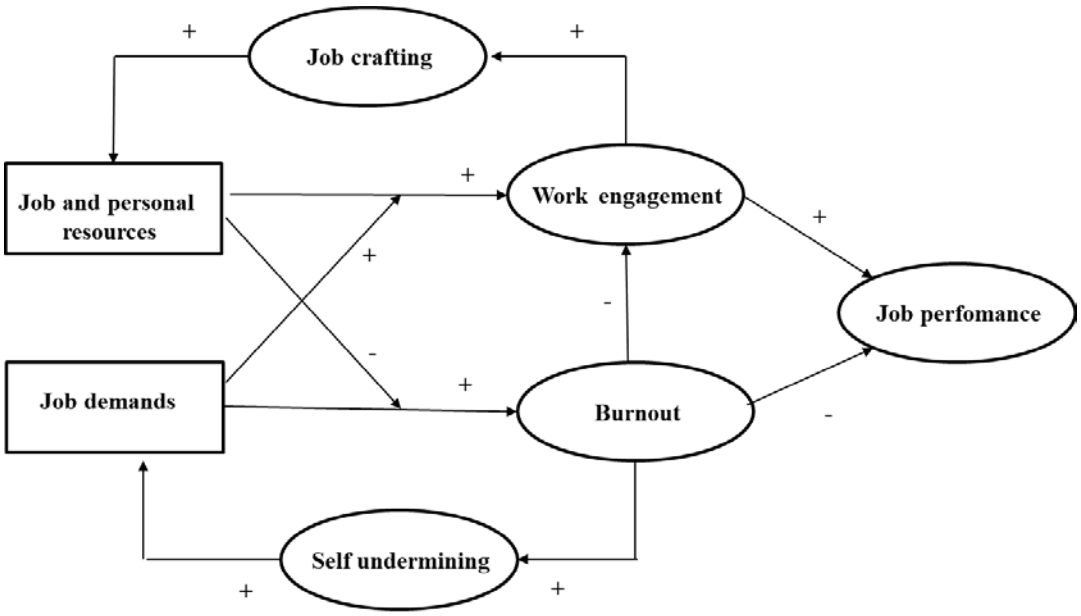

Figura 3. Elaboración propia basada en modelo JD-R extendido según Bakker y Demerouti (2016)

Hasta este punto, el modelo solo incluye variables individuales, pero recientemente se está enriqueciendo al incluir variables multinivel. Se espera que el futuro desarrollo del modelo avance por esta línea. Numerosas investigaciones han encontrado rastros de interacciones entre las variables multinivel y las variables individuales. Por ejemplo, Albrecht, Bakker, Gruman, Macey y Saks (2015) describen cómo diferentes prácticas de recursos humanos y el clima organizacional pueden ser precursores de las demandas y recursos que el empleado percibe en el trabajo. Otro ejemplo similar se puede encontrar en Alfes, Shantz, Truss y Soane (2013), que indica que la generación de resultados comportamentales positivos como consecuencia de un alto nivel de engagement, están ampliamente influidos por el clima organizacional.

En la Figura 5, se representa el modelo extendido según la visión de Albrecht et al. (2015), que es de alguna manera relevante para la presente tesis debido a que incluye en su estudio la variable de clima organizacional, objeto también de análisis en la presente tesis.

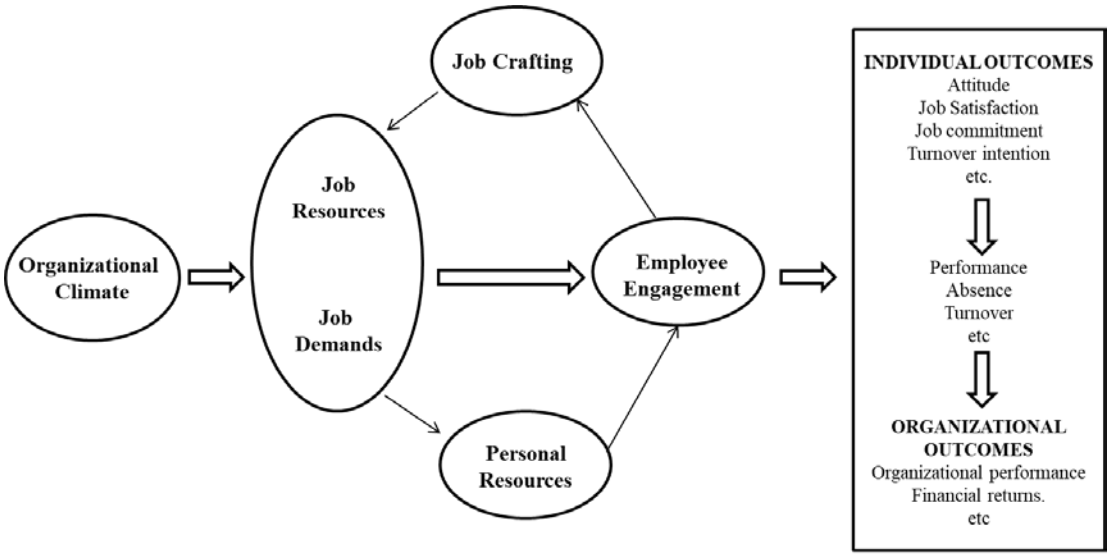

Figura 4. Modelo extendido de JD-R. Elaboración propia basada en modelo Albretch et al (2015)

Bases teóricas y demostraciones empíricas del modelo

El modelo no puede considerarse como una teoría explicativa sino más bien como un marco descriptivo de las relaciones entre variables. Para explicar los mecanismos subyacentes y todas las relaciones entre variables, se tiene que recurrir a teorías previas existentes. En concreto, en los trabajos de investigación basados en el modelo JD-R se puede ver como se citan algunas de las teorías de abajo a la hora de discutir los mecanismos explicativos de las relaciones:

Teoría de características del trabajo de Hackamn y Oldham (1980). Se cita esta teoría para explicar los mecanismos del engagement como variable mediadora y clave dentro del JD-R. Según esta teoría, estados psicológicos tales como alta significación del trabajo, alta responsabilidad en el trabajo, alta responsabilidad por los resultados del trabajo y conocimiento de los resultados del trabajo, son mediadores entre las características del trabajo y la motivación y rendimiento laboral.

Teoría de la auto-determinación (SDT; Ryan y Deci, 2000). Recurriendo a esta teoría se explica el efecto motivacional intrínseco de los recursos laborales, ya que generan satisfacción de las necesidades psicológicas básicas de relación, competencia y autonomía. Según esta teoría es precisamente esta satisfacción de necesidades básicas lo que origina la motivación del empleado.

Teoría esfuerzo-recuperación (Meijman y Mulder, 1998). Se recurre a ella para explicar el efecto de motivación extrínseca de los recursos. En concreto, esta teoría explica que los ambientes de trabajo que ofrecen muchos recursos impulsan la voluntad de los trabajadores a dedicar sus esfuerzos y habilidades al trabajo. Esta voluntad de llevar a cabo un esfuerzo compensatorio reduce las demandas laborales e impulsa el alcanzar metas.

Teoría de conservación de recursos (COR; Hobfoll, 2002). Esta teoría se usa sobre todo en los trabajos de job crafting para explicar por qué los empleados con más engagement inician actividades de job crafting y este produce a su vez más engagement. Esta teoría indica que los recursos tienen a acumularse y un exceso de recursos podría generar empleados más motivados, que iniciarían más actividades de job crafting que supondrían la generación de aún más recursos y por tanto más motivación.

Teoría social cognitiva (Bandura, 1997). Se recurre a esta teoría para explicar la influencia de las variables personales dentro del modelo. Según esta teoría los recursos personales como la autoeficacia, moldean la forma en que la gente entiende su entorno y reaccionen ante él.

Por lo que respeta a las bases empíricas, en los últimos 15 años se han realizado muchos estudios que prueban las relaciones pronosticadas por el modelo. Existen tanto estudios trasversales (e.g.: Bakker, Demerouti y Schaufeli, 2003; Bakker, Demerouti, Schaufeli, 2003; Lewig, Xanthopoulou, Bakker, Dollard y Metzer, 2007; Hu, Schaufeli y Taris, 2011; Llorens, Bakker, Schaufeli y Salanova, 2006) como longitudinales (Hakanen, Schaufeli y Ahola, 2008; Schaufeli, Bakker y Van Rhenen, 2009). Se han realizado también varios meta-análisis en los últimos años (Bakker, Demerouti, y Sanz-Vergel, 2014; Crawford, LePine, y Rich, 2010; Halbesleben, 2010; Nahrgang, Morgenson, y Hofmann, 2011).

Razones de éxito del modelo

El modelo JD-R se inspira en modelos de estrés en el trabajo como el modelo de demandas-control (Karasek, 1979) y el modelo de desequilibrio esfuerzo-recompensa (Siegrist, 1996). Se diferencia de ellos fundamentalmente en que estos modelos sólo incluían algunos aspectos de las demandas y características del trabajo que predecían el estrés. Según

Schafeli y Taris (2014) y Bakker y Demerouti (2016) el modelo goza de mucho éxito tanto entre los investigadores y profesionales por los siguientes motivos:

(a) El modelo JD-R en lugar de enfocarse en lo que va mal en el empleado, se centra en investigar en qué condiciones los empleados florecen en el trabajo, lo que le hace más atrayente para investigadores y profesionales. De hecho, el modelo puede ser usado con las dos visiones diferentes. Por un lado, la visión típica de la psicología ocupacional de reducir absentismo, mejorar salud y bienestar y por otro lado la visión de gestión de recursos humanos más enfocada a aumentar motivación y rendimiento.

(b) Utiliza la imagen de equilibrio entre dos extremos de manera similar a la que se utilizaba en modelos anteriores (JD-C, ERI), de forma que se encontró con terreno fértil para aceptar este concepto.

(c) El abanico de variables que cubre es mucho mayor que los anteriores modelos y por tanto ofrece más posibilidades de investigación y puesta en práctica.

(d) El modelo es más utilizado como un marco conceptual para resolver problemas de forma heurística, que como una teoría. Eso significa que el modelo es más flexible y puede ser adaptado a cualquier entorno de trabajo, dando lugar a más aplicaciones prácticas.

Críticas al modelo

Una de las críticas principales se refiere al alto grado de generalidad de los conceptos de demanda y recurso. Según Schaufeli y Taris (2014) el hecho de que todas las clases de demandas, recursos y resultados puedan ser incluidos en el modelo es a la vez una fortaleza y una debilidad, ya que supone flexibilidad pero a costa de solidez teórica.

Schaufeli y Taris (2014) indican que el modelo se queda corto en la explicación de los mecanismos subyacentes, porque no profundiza en ello y simplemente se apoya en otras

teorías para explicar por qué las características el trabajo influyen en el bienestar del empleado y en los resultados de la organización. Se le achaca que más que ser un modelo explicativo es un modelo descriptivo que no aporta ninguna explicación psicológica adicional.

Otra crítica al modelo se enfoca en poner de relieve que la barrera demanda, recurso a veces es difícil de trazar, existiendo incluso un tipo de demandas (demandas retantes) que pueden funcionar como un recurso motivacional en ciertos entornos (LePine, Podsakoff y LePine, 2005).

Por último, una crítica importante se refiere a la independencia de las dos líneas postulada por el modelo: la motivacional y la de deterioro de salud. Schaufeli y Taris (2014) indican que es más bien posible que sean dos caras de la misma moneda y que en realidad cuando la salud y el bienestar se deterioran la motivación caiga y viceversa.

Aplicaciones prácticas

Las críticas al modelo del aparatado anterior se enfocan en su mayoría a características propias de flexibilidad del modelo. Pero es precisamente esta flexibilidad lo que como hemos visto está contribuyendo a su éxito y a la proliferación de estudios y aplicaciones prácticas.

Las principales aplicaciones prácticas se enfocan en utilizar el modelo como herramienta para realizar evaluaciones individuales de empleados de cara a darles feedback y llevar a cabo evaluaciones organizacionales con el objetivo de definir e implantar intervenciones que mejoren el bienestar y rendimiento de los empleados.

Un ejemplo de estas herramientas practicas es el JD-R monitor (Schaufeli y Dijkstra, 2010). Esta herramienta consiste en una serie de tests on line que evalúan un amplio abanico

de recursos y demandas. Se utiliza para dar feedback inmediato al empleado, realizar una evaluación organizacional y definir qué tipo de intervención es mejor.

Otras aplicaciones del modelo se dirigen al entorno de la formación. Un ejemplo es la formación en job crafting. En este tipo de formación se enseña a los empleados los conceptos de demandas, recursos y las maneras que tienen ellos de modificarlas (Bakker, 2015; Demerouti y Bakker, 2014). Los empleados se hacen sus propios planes para aplicar estos conceptos en las semanas siguientes a la sesión de training. Numerosos estudios han demostrado la efectividad de estas intervenciones de entrenamiento en job crafting (Gordon, Demerouti, LeBlanc, Bakker, Bipp y Verhagen, 2016; Van Wingerden, Bakker y Derks, 2016).

Líneas de investigación abiertas del modelo

El modelo JD-R sigue en evolución. Existen varias líneas de investigación abiertas. A continuación, se nombran las que son relevantes para la presente tesis.

Una de las líneas de desarrollo del modelo pasa por la profundización en los tipos de recursos y demandas, así como en el estudio de los moderadores existentes en las relaciones de las variables del modelo. El meta-análisis en work engagement del capítulo 2 se orienta en esta línea, puesto que trata de conocer las magnitud de las relaciones de éste con sus antecedentes y consecuentes, contemplando moderadores potenciales de estas relaciones.

Otra línea de tendencia actual se enfoca en el estudio del rol activo de los empleados dentro del modelo, ya que estos pueden interpretar y modificar sus condiciones laborales. El estudio de job crafting del capítulo 3 va en esa línea de investigación. En este estudio se analiza el papel de job crafting como mediador entre engagement y rendimiento y bienestar.

Finalmente, una de las más recientes tendencias de investigación dentro del modelo, consiste en considerar las interrelaciones entre variables de distintos niveles: individual,

equipo, grupal y organizacional. El estudio sobre clima, si bien tiene todas sus variables medidas a nivel individual, toca esta línea de tendencia puesto que introduce una variable distal, precursora de demandas y recursos, y que tiene su origen a un nivel grupal: el clima organizacional.

El modelo que se va a seguir para en el presente estudio será el modelo JD-R expandido según la versión más reciente de Bakker y Demerouti (2016), enriquecido con variables distales contextuales que se pueden encontrar en Albretcht et al. (2015). La Figura 5 ilustra esquemáticamente la línea del proceso motivacional que se sigue en la presente tesis, basada en dichos modelos extendidos. En dicha figura se sitúan también cada uno de los capítulos de esta tesis que contienen los tres trabajos de investigación.

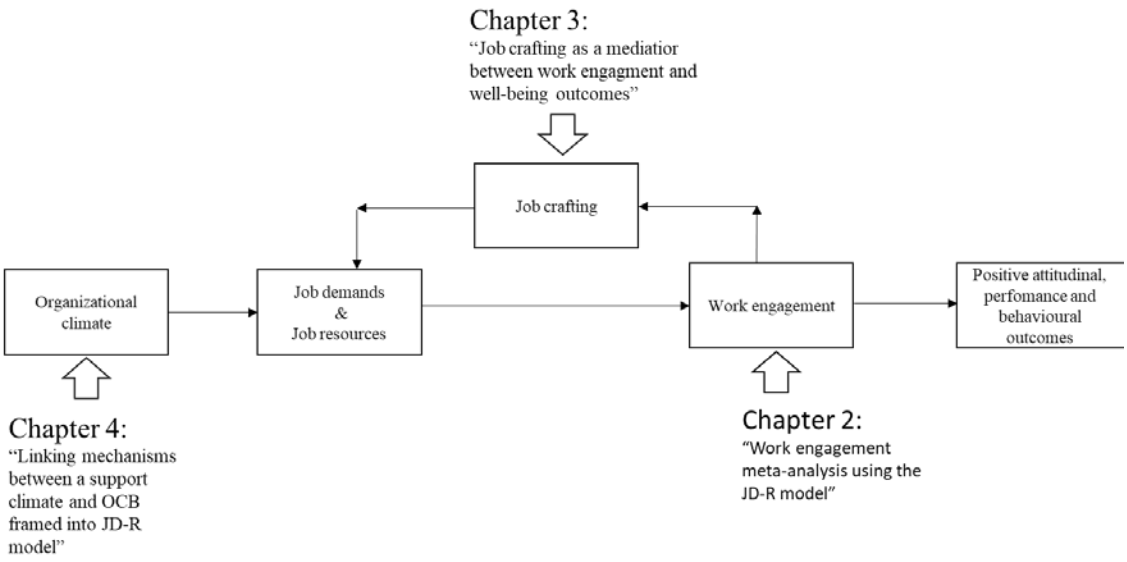

Figura 5. Proceso motivacional del modelo JD-R objeto de estudio del presente trabajo.

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CAPÍTULO 2.

WORK ENGAGEMENT META-ANALYSIS USING THE JOB DEMANDS-RESOURCES (JD-R) MODEL

Abstract

Although the nomological network of work engagement has been extensively explored in the academic literature, a systematic quantitative review of the empirical evidence currently available is still lacking, especially one that uses consistent categorisation of engagement antecedents, outcomes and well-being correlates. This meta-analysis aimed at filling the gap by using the Job Demands-Resources model as theoretical approach and the Energy Compass as reference frame. Accordingly, 94 primary studies reporting 533 correlations from 113 independent samples (N = 119,420) were coded. The effect size (ES) for development resources (*r*= .45) and personal resources (*r*= .48) was higher than for social resources (*r*= .36) and for work resources (*r*= .37). Among the work outcomes and well-being correlates explored, the ES was higher for job satisfaction (*r*= .60) and commitment (*r*= .63). Moderation analysis showed that: (a) concerning the occupational role, work engagement reports a lower association with turnover intention among civil servants, volunteer workers and educators; (b) collectivist cultural environments reported a greater impact of feedback on engagement than individualist cultural environments; (c) the influence of personal resources on engagement was higher among graduate workers than among secondary education workers. With specific focus on engagement dimensions, the absorption dimension of engagement reported a lower effect size with all the variables under investigation, when compared to the key components of vigor and dedication. In particular, absorption reported a significant difference concerning the impact on turnover intention and job satisfaction.

Keywords: work engagement, meta-analysis, JD-R model, demands, resources.

Introduction

Is the extensive research effort concerning work engagement of any use for workers, companies and society at large? One main trend in this investigation on engagement is to converge all knowledge in view of its practical application, in line with current literature based on the Job Demands-Resource (JD-R) model as an integrative conceptual framework that is useful in monitoring the workplace to foster employee engagement (Schaufeli, 2017). This agrees with a recent review of engagement research (Bakker & Albrecht, 2018) according to which it is crucial to translate the attained knowledge on engagement into practical applications studied to promote individual, team and organisational health, well-being, and performance. This call for concrete implementation of the current concept of engagement as positive involvement in one's job suggests the expediency of proposing a new comprehensive meta-analysis that can underpin effective intervention strategies in organisational settings. This meta-analysis embraces a broad spectrum of work engagement antecedents, outcomes and potential moderators within the general frame provided by the JD-R model (Schaufeli, Bakker, & Van Rhenen, 2009). Currently, the JD-R model is the most popular model in occupational health psychology with 12,287 citations, whereas the second most popular model – the Job Demands Control model (Karasek, 1979) – is cited 1,708 times (Google Scholar, November 2018). Consistently with this evidence, the current meta-analysis could offer several important contributions.

Indeed, previous meta-analyses on work engagement were published before 2011; therefore, systematisation of research findings concerning work engagement should be updated. Until 2010 the annual number of publications on work engagement[1] was lower than 400 and rose linearly to over 1,000 in 2017 (Google Scholar, November 2018). Moreover, these previous meta-analyses focused on specific variables: for instance, job performance

[1] The terms 'work engagement' and 'employee engagement' are used interchangeably.

(Christian, Garza, & Slaughter, 2011), resources, challenge demands and hindrance demands (Crawford, LePine, & Rich, 2010), or on a rather limited number of job demands, job resources and outcomes (Halbesleben, 2010). Since 2011, reviews on engagement were either merely narrative and, thus, unable to systematise and to discuss quantitative results (Pollak, Chrupała-Pniak, Rudnicka, & Paliga, 2017), or were limited in scope and designed to assess the quality of practical interventions and their effectiveness (Knight, Patterson, & Dawson, 2017). These meta-analyses did not take into account recent developments in the field, such as the growing number of studies focused on the role of personal resources and the impact of different leadership styles on work engagement. Moreover, this meta-analysis is systematic and comprehensive; in particular, it is clearly based on both the JD-R model and on the concomitant taxonomy of variables affecting work engagement.

In addition, this study could broaden the contribution offered by previous meta-analyses by including various moderators, such as age, gender, tenure, sector, occupation and culture (collectivist *vs.* individualist). Accordingly, a major goal of this paper is to answer the call for systematic understanding of engagement antecedents within specific demographic groups, occupational sectors and work roles (Bakker & Albrecht, 2018). Furthermore, this meta-analysis draws a clear distinction between the three components of work engagement (i.e., vigour, dedication and absorption). Conversely, meta-analyses carried out to date included a composite measure of engagement. Finally, this paper focuses on the practical application of meta-analytical findings for the implementation of interventions.

Work Engagement and the JD-R model

Work engagement is defined as a positive, fulfilling, work-related psychological state that stems from the combination of three interrelated dimensions, namely vigour, dedication, and absorption (Schaufeli & Bakker, 2004). In a nutshell, vigour involves prominent levels of

energy and resilience, while dedication to work entails a powerful sense of meaning, pride, and challenge associated with one's work, while absorption describes employees' condition of being completely concentrated on their work-related activities and happily engrossed in them, so that time flies by and they can hardly detach themselves from work. Thus, a significant remark concerning absorption associated with engagement concerns its similarity to the concept of flow, describing a brief peak in experience that implies strong focus on the present moment, associated with a lack of self-consciousness as well as a distorted temporal experience (Nakamura & Csikszentmihalyi, 2002). Hence, absorption resembles a mood that lasts longer, while vigour and dedication have been theoretically and empirically identified as the core dimensions of work engagement (Mazzetti, Schaufeli, & Guglielmi, 2018). Accordingly, confirmative factor-analytical studies indicated that the absorption dimension of work engagement enhances workaholism (Mazzetti, Schaufeli, Guglielmi, & Depolo, 2016), in line with the definition of the absorption dimension, as a state of full concentration on one's work resulting in difficulties with detaching oneself from work. Thus, this dimension reflects the overlapping nature of workaholism and work engagement, specifically concerning the deep involvement and concentration in one's tasks that is common to these opposite types of involvement in one's job.

Currently, the predominant model used to frame the nomological network of work engagement is the Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to the JD-R model, employee well-being is affected by a range of workplace characteristics that can be clustered into two main classes: job demands entailing aspects that require effort and which are, therefore, associated with physical and psychological costs; and job resources, defined as job-related aspects that allow employees to cope with the demanding aspects of their job and which stimulate their learning and development (Bakker & Demerouti, 2007).

The model assumes that these two types of job characteristics trigger two distinct processes. The so-called health impairment process postulates that prolonged exposure to an excessive amount of job demands combined with a lack of job resources may lead to job burnout that, in the long term, may result in harmful consequences for employee health and performance. In contrast, the motivational process of the JD-R model hypothesises that adequate availability of job resources may foster employees' levels of work engagement with subsequent positive outcomes, such as improved job performance, and with positive attitudes, such as organisational commitment (Taris, 2017).

Considering the underlying processes of the JD-R model, job demands, and job resources play a different role regarding employees' engagement. Increasing job resources may be a strategic tool to foster work engagement, since more resources would result in higher levels of engagement, whereas decreasing job demands would not be equally effective in achieving the same goal. In other words, a suitable number of demands is functional to the perception of a stimulating job and, therefore, a disproportionate reduction in job demands could lead to a decreased level of engagement among employees (Einarsen, Skogstad, Rørvik, Lande, & Nielsen, 2018). This evidence is consistent with the theoretical distinction between challenge and hindrance demands: whereas the former hinders employees' efforts toward normal work goal attainment and is, therefore, negatively associated with engagement, the latter have the potential to promote employees' mastery, personal growth and future gains. They stimulate positive emotions and active problem-focused coping strategies that increase willingness to spend one's energy on performing work-related tasks with subsequently enhanced levels of engagement (e.g., Kim & Beehr, 2018).

This remark underscores the importance of enriching the pool of job resources that individuals could rely on in performing their job as a major intervention strategy designed to boost both employee engagement and the suitability of empirical efforts to evaluate the

effectiveness of these strategies as a promising trend in literature on job engagement (Bakker & Albrecht, 2018).

Energy Compass categorisation

The Energy Compass (EC) is a recent remarkable attempt to classify different types of demands and resources consistently with the framework defined by the JD-R model. It is an efficient online tool that can be applied across different organisational contexts to both define and implement tailored interventions that maximise impact on workforce well-being and performance (Schaufeli, 2017). Along with the soundness of the underlying theoretical model, the main strength of this tool lies in the different outcomes it can yield: online individual feedback based on the comparison between the respondent's profile and the benchmark scores, the opportunity to compare the organisational units with each other and the whole organisation with similar companies. To be precise, this instrument involves the evaluation of twelve job demands, categorised into *quantitative* demands (e.g., work overload), *qualitative* demands (e.g., mental demands) and *organisational* demands (e.g., bureaucracy). Moreover, the EC includes twenty-two job resources, categorised into *social* resources (e.g., co-worker support), *job* resources (e.g., task variety), *organisational* resources (e.g., organisational justice) and developmental resources (e.g., career perspective). In addition to job resources, the tool also assesses eight personal resources, defined as cognitions or beliefs of all employees regarding the perceived control they can exert over their environment (e.g., self-efficacy). It also takes into account leadership characteristics framed into the engaged leadership concept.

We have selected the EC variable categorisation as the basis for the current meta-analysis. The selection of this categorisation was grounded on the following key points (Schaufeli, 2017): (a) the EC is the first tool developed in accordance with the assumptions of

the JD-R model; (b) the tool was designed considering previous research and consultancy experience, so it also reflects the conception and assessment of engagement in concrete contexts; (c) the categorisation criterion was defined to facilitate drawing practical conclusions from the findings obtained as the main aim of the current meta-analysis; (d) this tool was employed in practical contexts, allowing the definition of the most suitable intervention strategies for each work environment.

Though the EC embraces both demands and resources as antecedents of engagement, also considering the fostering role played by challenge demands (Crawford et al., 2010; Kim & Beehr, 2018), this meta-analysis entirely focuses on resources that have been consistently identified by academic literature as the most weighty and direct predictors of this positive and fulfilling work-related psychological state (e.g., Bailey, Madden, Alfes, & Fletcher, 2017). This decision is consistent with the key features of the motivational process described by the JD-R model, where resources are conceived as intrinsically motivating, given their capacity to promote employees' knowledge and mastery by fulfilling their basic human needs (i.e., autonomy, belongingness and competence). In the JD-R model, resources also play an extrinsic motivational role by allowing employees to tackle the demanding aspects of the job to achieve the goal (Bakker & Demerouti, 2017).

Meta-analysis of antecedents, work outcomes and well-being correlates

The aim of this meta-analysis was twofold. The first objective was to measure the relationships between work engagement, its antecedents and consequents according to the EC categorisation. Research extensively supports the existence of a significant influence on the level of work engagement by the different types of resources contained in the EC: social, work, organisational, development, personal and leadership (Schaufeli, 2017). However, the empirical results concerning the strengths of these relationships are mixed. For instance,

although social resources (e.g., leaders' and co-workers' supportive behaviours) are particularly salient for employee well-being (Ashforth, Harrison, & Corley, 2008), organisational factors may play a more crucial role, since the perception of supportive work culture presents a longer term effect on work engagement, compared to social support provided by immediate supervisors and co-workers (Biggs, Brough, & Barbour, 2014).

These mixed results may be attributed to the evidence that resources vary significantly across different organisations and work roles, as predicted by the JD-R model (Taris & Schaufeli, 2016). Accordingly, this meta-analysis aims at disentangling the influence of sample demographics and organisational distinctiveness.

Concerning work outcomes and well-being correlates considered in the EC, research has largely supported their relationship with engagement (Schaufeli, 2017). Job satisfaction and commitment represent attitudinal variables that are close to engagement and which have been identified as mediators of the relationship between engagement and specific work outcomes, such as turnover intention (Wefald, Mills, Smith, & Downey, 2012). Accordingly, we expect this meta-analysis to detect a higher effect size between attitudinal variables and engagement, compared to the relationship between engagement and health or performance outcomes.

A further goal was to contribute to the ongoing debate about the different role of engagement dimensions with a closer assessment of their relationship with different predictors and outcomes. In particular, given the considerable evidence that vigour and dedication constitute the key dimensions of work engagement (Mazzetti et al., 2018), this meta-analysis was designed to examine whether there is any difference in the relationship between the engagement antecedents and consequents under investigation with absorption, compared to vigour and dedication.

Potential moderator variables

In addition to the two main goals previously described, this meta-analysis aimed at identifying variables that can moderate the relationship between engagement and its antecedents and consequents. Since a large body of empirical evidence points out the role of moderators, a specific goal was to identify the most salient job demands and resources specific to particular demographics, occupations and industry sectors in order to frame the most ecologically valid interventions that, therefore, have the most likely chance of being effective, as suggested by Bakker and Albrecht (2018). In order to build a comprehensive set of potential moderators, we followed the guidelines defined by Lipsey and Wilson (2001). We first considered the substantive aspects of the primary studies. In this sense, we selected demographic variables that could be explicitly found in the primary studies: age, tenure, gender, hierarchical position, education, nationality, sector and occupation as demographic variables. Then, we took into account methodological variables. In this meta-analysis, we selected two potential methodological moderators: (1) the type of engagement questionnaire used in the study; (2) the sample selection method (rewarded participants *vs.* unrewarded participants). The rationale of these decisions and the expected results are reported in the following sections.

Age, tenure, gender and education are the demographic variables that are most investigated by primary studies considered in this meta-analysis. Many studies included them as control variables and they do not seem to have an impact on either engagement or its relationships. On the other hand, some studies found that the influence of flexible work arrangement over engagement depends on age (Rudolph & Baltes, 2017), and that age is a predictor of engagement (Macdonald & Levy, 2016). In addition, a study about the influence of individual characteristics on work engagement in a sample of national and foreign workers in Switzerland (Pocnet et al, 2015) found that the strength of the relationship between

personal resources and work engagement varied according to the employees' age, tenure, gender and education. Hence, this meta-analysis explores the moderating effects of age, tenure, gender and education in terms of the strength of the relationship between engagement with JD-R variables.

Sector and occupation. Previous longitudinal results on a sample consisting of eight occupational groups of Norwegians employees (Innstrand, 2016) revealed occupational differences in work engagement levels. To be specific, the highest levels of vigour were revealed among lawyers, whereas church ministers reported the highest levels of dedication. In contrast, the lowest level of vigour was reported among teachers, whereas the advertising group was characterised by the lowest degree of dedication to one's job. In addition, the association between engagement on the one hand, and autonomy and job performance on the other hand was moderated by occupation. Therefore, we hypothesised that the work sector and the type of occupation moderates the association between engagement and its outcomes.

Hierarchical position. The rank structure typically produces multiple layers of hierarchy, with lower level supervisors being perceived as having less autonomy over their work (Biggs et al., 2014). Hence, the hierarchical position is expected to influence engagement processes.

Culture. The demographic characteristic of nationality was translated into a more operational variable, namely the type of culture, declined in terms of collectivism and individualism (Hofstede, 1983). The relationship between culture and engagement has been a matter of interest in research. Schaufeli and colleagues (2017), for instance, revealed a slightly different pattern of correlations between work engagement and its antecedents and consequents in Japan, as compared to European countries. Pocnet and colleagues (2015) found that nationality moderated between personal resources and work engagement with differences between Swiss and non-Swiss workers. We expect the type of culture to influence

correlations between engagement and its antecedents and consequents.

Type of engagement questionnaire. Since the most widely used questionnaire to measure engagement is the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker 2003), this meta-analysis focused exclusively on studies using the UWES. To illustrate this, a Google Scholar search for 2017 documents yielded 1,300 results that included UWES, and only 302 that included Gallup Q12, the second most used questionnaire. The question is whether there is any difference in the effect size between the three types of UWES questionnaires: UWES-3, UWES-9 and UWES-17. Consistently with Schaufeli and colleagues (2017), we hypothesised that the employment of different versions of this scale is not related to different results.

Sample selection criteria. The sample selection criteria may influence effect sizes. For example, student-recruited samples may lead to smaller effect sizes of observed statistical relationships between engagement and certain outcomes (Wheeler et al., 2014). On the other hand, previous findings indicate that differences are negligible and reveal non-significant differences between student-recruited samples and non-student-recruiting samples (Demerouti & Rispens, 2014). This meta-analysis took into account the recent tendency to recruit participants from websites. In particular, this study assessed whether the effect observed in student-recruited samples can also be found in website-recruited samples, which normally provide incentives to participants in the form of either money or vouchers (rewarded participants vs. unrewarded participant samples). Despite some differences in effect sizes, we hypothesised the absence of any significant moderating effect resulting from the sample selection criteria, in line with the current literature (Demerouti & Rispens, 2014).

Method

Literature search, inclusion and rejection criteria

The literature search was performed on the electronic databases PsycINFO, Psycarticles, ERIC, Academic Search premier, and Medline. The first inclusion criterion was to select papers published after 2011, the date of the last meta-analysis on work engagement antecedents and consequents. The second inclusion criterion was to meta-analyse only studies that had measured work engagement using any of the UWES questionnaires, as this is the most extended scale to measure engagement and is the closest scale to the theoretical foundations of this study. Therefore, the following search criteria were used: documents from 2011 to 2017, “Engagement” in Keyword or Title, and “UWES” in any part of the document.

After rejecting repeated documents and documents out of scope by just reading the title, 241 published research articles, PhD theses and chapters were selected. We were able to retrieve 238 published research documents. The following rejection criteria were applied to the documents retrieved: (a) the document was not in English or Spanish, nine documents rejected; (b) the investigation was carried out with students and not with workers, 24 documents rejected; (c) no quantitative study, seven documents rejected; (d) UWES was not the scale to measure work engagement, two documents rejected; (e) the variables in the document differed from the ones included in this study and could not be mapped with Energy Compass parameters, 96 documents rejected; (f) there were regressions or structural model data but not Pearson correlation data between the variables, four documents rejected; (g) the level of measure of the variables was team level and not person level, one document rejected; (h) the document was a meta-analysis itself, one document rejected.

As a result, 94 documents were coded. Unpublished studies were excluded from this meta-analysis. The rationale was that the literature was extensive and conclusive about relationships between the variables considered by the study; hence, there were no

considerable expectations about findings in the unpublished studies. Moreover, studies would have probably induced some noise into the analyses as they normally have very short samples. Nevertheless, a publication bias analysis was performed following Egger's (Egger et al, 1997) Test of the Intercept and a Duval and Tweedie's (2000) Trim and Fill test. The aim was to ascertain whether the decision about not including unpublished studies was right, and to have a quantitative assessment of subject decision.

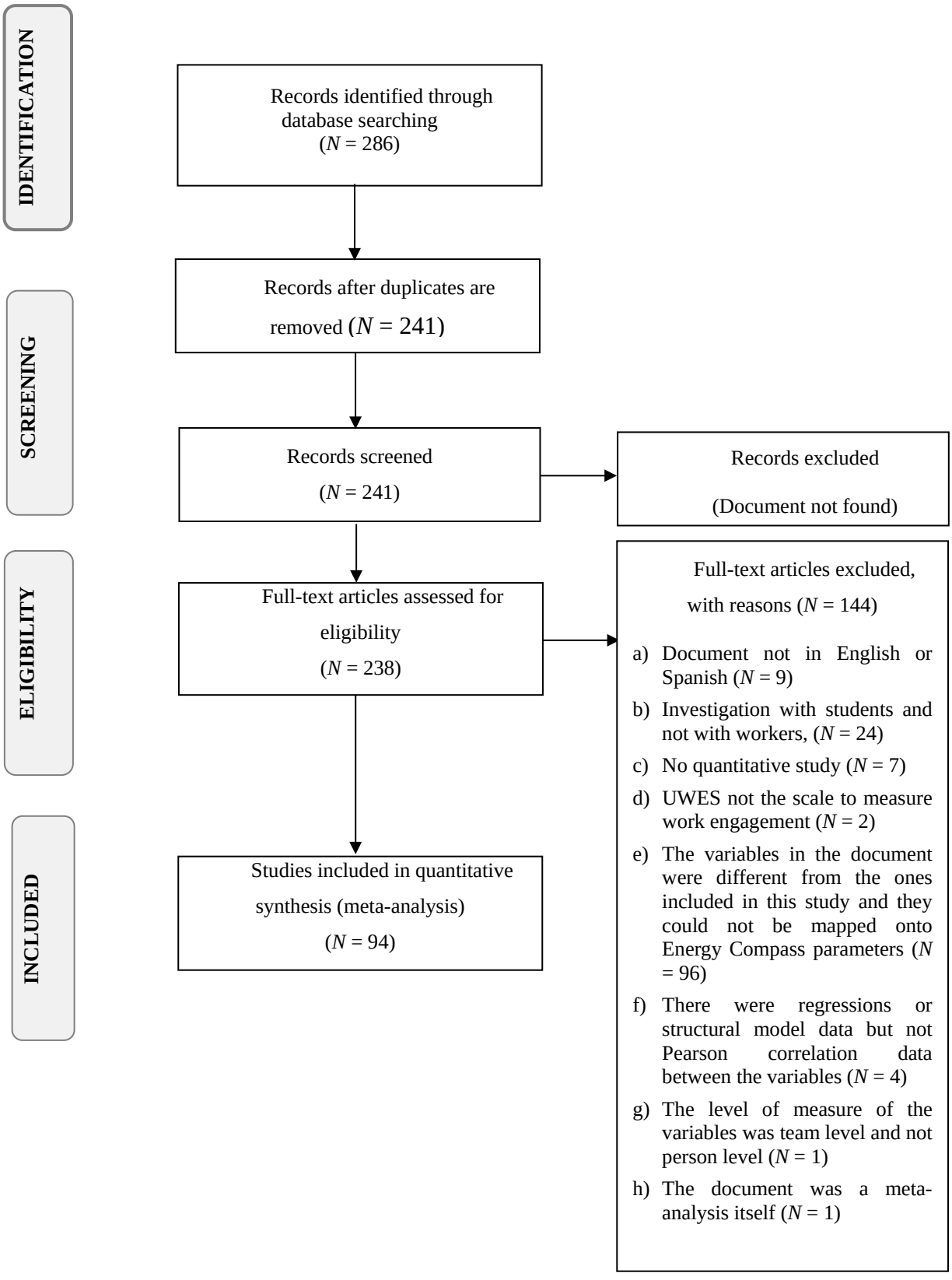

Figure 1. PRISMA flow chart

Coding of studies

The following decisions were made during the coding process of the 94 documents: (a) several samples could be coded from the same study as long as they were fully independent; (b) in longitudinal or intervention studies, the time selected to code was the one described in the demographic section. If demographic data were available in many time points, the first time point was selected; (c) only person level and not day level correlations were included; (d) if several UWES scales were used in the same sample, only data from one of them was coded to avoid duplication of samples. The priority was to first select UWES-3 data and then UWES-17 data, due to the higher number of studies available for UWES-9; (e) the cut-off points for each category level at each moderator were: Age, 40 years old; Average Tenure, 7 years; Percentage of males, 50%; Percentage of managers, 25%; and Percentage of university degrees, 50%. The cut-off points were calculated to have a similar proportion of studies in each category.

A reliability analysis for coding was performed. Two researchers independently codified a sample of 10% of studies by alphabetical order, reaching an 88% intercoder agreement. The level of agreement reached was highly satisfactory and minor disagreements were solved by consensus (Lipsey & Wilson, 2001). As a result, the 94 studies coded yielded 533 correlations from 113 independent samples and 119,420 participants overall.

Meta-analysis procedure

The meta-analytical software used was Comprehensive Meta-Analysis 2.0 (CMA; Borenstein, Hedges, Higgins, & Rothstein, 2005). The effect size (ES) was *r* (Pearson correlation coefficient). Correlations were corrected for sampling error by calculating the sample size-weighted correlations. The random effects model was selected due to the high diversity of samples and populations. Meta-analysis calculations were performed when at

least 3 correlations were available. Calculations included a 95% confidence interval for weighted correlations. We interpreted the results using the criteria defined by Cohen (1992): *r* = .1 as a low correlation, r = .3 as a medium correlation and *r* = .5 as a high correlation. The rest of the article regards "medium to high" correlations as .5> *r* >.4 and "medium to low" correlations as .2 > *r* >.4. Heterogeneity was analysed through Q statistics (Hunter & Schmidt, 1990), the classical measure of heterogeneity. It represents the weighted sum of squared differences between individual effects and the pooled effect across studies. To overcome the problem of Q test power with the small number of studies, I^2 statistics are also reported as a measure of heterogeneity that describe the percentage of variation across studies resulting from heterogeneity, rather than from chance. I^2 <30% is considered low heterogeneity, between 30% and 50% is medium heterogeneity, and above 50% is high heterogeneity (Higgins & Thompson, 2002). We grouped variables into an upper level (e.g., social resources, job resources, etc.) as established by the composite approach of Borenstein and colleagues (2005), which calculates a synthetic mean ES per study for each upper variable level. Although this procedure is highly conservative and produces wider confidence intervals than an independent values approach, we preferred this approach to guarantee the independence of the samples in our meta-calculations for upper level variables.

The procedure to look for moderation effects first focused on converting all potential moderators into categorical variables with the smallest number of levels possible in order to maximise the number of effects in each category. A moderator analysis (ANOVA analogous) with CMA software was performed to test for the overlapping of the 95% confidence interval of each subgroup. If there were no statistical difference between groups but the overlap were very small and the moderator were continuous, a meta-regression was performed. Additionally, to check for the presence of any bias in samples selected by any type of reward to participants (online sites rewarding participation), a moderator analysis was carried out for

job control correlations with engagement in the two specified conditions: rewarded vs. unrewarded participant. The remaining correlations did not offer an adequate number of events with differential selection methods.

Results

Table 1 indicates the results of the meta-analysis performed over the correlation between engagement and the different antecedents. We notice that two resources report a statistically lower correlation than the other ones: social resources (*r*= .36) and job resources (*r*= .37), as the C.I. do not overlap. In addition, two antecedents have a statistically stronger relationship with work engagement than the rest: personal resources (*r*= .48) and development resources (*r*= .45). Organisational resources report one of the highest average weighted correlations with work engagement (*r*= .47), but the overlap of the confidence interval with the U.L. of work engagement and social resources does not allow us to say that there is a statistically significant difference between them. A similar statement applies to leadership (*r*= .46). Concerning individual variables, the weakest relationship is between work engagement and co-worker support (*r*= .27, 95% UL = .32). The strongest correlations, with 95% LL above .35, were found for: resilience (*r*= .57), proactivity (*r*= .55), optimism (*r*= .55), learning (*r*= .51) and self-efficacy (*r*= .47).

Table 2 shows the result of the meta-analysis performed on the correlation between engagement and its consequents and other well-being correlates. The strongest correlations were for attitudinal variables close to work engagement, such as job satisfaction (*r*= .60) and job commitment (*r*= .63). The weakest correlations were for well-being variables related to physical, emotional and mental health that were not specific for work-related situations: health (*r*= .37), psychological distress (*r*= -.37), and life satisfaction, (*r*= -.38). Turnover intention (*r*= -.43) and performance (*r*= .49) also show medium to high correlations with

work engagement.

Table 1
Meta-analytical correlations between work engagement and its antecedents

				95% C.I.		Heterogeneity		
	k	***n***	**r**	**L.L.**	**U.L.**	**Q**	**df**	**I^2**
Social Resources (combined)	**22**	**83,566**	**.36**	**.33**	**.40**	**30.23**	**27**	**10.70**
Co-worker support	10	80,886	.27	.22	.32	7.28	9	.00
Supervisor support	16	79,632	.36	.30	.41	11.50	15	.00
Team	3	1,950	.44	.27	.58	2.32	2	13.68
Role clarity	7	68,394	.36	.32	.40	6.27	6	4.35
S.R. mixed	4	2,002	.40	.35	.44	3.19	3	5.98
Work Resources (combined)	**29**	**89,811**	**.37**	**.34**	**.40**	**33.26**	**21**	**36.86**
Job control	18	82,153	.34	.29	.39	13.67	17	.00
Task variety	5	29,820	.39	.33	.44	6.03	4	33.69
W.R. mixed	4	1,406	.44	.35	.51	3.56	3	15.63
Org. Resources (combined)	**18**	**36,412**	**.47**	**.38**	**.56**	**11.95**	**17**	**0.00**
Organizational justice	3	27,304	.33	.26	.39	2.17	2	7.85
O.R. mixed	14	7,140	.47	.38	.54	9.63	13	.00
Development Resources (combined)	**15**	**80,338**	**.45**	**.40**	**.50**	**31.74**	**14**	**55.89**
Feedback	8	76,378	.40	.34	.46	19.47	7	64.05
Learning opportunities	9	42,350	.51	.44	.57	11.74	8	31.85
Leadership (combined)	**5**	**1,515**	**.46**	**.30**	**.59**	**3.05**	**4**	**.00**
Leadership mixed	3	1,227	.47	.24	.65	1.47	2	.00
Personal Resources (combined)	**18**	**5,298**	**.48**	**.42**	**.55**	**22.23**	**17**	**23.51**
Resilience	4	764	.57	.35	.73	4.45	3	32.58
Self-Efficacy	9	3,399	.47	.35	.57	7.84	8	.00
Optimism	7	1,460	.55	.45	.63	10.31	6	41.83
Proactivity	3	1,180	.55	.44	.65	1.53	2	.00

Note: K, cumulative number of samples; n, cumulative sample size; r, sample-sized weighted correlation; C.I. 95% confidence interval for r; L.L, lower limit for r; U.L., upper limit for r; Q weighted sum of squared differences between individual study effects and the pooled effect across studies; df, degrees of freedom for Q Xi square distribution; I^2, percentage of variation across studies that is due to heterogeneity rather than chance; S.R. mixed, unspecified social resources with a mixed of other social resources variables; W.R. mixed, unspecified job resources; O.R mixed, unspecified organizational resources. Combined variables follow Borenstein and colleagues (2005) approach described in the meta-analysis procedure section.

About heterogeneity, looking at figures in Table 1 and Table 2 and following the indications provided by Higgins and Thompson (2002), we can conclude that there is low heterogeneity for most of the variables, medium for job resources (I^2=36.86) and high for development resources (I^2=55.89). This could suggest the presence of some moderators. To test the hypothesis of a different behaviour in the relationship between engagement components (vigour, dedication and absorption) and the rest of the variables considered by this study, a sample-sized weighted correlation was performed between each component of work engagement and the remaining variables. Results are reported in Table 3.

Table 2

Meta-analytical correlations between work engagement and its consequents and other well-being correlates.

				95% C.I.		Heterogeneity		
	k	***n***	**r**	**L.L.**	**U.L.**	**Q**	**df**	**I^2**
Outcomes								
Commitment	16	4,848	.63	.54	.71	12.40	15	.00
Turnover intention	24	12,321	-.43	-.47	-.40	22.00	23	.00
Perfomance	10	2,834	.49	.37	.59	10.56	9	14.73
Well being correlates								
Job Satisfaction	24	84,516	.60	.56	.64	29.33	23	21.59
Health	7	2,998	.37	.27	.46	7.30	6	17.80
Psychological distress	10	4,049	-.37	-.42	-.32	13.21	9	31.85
Life Satisfaction	8	5,014	.38	.31	.44	8.19	7	14.52

Note: K, cumulative number of samples; n, cumulative sample size; r, sample-sized weighted correlation; C.I. 95% confidence interval for r; L.L, lower limit for r; U.L., upper limit for r; Q weighted sum of squared differences between individual study effects and the pooled effect across studies; df, degrees of freedom for Q Xi square distribution; I^2percentage of variation across studies that is due to heterogeneity rather than chance.

Considering the weighted correlation coefficients reported in Table 3, vigour and dedication have always figures that are mutually very close, while absorption figures are always lower. Due to the confidence interval range, we can only state a statistically

significant difference between absorption and dedication in their correlations with turnover intention and job satisfaction. In particular dedication vs. turnover intention confidence interval (LL= -.49, UL= -.42) does not overlap with absorption vs. turnover intention confidence interval (LL= -.37, UL =-.29). Likewise, dedication vs. job satisfaction confidence interval (LL= .57, UL =.70) does not overlap with absorption vs. job satisfaction confidence interval (LL= .39, UL= .53).

Table 3

Meta-analytical correlations between each component of work engagement and antecedents, consequents and other well-being correlates.

	VIGOR					DEDICATION					ABSORPTION				
	k	***n***	**r**	**LL**	**UL**	***k***	***n***	**r**	**LL**	**UL**	***k***	***n***	**r**	**LL**	**UL**
Social Resources	13	5,506	.30	.23	.36	13	5,506	.33	.26	.40	12	5,278	.25	.17	.33
Work Resources	11	5,031	.38	.29	.46	10	4,892	.39	.27	.50	10	4,803	.36	.27	.45
Organizational Resources	6	2,589	.44	.35	.52	6	2,589	.47	.37	.55	6	2,589	.36	.28	.43
Development Resources	2	777	.32	-.04	.60	2	777	.47	.06	.75	2	777	.25	-.03	.49
Personal Resources	11	2,796	.41	.34	.48	11	2,796	.39	.33	.44	10	2,568	.30	.23	.37
Leadership	3	677	.33	.16	.48	3	677	.37	.27	.47	3	677	.23	.14	.33
Job Satisfaction	12	5,614	.54	.46	.60	12	5,614	.64	.57	.70	12	5,614	.46	.39	.53
Job Commitment	5	1,099	.48	.31	.62	5	1,099	.53	.36	.66	5	1,099	.43	.28	.56
Life Satisfaction	3	2,630	.32	.22	.42	3	2,630	.35	.28	.42	3	2,630	.21	.11	.31
Turnover intention	10	4,004	-.38	-.42	-.33	10	4,004	-.46	-.49	-.42	10	4,004	-.32	-.37	-.29

Note: K, cumulative number of samples; n, cumulative sample size; r, sample-sized weighted correlation; L.L, lower limit for 95% confidence interval for r; U.L., upper limit 95% confidence interval for r.

Moderator analysis and meta-regression

The results of the moderator analyses in tables 4 and 5 show some statistically significant findings.

The variables referred to the *work sector* (*p*= .045) and *occupation* (*p*= .027) moderated the effect of engagement on turnover intention. Precisely, work engagement

reported a lower correlation index with the intention to leave among workers in the educational field (r= -.35), civil servants (r= -.4) and NGO volunteers (r= -.39).

The percentage of workers with a university degree moderated the effect of personal resources on engagement (p= .007). A higher percentage of workers with a university degree corresponded to a higher influence of personal resources on work engagement.

Culture moderated the relationship between development resources and work engagement (p= .001). In fact, development resources reported a greater correlation with engagement (r= .54) within a context characterised by a collestivist culture. An additional analysis for this specific moderation effect was performed with the two components of the development resources coded (learning and feedback). The result obtained indicated that the feedback component is the one that is differential between both cultures (p= .001), with a higher effect of feedback on work engagement in collestivist cultures (r= .59).

Additionally, taking into account the fact that the method followed to build tables 4 and 5 is not powerful enough to detect all moderation interactions, meta-regressions (method of moments) were performed for quantitative moderators over effects that were almost statistically significant. None of the following meta-regressions were statistically significant: (a) average age as predictor and commitment vs. engagement as criterion; (b) average tenure as predictor and commitment vs. engagement as criterion; (c) percentage of managers as predictor of job resources as criterion.

However, the meta-regression of the percentage of managers as predictor and the turnover intention as criterion yield a significant result (Q= 23.36, df= 6, p=.000). A higher percentage of managers in the sample corresponds to a higher influence of engagement in turnover intention. This result must be considered with caution as only 7 samples have all data available to build the regression, as depicted in Figure 2.

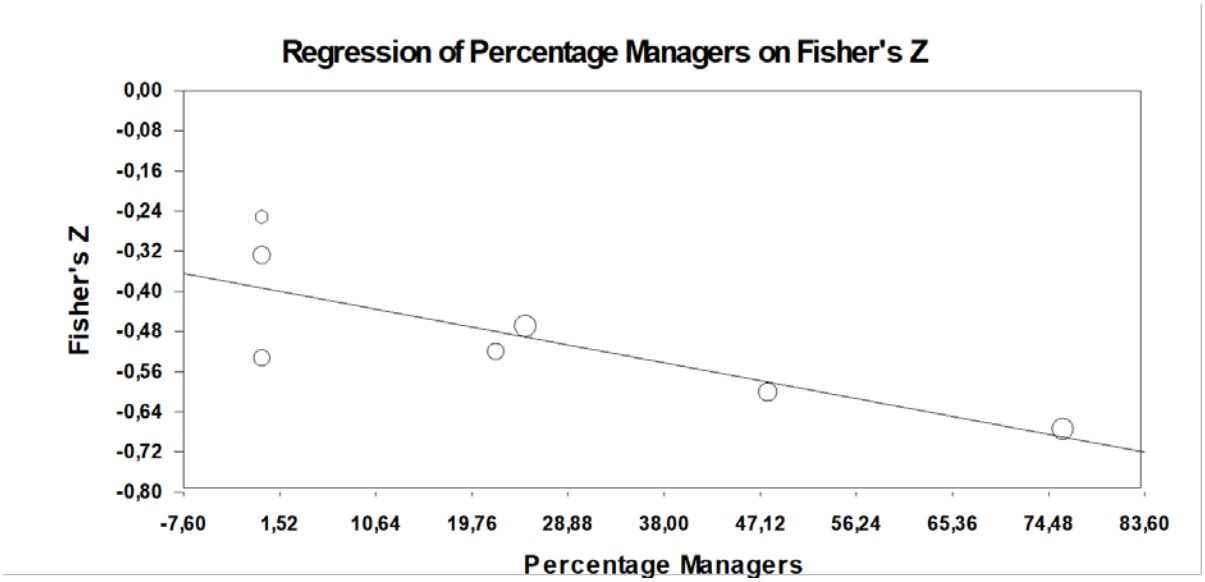

*Figure 2***.** Meta Regression on Fisher´s Z of Turnover intention correlation with engagement, with Percentage of Managers as predictor.

Tables 4 and 5 also contain the results of the moderator analysis for UWES. Few studies used the UWES-3 questionnaire. Actually, only one study based on 5 samples was currently available (Schaufeli, Shimazu, Hakanen, Salanova, & De Witte, 2017). We notice that UWES-3 systematically shows lower correlations; however, the difference is not statistically significant compared to UWES9 and UWES-17. Finally, the moderator analysis of the selection method in the primary study (rewarded vs. unrewarded participant) could only be used for the relationship between job control and engagement, since the rest of the correlation did not offer more than three studies for the rewarded condition. The test results (Q=.31, df =1, p =.57) showed that there is no influence on the type of selection method over the correlation between job control and engagement.

Table 4

Work engagement antecedent moderator analysis

	Social Res.				Work Resources				Org. Resources				Develop. Res.				Personal Res.			
	K	r	UL	LL	K	r	UL	LL	K	r	UL	LL	K	r	UL	LL	K	r	UL	LL
AGE																				
Below 40	14	.38	.33	.43	10	.38	.33	.42	8	.45	.28	.58	7	.44	.37	.51	14	.50	.42	.57
Above 40	11	.35	.29	.40	9	.36	.31	.40	10	.49	.36	.61	5	.47	.39	.53	4	.43	.26	.57
TENURE																				
Below 7	4	.40	.31	.49	2	.40	.29	.50	4	.46	.18	.67	2	.53	.39	.64	6	.58	.48	.66
Above 7	10	.32	.26	.38	8	.33	.28	.37	6	.50	.29	.67	6	.44	.37	.52	4	.47	.32	.60
GENDER (% Males)																				
Below 50%	15	.36	.30	.41	11	.36	.31	.41	7	.45	.26	.61	11	.46	.39	.53	6	.46	.33	.57
Above 50%	12	.37	.31	.43	11	.38	.34	.42	10	.47	.31	.60	4	.43	.30	.55	11	.52	.43	.60
% MANAGERS																				
Below 25%	3	.32	.21	.43	3	.43	.34	.51	5	.37	.15	.55	2	.42	.24	.58				
Above 25%	9	.34	.28	.40	10	.35	.31	.39	4	.53	.31	.69	6	.43	.36	.50	4	.63	.53	.71
% UNIV.																	**(Q=7.215 df=1 p=.007)**			
Below 50%	3	.35	.24	.44	3	.36	.28	.44									5	.44	.33	.54
Above 50%	5	.45	.37	.52	7	.43	.37	.48	5	.49	.29	.64	6	.45	.36	.53	6	.61	.53	.69
UWES SCALE																				
UWES-3	5	.28	.21	.35	5	.33	.28	.38	3	.53	.26	.71	5	.41	.33	.48	1	.34	-.04	.63
UWES-9	18	.38	.34	.42	12	.38	.34	.43	7	.45	.28	.60	7	.50	.42	.57	4	.54	.40	.66
UWES-17	5	.41	.33	.48	5	.41	.35	.48	8	.47	.31	.61	3	.45	.33	.55	6	.56	.45	.65
CULTURE													**(Q=13.51 df=1 p=.00)**							
Collectivist	11	.37	.32	.43	5	.37	.32	.43	7	.51	.37	.62	7	.54	.48	.60	6	.52	.41	.60
Individualist	17	.36	.31	.40	17	.37	.33	.40	11	.45	.34	.55	8	.37	.31	.44	12	.46	.38	.54
SECTOR																				
Private	9	.34	.27	.40	4	.43	.36	.50					2	.29	.10	.45	3	.59	.44	.71
State Owned	8	.39	.33	.45	5	.43	.37	.48					4	.57	.48	.64	8	.42	.32	.52
NGO																				
OCCUPATION																				
Education	2	.36	.23	.48	4	.46	.40	.52	3	.41	.11	.63	3	.61	.51	.70	2	.36	.12	.57
Health	1	.50	.33	.64	1	.31	.18	.43					1	.45	.26	.61	2	.39	.13	.60
Industry	2	.33	.19	.45	1	.38	.26	.48												
Services	10	.36	.31	.42	1	.56	.38	.70	6	.39	.19	.56	2	.29	.09	.46	7	.52	.41	.62

Note: K, cumulative number of samples; r, sample-sized weighted correlation; LL, lower limit for 95% confidence interval for r; UL, upper limit 95% confidence interval for r.

Table 5.
Work engagement consequents and correlates moderator analysis

	Job Satisfaction				Turnover intention				Commitment			
	K	r	UL	LL	K	r	UL	LL	K	r	UL	LL
AGE												
Below 40	9	.57	.48	.65	8	-.45	-.51	-.39	7	.70	.59	.78
Above 40	10	.58	.50	.65	10	-.45	-.50	-.39	8	.56	.43	.67
TENURE												
Below 7	5	.66	.57	.74	7	-.39	-.47	-.31	2	.37	.05	.63
Above 7	12	.59	.52	.64	11	-.46	-.51	-.40	8	.71	.61	.78
GENDER (% Males)												
Below 50%	10	.63	.56	.69	15	-.43	-.48	-.38	11	.67	.56	.76
Above 50%	10	.58	.51	.64	9	-.43	-.49	-.37	5	.53	.30	.70
% MANAGERS												
Below 25%	4	.63	.51	.72	4	-.40	-.48	-.31	5	.50	.30	.66
Above 25%	7	.59	.50	.66	3	-.53	-.59	-.45	3	.73	.56	.84
% UNIV.												
Below 50%	3	.58	.43	.69	4	-.45	-.53	-.36	7	.62	.45	.75
Above 50%	1	.69	.47	.83	8	-.42	-.49	-.36	3	.59	.30	.78
UWES SCALE												
UWES-3	5	.56	.46	.65								
UWES-9	14	.63	.57	.68	18	-.44	-.48	-.39	6	.59	.40	.72
UWES-17	5	.55	.44	.65	6	-.41	-.48	-.33	10	.66	.54	.75
CULTURE												
Collectivist	8	.60	.51	.67	6	-.45	-.52	-.37				
Individualist	16	.60	.55	.65	18	-.43	-.47	-.38	15	.61	.53	.68
SECTOR					**(Q=6.21 df=2 p=.045)**							
Private	3	.70	.58	.79	5	-.50	-.56	-.43	2	.58	.32	.76
State Owned	11	.61	.53	.68	13	-.40	-.45	-.35	6	.54	.39	.66
NGO	2	.53	.32	.69	4	-.39	-.48	-.30	3	.57	.37	.72
OCCUPATION					**(Q=9.21 df=3 p=.027)**							
Education	7	.64	.53	.72	7	-.35	-.42	-.27	5	.50	.33	.64
Health	2	.47	.22	.66	2	-.48	-.58	-.36				
Industry	2	.71	.53	.82	2	-.52	-.60	-.43				
Services	3	.67	.52	.78	6	-.46	-.52	-.40	2	.58	.32	.76

Note: K, cumulative number of samples; r, sample-sized weighted correlation; LL, lower limit for 95% confidence interval for r; UL, upper limit 95% confidence interval for r.

Publication bias

To look for publication bias, Egger's Test of the Intercept was performed on the correlation of engagement with variables having *k*>10. No significant intercept was found for the correlation of work engagement with job satisfaction, job commitment, co-worker support, job performance and supervisor support. Hence, we can conclude that there is no publication bias for the above correlations.

However, a significant Intercept (*Bo* =2.04 *p*=.021) was found in Egger´s Test of the correlation between engagement and turnover intention. A Duval and Tweedie's Trim and Fill test was performed to assess this publication bias. Under the random effects model, the point estimate and 95% confidence interval for the correlation was -.43 (-.47, -.40). Using Trim and Fill the imputed point estimate was -.47 (-.50, -.44), with 7 studies added, as illustrated in red in the funnel plot (Figure 3). Hence, there is a likely tendency to publish a lower relationship between engagement and turnover intention in short sample studies, although once this publication bias is trimmed and filled, the ES changes slightly and, therefore, all conclusions from previous results would remain valid. We can thus conclude that publication bias is unlikely to threaten the results severely.

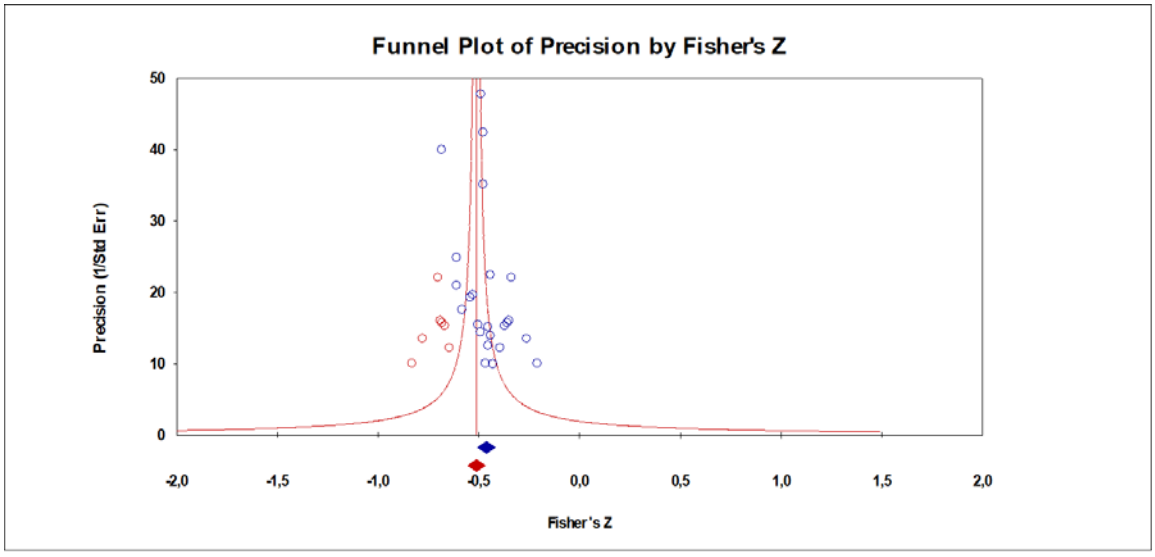

*Figure 3***.** Funnel Plot of Precision by Fisher´s Z of the correlation between Engagement and Turnover Intention.

Table 6. *Summary of findings by variable*

	ENGAGEMENT ANTECEDENTS
Social resources	• Moderate to low correlation with engagement (*r* = .36) • Statistically weaker relationship with engagement than personal and development resources • Co-worker support shows the weakest relationship with engagement from all single variables in this study (*r* = .27)
Job resources	• Moderate to low correlation with engagement (*r* = .37) • Statistically weaker relationship with engagement than personal and development resources
Organizational resources	• Moderate to high correlation with engagement (*r* = .47)
Development resources	• Moderate to high correlation with engagement (*r* = .45) • Statistically stronger relationship with engagement than social and job resources • Higher effect of feedback on work engagement in collective cultures (*r*= .59).
Leadership	• Moderate to high correlation with engagement (*r* = .46)
Personal resources	• Moderate to high correlation with engagement (*r* = .48) • Statistically stronger relationship than social and job resources • Higher influence in samples with higher percentage of University degrees.
	WORK ENGAGEMENT OUTCOMES
Job satisfaction	• High correlation with engagement (*r* = .60) • Statistically stronger correlation than health related variables • Statistically higher correlation with dedication component (*r*= .64) than with absorption component (*r*= .46)
Job commitment	• High correlation with engagement (*r* = .63) • Statistically stronger correlation than health related variables
Turnover intention	• Moderate to high correlation with engagement (*r* = -.43) • Work engagement is statistically less correlated with the intention to leave for workers in education (*r*= -.35), civil servants (*r*= -.4) and NGO volunteers (*r*= -.39). • The higher the percentage of managers in the sample. the higher is the influence of engagement in the turnover intention • Statistically higher correlation with dedication component (*r*= -.46) than with absorption component (*r*= -.33)
Job Performance	• Moderate to high correlation with engagement (*r* = .49)
Further positive outcomes	• Moderate to low correlation with engagement: physical health (*r* = .37), psychological distress (*r* = - .37), life satisfaction (*r* = .38). • Statistically lower relationship than attitudinal variables.

Discussion

The main purpose of this meta-analysis was to delve deeper into the relationship between different types of resources and work engagement, as well as into the relationship between engagement and its outcomes by using the taxonomy of resources provided by the Energy Compass tool as a general frame (Schaufeli, 2017).

The first concrete objective of the meta-analysis was to measure the relationships between work engagement, its antecedents and outcomes. These findings indicate that the strength of the relationship with engagement varies across different types of resources. Although all of them are characterised by a medium range of correlation, some of them are statistically closer to the lower range (social and job resources), while others are statistically closer to the higher range (personal and development resources). Although organisational resources too seem to be in the higher range, the extensive range of the confidence interval did not allow to report a finding from a statistical standpoint, as it slightly overlaps with the U.L. from social and job resources. The origin of this wide C.I interval seems to come from a high sampling variance within the primary studies and not from a high variance between samples, as this is very low. In the case of leadership, we face the same issue with the C.I. range but, in this case, the main problem is the small number of studies.

We can, thus, conclude that personal and development resources have a higher influence on engagement than work and social resources, with co-worker support reporting the lowest coefficient. This prevalence of personal resources is consistent with previous results. In a noteworthy research conducted on a sample of 85,000 workers across five countries, Schaufeli and colleagues (2017) revealed that correlations with personal resources are generally moderately strong, whereas job resources (social and work) are positive and, generally, weakly to moderately strong. In a sample of teachers in Bangkok, Choochom (2016) found that personal resources, such as psychological immunity and intrinsic

motivation, had the most positive influence on work engagement. This higher influence of personal resources in engagement could be explained by the fact that personal resources can be a mechanism that taps into many parts of the JD-R model (Schaufeli & Taris, 2014). It can be a mediator or a moderator of the relationship between job characteristics and outcomes, an antecedent of strain and motivation, an antecedent of work characteristics, and/or an outcome of work characteristics. The available evidence suggests that relatively stable personal resources (e.g., personality characteristics) are more likely to function as antecedents of work characteristics or as outcomes or as moderators of the association between work characteristics and outcomes than relatively malleable characteristics, such as self-efficacy, which may be better taken as mediators or even outcomes. The underlying assumption entails that the perceived level of control over one's job and ability to tackle unforeseen events may prompt employees to actively manage their job and effectively attain their goals (Bakker & Sanz-Vergel, 2013). Employees with high levels of personal resources are thought to positively appraise their ability to meet their work demands, believe in good outcomes and believe they can meet their needs by fully engaging in their organisational roles. (Knight et al., 2017).

This main role played by leadership is in line with previous results: for instance, Hayati and colleagues (2014) pointed out that transformational leadership plays a key role in explaining the level of engagement reported by nurses, especially due to the dimension of inspirational motivation. As previously stated, the strong influence of transformational leadership on engagement could be explained through the enhancement of job resources that the skills and knowledge of managers could stimulate, thus motivating employees to engage in their work according to the motivational hypothesis of the JD-R Model (Fernet, Trépanier, Austin, Gagné, & Forest, 2015). Our results also suggest significant differences in the strength of relationships between engagement and a wide range of positive outcomes. In

particular, engagement is closer to attitudinal variables (i.e., job satisfaction and job commitment) than to behavioural or intentional variables (i.e., turnover intention, performance or health), although they still report medium to high correlation coefficients.

The results obtained further support the evidence underscored by previous meta-analytical papers. In particular: (a) consistently with results suggesting a stronger association of engagement with self-esteem and optimism (Halbesleben, 2010) and conscientiousness and positive affect (Christian et al., 2011), this meta-analysis indicates a stronger influence of personal resources on engagement, when compared to work and social resources; (b) the fact that attitudinal variables are closer to engagement than behavioural or intentional variables can be found in Halbesleben (2010), where job commitment shows stronger correlation to engagement than performance, health and turnover intention, and in Christian and colleagues (2011), where job satisfaction and commitment are considered proximal factors to work engagement, sharing similar antecedents and consequents, and showing stronger correlation with engagement than with job performance. No such conclusions can be found in the meta-analysis from Crawford et al. (2010) as neither personal resources nor outcomes are coded and the results concerning the remaining resources are quite comparable. On the other hand, an apparently inconsistent finding in comparison to previous meta-analytical findings entails the different role played by leadership. Precisely, Christian and colleagues (2011) reported a lower relationship between leadership and engagement, in comparison to our meta-analysis. This difference could be explained by the different style of leadership considered: on the one hand, Christian and colleagues (2011) coded transformational leadership, whereas this research coded engaged leadership (Schaufeli, 2017), defined as the combination of inspiring, strengthening and connecting dimensions.

The second objective of the meta-analysis was to explore the different role played by engagement components in the relationship with resources and positive outcomes. According

to current findings, absorption systematically reported lower correlations with the variables investigated, in comparison to dedication and vigour. However, this study reports that the difference between absorption and dedication is only statistically significant for the relationship between these factors and turnover intention and job satisfaction. This means that, in order to increase job satisfaction and reduce turnover intention, it could be more effective to tap into actions focused on the dedication component of engagement and not so much on the absorption component.

A further objective of the meta-analysis was to identify moderating variables in the relationship between engagement, resources and positive outcomes. The moderator analyses provided some insightful findings, mainly regarding turnover intention and development resources. In particular, this meta-analysis identified specific occupational groups, showing a lower association between engagement and turnover intention: Civil Servants, NGO workers and education workers. It could be argued that there are other reasons beyond engagement for people to remain at their jobs in this sector. In addition, we found a potential relationship between the percentage of managers in the sample and the intention to leave; hence, it seems that engagement is a weaker predictor of the intention to leave among managers than among their subordinates. This result is hard to interpret. It should be considered with caution as only 7 samples had all data available to perform the meta-regression. It should be considered a potential hint for future investigation.

Another demographic group with differentiated correlations is made up of countries with collective cultures, where the influence of feedback on engagement is stronger than in individualist cultures. A possible explanation could be that the relationship between self-efficacy and work engagement in collective cultures might not be similar to the relationship observed by studies conducted in Western countries (Chaudhay, 2014). In collective countries, dependence and belongingness are promoted over personal freedom (Hofstede,

1983); therefore, the influence of feedback from others will actually enhance self-efficacy, and this could have a higher influence on engagement than in individualist cultures where the concept of self-efficacy does not depend too much on others.

In addition, personal resources seem to have a higher influence among workers with a university degree. This might depend on the type of jobs developed and needs further investigation. In this study, some demographic variables did not show any moderation effect on the relationship between work engagement and its antecedents and consequences, such as age, tenure, and gender. Another interesting finding of the moderation analysis is that UWES-3 does not statistically differ from UWES-9 and UWES-17 in their relationship with engagement antecedents and outcomes. Relationships between variables are weaker with UWES-3 but this result may be interpreted as a consequence of the use of a shortened version of the scale. Hence, coefficient alpha, which is less bound by internal consistency, is generally reduced, and a larger proportion of the variance is due to a measurement error, with a subsequent reduction in correlations (Schaufeli et al., 2017). This reinforces the use of UWES-3 as a practical tool to measure engagement. One of the most critical phases of studies is data gathering, since participants are reluctant to participate if the survey is perceived to be too long and time consuming (Burisch,1984). There is increasing pressure on researchers to develop valid, reliable and short measures without redundant items (Fisher, Matthews, & Gibbons, 2016). Hence, using questionnaires with the shortest number of questions, like the UWES-3, would be very convenient for interventions, as long as there is no significant concession in terms of accuracy.

Finally, no moderator effect was found for the type of sample selection (rewarded participants vs. unrewarded participants). This result is parallel to the one stated by Demerouti & Rispens (2014) for student-recruited samples and non-student-recruiting samples.

Limitations and future research

Although this meta-analysis provides an updated picture of empirical evidence concerning the role of different types of resources in fostering work engagement and its relationship with various positive outcomes, some limitations should be acknowledged. The first is that, although the meta-analysis included quite a significant number of studies on work engagement, very few studies covered a wide scope of variables. Most of them provided few relationships among the whole set of variables contained in the Energy Compass tool; hence, for some of pairs of variables the number *k* was lower than desired. This limited the number of conclusions that could be reached in terms of statistical significance of differences between correlations.

A further weakness of this study is that, though all correlations referred exactly to the same engagement concept measured with an UWES scale, the other paired variable was less homogeneous in terms of definition and measurement scale across the diverse studies. This was taken into account in the random effects models but left some room for subjectivity in the coding that could influence some of the results in the event of a small *k* number. Moreover, given the lack of primary studies with the full range of moderator categories, we could only analyse potential moderators in a limited number of variables. This limited the findings that could be reached by moderating analyses. For instance, few studies included UWES-3 as a questionnaire as it has been introduced only recently, so it is advisable to replicate the analysis in the future with a higher sample of UWES-3 questionnaires.

Future research could also consider limiting the scope of correlation pairs and increasing the number of studies by including older papers. This would increase *k* figures, and the analysis could focus on the most important variables. The larger number of studies could also provide more examples in each category of moderators, and lead to additional conclusions, compared to those mentioned in this paper.

Practical implications

The main goal of this study was to define practical guidelines grounded in the meta-analysis of data contained in the most recent papers on work engagement. The objectives were set up with this practical mindset, and findings are interpreted in that sense. The practical guidelines are designed to be useful for practitioners implementing intervention strategies, but they might also be considered by different actors in the organisations: selection departments, training departments, operational managers, health prevention departments and general HR functions.

First, the prevalence of some resources over others in their relationship with engagement can have practical applications at the time of designing interventions. Although it is clear that promoting engagement depends very much on the specifics of each group of people, the findings provide guidelines about where to start the intervention when little knowledge about the group is available. In such a case, it could be interesting to first explore leadership training and personal resource development. Personal resource building interventions focus on increasing an individual's self-perceived positive attributes and strengths, often by developing self-efficacy, resilience or optimism, while leadership training interventions involve knowledge and skill building workshops for managers and measure work engagement in their direct employees (Knight et al., 2017).

Furthermore, this prevalence of certain resources is also interesting when informing the business world about how to build an engaged company. The rule of thumb for practitioners could be: if you want to have engaged employees, start by selecting them with the right characteristics (optimism, resilience), train them in these personal malleable characteristics, then provide them with the right leadership that builds the most appropriate organisational systems and promotes self-efficacy and personal development among them.

Finally, provide them with autonomy and variety in their job, and build support from supervisors and co-workers.

Moreover, the results of the meta-analysis on outcomes and well-being correlates provide some hints about what expectations to communicate when starting a work engagement intervention. It is clear that a higher impact on proximal factors, such as job satisfaction and commitment, is expected. Results on performance and health should be expected but to a lesser degree and probably at a later date. In addition, for practical purposes, the combination of findings about the absorption component and UWES-3 is also interesting. It is advisable to consider this ultra-short version of the engagement questionnaire in order to facilitate employee participation. This is highly advisable when multiple tests are analysing time periods. In any case, if the UWES-9 questionnaire is preferred, it could be interesting to consider only the dimensions vigour and dedication.

Lastly, regarding the moderator analysis, two findings are worth highlighting. When implementing interventions, culture could have an influence on success and it could be interesting to develop positive feedback interventions in a collectivist cultural environment. Moreover, the fact that engagement does not have a particular effect on the intention to leave of civil servants, volunteer workers and educators does not prevent the implementation of work engagement interventions in these collectives but, somehow, frames the expectations in such interventions.

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CAPÍTULO 3.

JOB CRAFTING AS A MEDIATOR BETWEEN WORK ENGAGEMENT AND WELL BEING OUTCOMES

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CAPÍTULO 3.

JOB CRAFTING AS A MEDIATOR BETWEEN WORK ENGAGEMENT AND WELL BEING OUTCOMES

Abstract

This time-lagged study, using the framework of the JD-R model, tested the mediating role of job crafting measuring, at T1, work engagement, workaholism and emotional exhaustion, at T2, job crafting and, at T3, flourishing, job performance and job satisfaction. Respondents were 443 Spanish employees working in different companies. Results show that job crafting mediates the relationship between work engagement and some of its outcomes (job performance and flourishing). In particular, the job crafting component 'increasing structural job resources' mediates the positive effect of work engagement on flourishing and job performance, and the job crafting component 'increasing challenging demands' mediates the positive effect of work engagement on job performance. No job crafting mediation is found between work engagement and job satisfaction.

Keywords: job crafting, demands, resources, engagement, well-being, job performance.

JOB CRAFTING AS A MEDIATOR BETWEEN WORK ENGAGEMENT AND WELL BEING OUTCOMES

Organizations have been recently more and more aware of the importance of employees' well-being because this may have positive results for the companies and for the society with a clear impact also on public health. Several concepts have been studied by occupational psychology in this regard: work engagement, burnout, stress, job performance and so on. Job crafting is a concept that, although still in its infancy (Demerouti, 2014), has been developed to better understand the virtuous cycle of employee well-being and organizational positive results.

This study contributes to the job crafting body of research with a time-lagged analysis of the relationship between several variables of the Job Demand-Resources (JD-R) model, which is the theoretical framework used in this paper, and some individual outcomes. Following main principles of the JD-R, we argue that certain aspects of engagement and burnout (as work engagement, workaholism and exhaustion), measured at T1, will lead to outcomes at T3, in particular, flourishing, job satisfaction and job performance. Taking into account job crafting, and the four components of job crafting proposed by Tims, Bakker and Derks (2013), at an intermediate time (T2), we will test the mediation processes between variables at T1 and T3.

The core contribution of this study is the analysis of the differential effects of the job crafting components on engagement outcomes and in the mediation processes between engagement and outcomes. The study has other additional contributions to the job crafting field of research: (a) it looks at job crafting as a consequence of engagement and not the other way around, as most of the previous research does; (b) it provides a time-lagged analysis of the JD-R model with a quite comprehensive set of variables; (c) more importantly, we

integrate previous studies that showed that work engagement promotes well-being and contributes to organizational development, by proving that job crafting is one of the mechanisms that explains that relationship.

In the following sections, we shortly describe the JD-R theoretical framework and how the two focal variables of the study, engagement and job crafting, fit with it. Then, we present the rationale of our hypotheses, describing why engagement, workaholism and emotional exhaustion (as antecedent variables) are related to job crafting (the mediator) and to our dependent variables (flourishing, job satisfaction and job performance). Then, we argue about the main target of this study, which is hypothesizing and testing the differential effects that job crafting components have on the individual outcomes here examined.

Job crafting and work engagement in the JD-R model

The term job crafting was coined by Wrzeniewski and Dutton (2001) as the physical and cognitive changes individuals make in their task or relational boundaries. It concerns the proactive changes in the job design that are not negotiated with the organizations, probably not even noticed by the manager [4]. According to Wrzeniewski and Dutton (2001), employees can change how work is conceptualized and carried out (i.e., changing task boundaries), how often and with whom they interact at work (i.e., changing relationship boundaries) and how they cognitively ascribe meaning and significance to their work (i.e., changing meaning).

The integration of job crafting in the JD-R model was proposed by Tims and Bakker (2010). In the JD-R model all job characteristics can be categorized into two types: job demands or job resources. Job demands refer to all aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills. Therefore, job

demands are associated with certain physiological or psychological costs. Job resources refer to those aspects of the job that are either/or functional in achieving work goals, reduce job demands and the associated physiological and psychological costs, and stimulate personal growth, learning, and development (Bakker and Demerouti, 2007).

Job crafting in the JD-R model framework is defined as the changes that employees introduce in their job demands and job resources to better meet their personal abilities and needs (Tims and Bakker, 2010). This conceptualization does not consider the cognitive dimension of job crafting and focuses only on real changes that employees make in their jobs. This is the conceptualization followed in this paper.

According to Tims, Bakker and Derks (2014), job crafting can take the form of four type of behaviors: (a) increasing social job resources, (b) increasing structural job resources, (c) increasing challenging job demands; and (d) decreasing hindering job demands. This factor structure for job crafting has also been found when job crafting is measured on a daily basis (Petrou, Demerouti, Peeters, Schaufeli and Hetland, 2012; Tims, Bakker and Derks, 2014).

Work engagement is defined as a positive, fulfilling and work-related state of mind that is characterized by vigor, dedication and absorption (Schaufeli, Salanova, González-Romá, Bakker, 2002). The vigor component refers to how stimulating, energetic and time worth devoting is the work perceived by the workers. Dedication reflects a significant and meaningful pursuit. Absorption is the component that describes when the workers are fully concentrated and immersed into the task.

Work engagement, extensively studied in the JD-R model, is influenced by job resources such as autonomy, feedback, social support and skill variety, as reported in many research papers and meta-analyses (e.g.: Christian, Garza and Slaughter, 2011; Halbesleben,

2010). This relationship is explained by arguing that job resources promote employees' extrinsic motivation (in other words increase their interest to achieve work goals) and intrinsic motivation (foster employees 'desire for growth, learning and development), which, in turn, affect work engagement.

Job crafting as a consequent of the well-being state

In this section we discuss how job crafting is related to employee well-being state measured by the level of work engagement, emotional exhaustion and workaholism of the employee. We first analyse the relationship of job crafting with the positive well-being state measured by work engagement. Then, we take into account the relationship between job crafting and the negative state variables of emotional exhaustion and workaholism.

There is an extensive literature about the impact of job crafting on work engagement, with job crafting considered a predictor of work engagement (Bakker, Tims and Derks, 2012; Vogt, Hakanenen, Brauvhli, Jenny and Bauer, 2016; Rudolph, Katz, Lavigne and Zacher, 2017; Makikangas, Aunola, Seppala and Hakanen, 2016). However, here we take a different position and we believe that a reversed causal positive relationship is possible (Bakker, 2011), and that work engagement may also promote job crafting. It is in fact likely that employees that feel motivated and enthusiastic and, therefore, engaged with their job, will be more prone to be proactive and to craft their job (Tims , Bakker and Derks, 2014). Also, job crafting behaviors are dependent, both in intensity and in typology, on task contextual and personal factors, like type of job and type of personality. Job crafting has been positively related to proactive personality (Bakker, Tims and Derk, 2012) and according to Roczniewska and Bakker (2016) personality plays an important role when choosing how to craft one´s job. In this sense, it seems reasonable to think that not only personality, but also a well-being state, as work engagement, could influence the intensity and type of job crafting.

However not many studies have empirically proved this causal relationship. Harju, Hakanen and Schaufeli (2016) found a cross lagged effect over time between work engagement and the two job crafting components of increasing social and structural resources. In Hakanen, Peeters and Schaufeli (2018), this causal relationship is tested longitudinally. In a sample of 1,877 Finnish dentists, they found that work engagement positively predicted increasing social and structural resources and challenging demands, and negatively predicted decreasing hindering job demands. However, they did not test this causal relationship with job crafting as a global indicator and we believe that an added value of our study is also the usage of the global indicator. Also, Hakanen et al. (2018) report as a limitation of their study having focused on a particular professional group (dentists) and they urge to replicate their results in other occupational contexts. Both limitations are going to be covered in this study where job crafting is measured as a global indicator and the sample is from a wide variety of occupations. Based on above mentioned theory and previous research, we hypothesize that:

H1: Work engagement at T1 is an antecedent of job crafting at T2.

One question is if job crafting, beyond being influenced by a positive well-being state of mind (work engagement), is influenced also by other negative wellbeing states of mind, such as emotional exhaustion or work addiction.

Emotional exhaustion is the clearest manifestation of burnout, a psychological syndrome in response to job stressors, which is characterized by emotional exhaustion, cynicism, and reduced professional efficacy (Maslach, Schaufeli and Leiter, 2001). Workaholics are, instead, employees that work excessively and compulsively, investing

continuously their resources in work, often at the expense of their private life and regardless whether they fail or succeed (Schaufeli, Bakker and Van Rhenen, 2009).

Some studies observed a negative relationship between burnout and job crafting components. Petrou et al. (2015) found that emotional exhaustion predicted decreasing hindering job demands and the other way around. The only study we have found that analyses the relationship between workaholism and job crafting is Hakanen et al. (2018), where they also studied the influence of burnout on job crafting components. They found different relationships between workaholism, burnout and specific job crafting components in a longitudinal sample of Finnish dentists. In particular, they found that workaholism positively predicted increasing structural resources and challenging demands and that burnout positively predicted decreasing hindering job demands and negatively predicted increasing structural resources.

The difference between these studies and ours is that we simultaneously include all these three variables (engagement, workaholism and emotional exhaustion) and relate them to a global job crafting measure and to personal and organizational outcomes, while controlling for each other.

We also expect a stronger causal relationship between work engagement and job crafting than between emotional exhaustion, workaholism and job crafting. One of the reasons is that, as explained above, engagement has been proved to be related to all components of job crafting, while emotional exhaustion and workaholism only to some of them. Another reason is that, according to Bakker and Demerouti's (2008) model, job crafting and work engagement are concepts included in the JD-R motivational process line (in which high job resources lead to positive organizational outcomes) and not in the health impairment line (where chronic high job demands lead to strain and health problems) where it

is more reasonable to locate the main influence of emotional exhaustion and workaholism. Therefore, we forecast the following:

H2: Work engagement in T1 is a stronger predictor of job crafting at T2 than workaholism and emotional exhaustion.

Job crafting mediation between work engagement and its outcomes.

Studies and meta-analyses showed that work engagement has many consequences, related to task performance and contextual performance that are positive for workers and their organizations (Christian et al., 2011; Halbesleben, 2010). It is also believed that job crafting behaviors are mainly associated with positive outcomes, since proactive employees, capable to modify their working environment, are also more likely to contribute positively to the organization (Tims and Bakker, 2010). In addition, job crafting behaviors, improving person-job fit, put workers in condition to have a better performance and also a better well-being condition (Kooij, Van Woerkom, Wilkenloh, Dorenbosch and Denissen, 2017). This positive relationship has been observed also in a quasi-experimental study, conducted with teachers, in which it is shown that a job crafting intervention had positive effects on employee well-being (Van Wingerden and Bakker, 2017)

The question is that whether these two lines of influence, from engagement to positive outcomes and from job crafting to positive outcomes, are somehow linked. The research so far has studied the mechanism by which job crafting creates more engagement and other concurrent positive outcomes, but there is not so far, any research that analyses if a particular engagement state can build on job crafting behaviors to produce positive personal and organizational outcomes.

Thus, based on the JD-R model and on empirical studies, we forecast that engaged employees will craft their job by introducing changes in resources and demands, thus creating better conditions to reach higher levels of positive outcomes. In another way, there is an indirect effect from work engagement to positive outcomes through job crafting. This leads us to formulate the following:

H3: Job crafting, at T2, mediates the effect of work engagement at T1, over job performance, job satisfaction and flourishing, at T3

Differential effects of job crafting components

Many authors agree that job crafting components behave differently and have underlying differential processes with the variables with which they have been related, and this could be a reason for some inconsistencies observed in job crafting studies.

In particular, inconsistencies have been observed in studies relating such components with engagement. We mentioned above how in Hakanen, Peeters and Schaufeli (2018) study, all job crafting components are positively related to engagement except decreasing hindering job demands, which is negatively related. Instead, Sakuraya et al. (2017) report that decreasing job hindering demands is not related to work engagement, while the other components are.

There are even some authors that split the job crafting components into two groups with differential properties. This is the case for Tims, Bakker and Derks (2015). They define expansive components (increasing structural resources, increasing social resources and increasing challenging demands) versus hindering demands components (decreasing hindering job demands). Demerouti (2014) talks about expansive job crafting, which includes

seeking resources and new challenges and coping-related job crafting, comprising decreasing negative aspects of the job.

The differential effect of job crafting components on consequences generated by wok engagement has not yet been tested. However, considering that job crafting components seem to have differential relationships with engagement, we forecast that job crafting components will have differential effects also with job performance, job satisfaction and flourishing, and, in particular, that the component decreasing hindering job demands will not mediate between engagement and outcomes, while the other components will have a mediating effect.

H4: *Job crafting components behave differently in the mediation process; in particular, decreasing hindering job demands at T2 will not mediate between engagement at T1 and positive outcomes at T3, while the other three components will mediate.*

Method.

Participants

To alleviate common method variance concerns, data were collected in three rounds (from now on T1, T2, T3), with a 4-month time lag. A sample of 443 Spanish white-collar employees, working in health and education (32,5%), industry (8,9%), banking (7,8%), pubic administration (4,2%) and other services, answered three questionnaires. At T1 engagement, workaholism and exhaustion were measured; at T2, we measured job crafting and, at T3, job performance, job satisfaction and flourishing.

Women are 63% of the sample. The average age is 41-year-old. Average tenure is 11,64 years; 73% of respondents hold a university degree and 46% are managers. Gender,

age, tenure, education and organizational level were used as control variables; all respondents were white collars; thus, we did not control for type of job.

Measures

Work engagement was measured using the Spanish validated version of the Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Bakker and Salanova, 2006). This scale is the reduced version of the 17-item UWES. It contains nine items in three sub scales: Vigor (e.g." At my work I feel bursting with energy"), dedication (e.g., " I am enthusiastic about my job") and absorption (e.g., "I feel happy when I am working intensively"). Answers are given on a five-point scale, ranging for (1) never to (5) very often.

Workaholism was measured using the Spanish validated version of the Dutch Work Addiction Scale (DUWAS) (Schaufeli and Taris, 2004). The scale consists of 10 items in two subscales: working excessively (WE; e.g." I seem to be in a hurry and racing around the clock") and working compulsively (WC; e.g., "it is important to me to work hard even when I do not enjoy what I am doing"). Answers are given on a five-point scale, ranging for (1) never to (5) very often.

Emotional exhaustion was measured using five items from the Maslach Burnout Inventory-General Survey (MBI-GS) (Schaufeli, Leiter and Maslach, 1996), translated to Spanish for this study. Example of one item is: "I am emotionally exhausted by my job ". Answers are given on a five-point scale, ranging for (1) never to (5) very often.

Job crafting was measured using the Job Crafting scale developed by Tims, Bakker and Derks (2012), validated to Spanish language (Ficapal-Cusí, Torrent, Boada-Grau, Hontangas Beltran, 2014). It contains 21 items in four sub-scales: increasing social job resources (ISR), increasing structural job resources (ISJR), increasing challenging job demands (ICJD) and decreasing hindering job demands (DJD). Examples are: "I ask my

supervisor to coach me" (ISR); "I try to develop my capabilities" (ISJR); "when an interesting project comes along, I offer myself proactively as project co-worker" (ICJD), and "I make sure that my work is mentally less intense" (DJD). Answers follow a five-point scale, ranging for (1) never to (5) very often.

Job Satisfaction was measured by four items of the Brief Affective Job Satisfaction Scale (BIAJS) (Thomson and Phua, 2012), validated to Spanish language (Fernández Muñoz and Topa, 2018). An example of one item is: “I really enjoy my job”. Answers are given on a five-point scale, ranging for (1) never to (5) very often.

Flourishing was assessed using the Spanish version (FS-SV) (Ramirez-Maestre et al., 2017) of Diener et al.'s Flourishing Scale (2010). The scale assesses major aspects of social-psychological functioning, as having good social relationships, a purposeful and meaningful life, and being interested in one’s activities. Example of one item is: “I am optimistic about my future”. Answers are given on a five-point scale, ranging for (1) never to (5) very often.

Job performance was measured by the seven items of the In-Role Behavior Scale (IRB) developed by Williams and Anderson (1991). The original version in English has been already used in the Spanish language in a previous study (Villajos, Garcia-Ael and Topa, 2019). A sample item is: ``fulfills responsibilities specified in the job description." Answers are given on a five-point scale, ranging for (1) never to (5) very often. Items 6 and 7 are reversed items.

Procedure

The present study was approved by the Ethical Committee of the UNED in 2018.

The HR department of companies that had worked with us in previous studies were contacted and invited to participate in a study about career planning. Companies that accepted to participate, distributed to their workers a link to online questionnaires built with the tool

google forms. Workers participation was voluntary and confidential. The first part of the questionnaire comprised an informed consent form. Respondents were then informed of the voluntary and anonymous nature of their participation, of the aims of the research project and of the fact that they were free to abandon the study at any moment without any penalty.

Data analysis

The hypotheses 1 and 2 were tested through hierarchical regression methodology and hypotheses 3 and 4 were tested in two steps with structural equation modelling (SEM) analysis using the AMOS software package (Arbuckle, 2006): in the first step we tested the measurement model and in the second step we tested the structural paths. To test the fit of alternative models to the data we used the traditional chi-square, the normed chi-square (CMIN/DF), the Root Mean Square Error Approximation (RMSEA) and the comparative fit index (CFI). The values considered to be good fit of the model to the data are RMSEA< .08 (Browne and Cudeck, 1993) CMIN/DF <.5 (Marsh and Hocevar, 1985) and CFI > .90 (Marsh, Balla and Hau, 1996)

Results

Table 1 shows correlations between all variables and their components, and Cronbach alphas. All variables have a high reliability, with all Cronbach alphas well above 0.70. One of the relevant results from Table 1 is that there is no significant correlation between workaholism and work engagement and between workaholism and the general job crafting indicator. However, workaholism is positively correlated with emotional exhaustion (r=.43) and emotional exhaustion is negatively correlated with engagement (r=-.54). These results are like those in Schaufeli et al. (2008). Work engagement is well related with the global indicator and all the components of job crafting (from r=-.18 to r=.54) and, similarly, to the other outcome variables.

To test hypothesis 1 and 2, a hierarchical regression of job crafting at T2, over T1 variables was run. In step 1 the control variables were introduced. In step 2 all T1 variables were introduced at the same time. The results in Table 2 show that engagement is clearly an antecedent of job crafting (Beta = .52, $p < .01$) (which confirms Hypothesis 1) and that neither workaholism nor emotional exhaustion have a significant influence on job crafting. So, work engagement is clearly a stronger predictor of job crafting than workaholism and emotional exhaustion (thus confirming Hypothesis 2).

To explore H3 a set of hierarchical regressions were run, with job performance, job satisfaction and flourishing regressed on T3, T2 and T1 variables. In Step 1, the same control variables as before were introduced. In Step 2, T1 variables were introduced. In Step 3, job crafting was introduced. In Step 4, the other T3 variables were introduced. Results are also shown in Table 2.

Table 1.

Pearson correlations and reliabilities of the study variables.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Emotional Exhaustion	.90															
2	Work engagement	-.54**	.93														
3	Vigor	-.61**	.91**	.85													
4	Dedication	-.54**	.94**	.83**	.89												
5	Absorption	-.31**	.87**	.66**	.74**	.79											
6	Workaholism	.42**	.08	-.06	.04	.25**	.88										
7	WE	.45**	.07	-.07	.03	.23**	.93**	.80									
8	WC	.33**	.07	-.05	.04	.23**	.91**	.69**	.77								
9	Job Crafting	-.14**	.44**	.41**	.43**	.36**	.12**	.10*	.12**	.79							
10	ISJR	-.29**	.54**	.52**	.55**	.41**	.04	.05	.02	.64**	.81						
11	DJD	.20**	-.18**	-.17**	-.18**	-.14**	-.07	-.07	-.05	.47**	.02	.78					
12	ISR	-.14**	.30**	.29**	.31**	.22**	.07	.04	.09	.65**	.22**	.06	.76				
13	ICJD	-.20**	.53**	.46**	.49**	.49**	.27**	.26**	.24**	.69**	.55**	-.06	.29**	.83			
14	Job Performance	-.17**	.18**	.18**	.19**	.11*	-.13**	-.12**	-.12**	.22**	.38**	.04	.04	.19**	.84		
15	Flourishing	-.39**	.48**	.54**	.47**	.30**	-.22**	-.19**	-.22**	.30**	.47**	-.02	.13**	.25**	.29**	.88	
16	Job Satisfaction	-.60**	.82**	.77**	.83**	.63**	-.049	-.02	-.06	.36**	.49**	-.19**	.26**	.43**	.18**	.46**	.92

Note: WE = Working excessively; WC = Working compulsively; *p < .05; **p < .01; Cronbach alphas are on the diagonal.

Table 2

Multiple regression analysis.

	Job Crafting		Job Satisfaction				Job Performance				Flourishing			
	Step1	**Step2**	**Step1**	**Step2**	**Step3**	**Step4**	**Step1**	**Step2**	**Step3**	**Step4**	**Step1**	**Step2**	**Step3**	**Step4**
Control variables														
Age	-.03	-.04	-.02	-.04	-.04	-.04	-.02	-.04	-.03	-.03	.00	-.03	-.02	-.02
Tenure	-.03	-.04	.03	.00	.00	.01	.00	-.02	-.01	-.01	.03	-.01	.00	.00
Gender	.04	.03	.00	.03	.03	.03	.02	.03	.02	.03	.00	.02	.02	.02
Education	.13**	.11**	.01	-.01	-.01	-.01	-.08	-.07	-.10	-.08	-.04	-.04	-.06	-.04
Org Level	.05	.08	-.11*	-.04	-.04	-.04	-.08	-.07	-.08	-.07	-.06	-.03	-.04	-.02
T1 variables														
Engagement		.52**		.70**	.68**	.66**		.20**	.08	-.01		.50**	.43**	.36**
Workaholism		.02		-.02	-.02	.00		-.17**	-.18*	-.10*		-.26**	-.26**	-.22**
Emotional Exhaustion		.11		-.22**	-.23**	-.21**		.03	.01	.03		-.02	-.04	-.03
T2 variable														
Job Crafting					.03	.03			.23**	.20**			.14**	.10*
T3 variables														
Job Satisfaction										.00				.08
Job Performance						.00								.15**
Flourishing						.04				.20**				
R^2	.02	.24	.01	.71	.71	.71	.01	.06	.10	.13	.01	.32	.33	.36
R^2 Change	.02	.22**	.01	.70**	.00	.00	.01	.05**	.04**	.03	.01	.31**	.01	.03

Note: * p<.05, ** p<.01

Looking at the impact of job crafting, measured at T2, on outcome variables measured at T3 (Step 3), we note that job crafting is a predictor of job performance (Beta = .23, $p < .01$) and flourishing (Beta = .14, $p < .05$) but not of job satisfaction. In addition, we note that when we introduce job crafting as a predictor of job performance, the influence of work engagement disappears (from Beta = .20, $p < .01$, to Beta= -.08, p = non-significant), so it seems that job crafting is a full mediator between engagement and job performance. For flourishing, however, introducing job crafting does not fully takes out the influence of engagement (whose Beta goes from .50, $p < .01$, to.43, $p<.01$), so it seems that job crafting is a partial mediator between engagement and flourishing. In this way Hypothesis 3 is partially accepted as job crafting mediates the relationship between engagement and well-being outcomes, only for job performance and flourishing but not for job satisfaction.

Job satisfaction is predicted by engagement and emotional exhaustion and does not have a direct relationship with job crafting. For this reason, we tested the mediation of job crafting and its components (Hypothesis 4) only on job performance and flourishing (see Figure 1) using a structural equation modelling approach. We first tested the measurement model that showed a good fit to the data: $\chi 2$ (543) = 1,454, CMIN/DF = 2.582, CFI = .902, RMSEA = .06.

To test the path model, we tested the significance of the paths of 5 different models. In M1 we tested the mediation of the global job crafting measurement; in M2 we tested the mediation of increasing structural resources component; in M3 we tested the mediation of increasing social resources component; in M4 we tested the mediation of increasing challenging demands and in M5 we tested the mediation of the decreasing job demands component.

All models have a good goodness of fit, as shown in Table 3. Path results are reported in Figure 1. The scores of the relationship of work engagement with flourishing and job

performance, reported in Figure 1, take into account the mediating effect of job crafting (and its components) and thus represent the indirect effects.

Table 3.

Fit indices of the alternative models.

	χ2 (df)	p	CMIN/DF	CFI	RMSEA
M1.- Global Job crafting mediation	1,408 (544)	.000	2.588	.902	.060
M2.- Increasing structural resources mediation	802 (243)	.000	3.304	.916	.072
M3.- Increasing social resources mediation	829 (264)	.000	3.140	.910	.070
M4.- Increasing challenging demands mediation	731 (220)	.000	3.325	.916	.072
M5.- Decreasing hindering demands mediation	652 (200)	.000	3.261	.910	.072

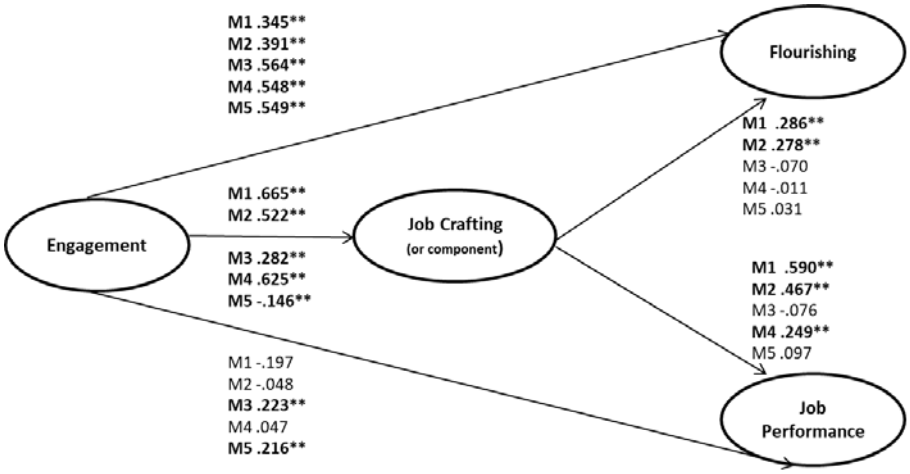

Figure 1. Path modelling of alternative models *(Betas,* ** p<.01, * p<.05).

As a summary of Figure 1 and related to hypothesis 3 and 4, our results suggest that: (a) both global job crafting and increasing structural resources are partial mediators between work engagement and flourishing; (b) global job crafting, increasing structural resources and increasing challenging demands are full mediators between work engagement and job performance; (c) no mediation is observed with decreasing hindering job demands and increasing social resources; (d) decreasing hindering job demands is negatively related to engagement, while all other components are positively related to work engagement.

In other words, job crafting partially mediates between engagement and flourishing and the mediation is due to the increase of structural resources. Job crafting also fully mediates

between engagement and job performance, and the mechanisms are due to the increase of structural resources and the increase of challenging demands.

So, we partially accept hypothesis 4 because decreasing job demands, as expected, is not a mechanism in the mediation process, but we have not found the expected mediation of increasing social resources.

Discussion

This time-lagged study demonstrates first that worker engagement state will determine the level of job crafting behaviors that employees will deploy in the future: the higher the engagement, the higher the level of job crafting behaviors.

Secondly, this study shows that while work engagement is a stronger predictor of job crafting behaviors than workaholism and burnout, whose effect is not comparable with engagement, in the sense that they do not affect job crafting behaviors at all. So, we can conclude that job crafting, as a global concept, is triggered by a positive (engagement) and not by negative states of mind (emotional exhaustion and workaholism).

These results seem to be in line with the principles of the JD-R model (Bakker and Demerouti, 2007). Hence, in line with Bakker and Demerouti (2017), there is a motivational process to which engagement and job crafting contribute, and a health impairment process which sees the main contribution of emotional exhaustion and workaholism. The health impairment line, in this study, and in line with JD-R model (Bakker and Demerouti, 2007), is linked with the motivational line through the negative correlation between emotional exhaustion and engagement.

Thirdly, the study shows that there is an indirect effect from work engagement to job performance and flourishing through job crafting. This result, expected according to theory, has not been observed, till now, in previous studies. This means that engaged employees not

only are more prone to develop job crafting behaviors, but also that these job crafting behaviors contribute to improved job performance and social-psychological well-being. Some studies have already demonstrated that job crafting increases engagement; thus, taking into account also our results, we can anticipate a virtuous gain loop: 'engagement leads to job crafting that leads to more engagement, that leads to more job crafting, and so on'. This is the idea of the spiral gain that was already proposed by Schaufeli, Bakker and Rhenen (2009): "initial work engagement predicts an increase in job resources, which, in its turn, further increases work engagement".

Fourthly, we have confirmed that the component decreasing hindering job demands has a different effect compared to the other job crafting components. This differential effect is found in many research studies and even in the original paper by Tims et al. (2012) on the development and validation of the Job Crafting Scale. In our study, decreasing hindering job demands does not correlate with the rest of job crafting components, neither with job performance and flourishing and it is negatively correlated with engagement and job satisfaction, and positively correlated with emotional exhaustion. It seems also clear that decreasing job demands is not a mechanism in the mediation between engagement and outcomes.

The interpretation is that decreasing hindering job demands can be seen as something positive (I want to obtain the best performance, so I prioritize my tasks and ignore other requests) or it can be interpreted like something negative (I do not like my job, so I try to do as less as possible of what is expected by me). This positive or negative characterization may depend on the sample or on the specific context, but in the whole, it will not have a relevant impact on engagement and positive outcomes. This dependency from the context may explain the results observed by Dierdorff and Jensen (2018) that conclude that job crafting might have dysfunctional consequences for performance related outcomes under certain conditions

of task and social context. Another explanation is that decreasing job demands might be a too ample component that might contain multiple concepts. Something similar was stated by Nielsen and Abildgaard (2012) that found two types of decreasing job demands (hindering and social) that were differentially related to other psychosocial variables.

One unexpected result was the lack of influence of the increasing social resources component in the mediational process. This is not in line with the finding of Hakanen, Peeters and Schaufeli (2018) but is close to the result observed by van Windergen, Bakkers and Derks (2017) that found that increasing social resources was not affected by an intervention to increase job crafting.

What is clear in our research is that increasing structural job resources and increasing challenging job demands are the two strongest job crafting components in the relationship between work engagement and outcomes. In fact, they seem to be the most productive mechanisms to leverage the effect of job crafting in order an engaged workforce may get positive outcomes.

Limitations and practical implications

Limitations come mainly from the type of methodology used in the study. A first limitation is the time-lagged design. It provides a more rigorous test of non-spurious associations than cross-sectional studies, and avoids the common method bias, but anyway a full longitudinal analysis, collecting measures of work engagement, job crafting and outcomes in the three time periods, would have allowed a more rigorous causal analysis. Another limitation is that job performance is only measured by self-ratings of in role performance and not by peer or supervisor reports of in role and extra role. Also, a limitation could be the four-month time-lag between measures that could not have been enough to capture some effects over time, for instance the effect of some job crafting component on

flourishing or job performance. Another limitation is that we did not compute the percentage of variance that the indirect effect accounts for. This could have given an idea of the strength of the mediation, although we believe that this is not a problem in our study as we were looking for mediation versus no mediation effect instead of the relative strength of mediations.

Practical implications concern the positive effects of work engagement. In detail, this study suggests that enhancing work engagement may be an effective way to increase job crafting and prevent poor well-being. Organizations should be also aware of the influence of job crafting as a tool to increase job performance and worker's well-being; they should also promote interventions that foster employees' proactivity to increase structural resources and challenging demands, which are the two most influential components in the job crafting boosting process.

Findings are not just useful for organizations. Implications for public health may be related to the increase of the well-being of an already positive labor workforce. A public health policy that facilitates training and interventions in job crafting can be a powerful tool to increase job performance Van Windergen et al. (2017) conclude that a job crafting intervention can increase the resource opportunities for professional development. In fact, self-initiated skills development at work is a type of job crafting (Lyons, 2008). Also, Akkermans and Tims (2017) state that job crafting mediates the positive relationship between career competencies and career success, measured by both internal and external perceived employability. Linking these studies to the findings in our study we can conclude that it is important to facilitate self-learning and development activities (increasing structural job resources) that are at the same time challenging (increasing challenging demands), so the effect of engagement on job performance and well-being are maximized.

Future Research

Finally, there are some additional side results, non-core for the objectives of the study, but that are worth noting because they open the door for future studies.

Job satisfaction is only predicted by engagement and emotional exhaustion and not by job crafting. This is in line with Hakanen, Peeters and Schaufeli (2018) where job satisfaction does not relate to job crafting. It is interesting to see that job satisfaction is not related to job crafting while flourishing is, despite being both well-being outcomes of the motivational line. The interpretation we make is that although both job satisfaction and flourishing are well-being variables and outcomes of engagement, flourishing conveys some active role of the employee ("I lead a purposed and meaningful life", "I actively contribute to the happiness and well-being of others") and not just a passive role as job satisfaction, so flourishing is closer to job crafting than job satisfaction. To interpret this result, further investigation of the role of job satisfaction in the JD-R motivational process and its relationship with job crafting is needed.

The absorption dimension of engagement has a differential behavior than vigor and dedication. The internal correlations inside the construct engagement is lower for this component and also the correlation is less strong with the rest of variables. So, absorption is the only engagement component that can have a dual interpretation: one positive and close to the concept of flow and another one negative and closer to the concept of workaholism. This finding could be incorporated to the body of research in work engagement for further analysis.

In the job crafting indicator there seems to be an influence on the education level, meaning that the higher the level of education the higher the level of job crafting behaviors

deployed. We have not found any study relating job crafting to the education level, so further research is needed.

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

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CAPÍTULO 4.

LINKING MECHANISMS BETWEEN A SUPPORT CLIMATE, JOB SATISFACTION AND OCB FRAMED INTO THE JD-R MODEL

Enrique Robledo Martín

CAPÍTULO 4.

LINKING MECHANISMS BETWEEN A SUPPORT CLIMATE, JOB SATISFACTION AND OCB FRAMED INTO THE JD-R MODEL

Abstract

The present research examined how a support climate can influence organizational citizenship behaviours (OCB) grounded in the JD-R principles. The variables of climate, job resources, job demands, job satisfaction, health and OCB were measured in a sample (N=105) of employees from a Spanish transportation company. The main finding shows that a support climate promotes OCB and that this influence has two indirect paths: one through the increase of job resources and another one through the increase of job satisfaction. The findings of the study also endorse the principle of the JD-R that states the existence of a health impairment line and a motivational process line. In the health impairment line, the employee perception of a poor support climate would increase job demands and this would have a negative effect on health. In the motivational process line, a perception of a high support climate would increase job resources, and this will increase job satisfaction and OCB.

Keywords: demands, resources, OCB, climate, competing values framework.

LINKING MECHANISMS BETWEEN A SUPPORT CLIMATE, JOB SATISFACTION AND OCB FRAMED INTO THE JD-R MODEL

The body of research suggests that important organizational work environment characteristics such as organizational climates elicit discretionary employee behaviours, such as OCBs (Schneider et al, 2016). This relationship between organizational climate and OCB has been previously found in other studies (Kokt and Ramarumo, 2014; Herren 2016). However, the mechanisms by which that process takes place are not clear yet.

The aim of the present study is to find some of those mechanisms under the lens of the JD-R model. In particular, the variable selected to conceptualise the work environment will be the climate categorized according the competing values framework (CFV). As the theoretical framework selected is the JD-R model, the relevant variables of the model are selected to do analysis: job demands, job resources, job satisfaction and health.

The main contribution of this study will be to link the type of organizational climate with OCB under the JD-R framework. This will allow to find some explanations, in terms of JD-R model, about how the right organizational climate can elicit OCB.

OCB

Organizational citizenship behaviour refers to employee activities that exceed the formal requirements and contribute to effective functioning of the organization (Finkelstein and Penner, 2004). The term was introduced by Organ and colleagues (Smith, Organ and Near, 1983) and since then, a variability of labels has been used to describe behaviours that in general fit the definition of OCB. Those definitions share that involve long-term, planned and discretionary behaviours that occur in an organizational context over an extended period of time and that benefit non-intimate others at two levels: individuals and the organizations

itself (Davila and Finkelstein, 2010). At the individual level the help can be work-related, for example assisting a workmate with a specific task, or not work-related, for example helping with a personal problem. One example at the organizational level could be offering ideas to improve the functioning of the organization.

Long-term organizational survival and effectiveness is related not only to task performance but also to organizational citizenship behaviours, that it is a concept that supports a broad organizational, social, and psychological environment (Organ, 1988). Empirical studies show that OCB improve performance in several metrics such as performance ratings, productivity, efficiency, and customer satisfaction (Podsakoff et al, 2009). These OCBs have also relevance to organizational effectiveness because they enhance organizational adaptability (Marinova et al., 2010)

Climate and level of analysis

Psychological climate refers to how organizational environments are perceived and interpreted by their employees (James et al, 1978) and it can be viewed as an individual´s cognitive map of his or her work context (Ashkanasy, 2010). It is generally accepted that psychological climate is a property of the individual and that the individual is the appropriate level of theory, measurement, and analysis (James et al, 1978). In contrast, the organizational climate, that is a property of the organization itself and represents employees' descriptions of an area of strategic focus or organizational functioning, it is a group-level construct that can be measured by the aggregation of individual perceptions (Parker et al, 2003)

In this study, when we refer to the term climate, we talk about the individual employee perception of the organizational environment. It is important to study individual level climate because it is employees´ perceptions and valuations of the environment rather

than the environment itself that mediate attitudinal and behavioural responses (Brown and Leigh, 1996). In this study job satisfaction as an attitudinal variable and OCB as behavioural responses are measured at the individual level, so the decision was to measure also perceptions of the work context at the individual level. Therefore, in this study, the individual is the appropriate level of theory, measurement and analysis.

Climate and the CVF

CFV was originally developed as a cultural framework by Cammeron and Quinn (2006). There is considerable confusion in the literature relating the concepts of climate and culture (Parker et al 2003). According to the integrated model of climate and culture (Ostroff, Kinicki and Tamkins, 2003), the climate is a description, based in the experience, about what the people perceive and interpret that happens in the organizational context. On the other side, the culture is an employee´s fundamental ideology that explains why behaviour happens. In any case, culture and climate are interrelated, since the culture of an organization is what dictates the behaviours expected of employees and therefore allows to form a specific work environment, which precisely defines a certain organizational climate (Yahyagil 2006).

This interrelation between climate and culture led to Patterson et al (2005) to theoretically and empirically validate the use of this model to measure organizational climate. Since then, this model has been used in the climate literature as a mean to integrate organizational values via a climate lens (Marinova & Cao 2018). The CVF is the model that has more empirical evidence and has greater simplicity and conceptual clarity, as many research works have shown (Hernandez and Fernandez, 2008).

The model of Cammeron and Quinn (2006) was designed after a series of investigations that had the objective of finding indicators of organizational effectiveness.

They classify the culture and climate according to 4 types that can be seen named in the research literature as clan/hierarchy/adhocracy/market or collaborate/control/create/compete or support/rules/innovation/market. In this paper we will use the latter terminology. Each resulting culture and climate is different and opposite to the rest and this is what gives the name to the model. Support climate is defined as the degree to which the relations between the members of the organization are friendly and of mutual collaboration. Rule-oriented climate describes the degree to which the behavior of employees is regulated by rules and formal rules. Climate of goals defines the degree in which activities and behaviors are oriented towards the achievement of previously established objectives. Climate of innovation is the degree to which new ideas and projects are well received and stimulated. In addition to categorizing culture and climate, it indicates what type of leadership defines each typology. Thus, in a climate of support, leaders act as facilitators, mentors and builders of teamwork. In an innovation climate, leaders are innovators, entrepreneurs and visionaries. In a climate of rules, the leaders are coordinators, monitors and organizers. In a climate of results, leaders are competitive, productive and push to achieve results.

Relationship between OCB and climate

Although the influence of climate on well-being is highly dependable on situational and personal conditions, there is an extensive set of articles that show an advantage in the flexible dimensions (support and innovation) against the inflexible (rules and goals). In Kokt and Ramarumo (2014) a collaborative and innovative climate is related to positive outcomes like engagement less burnout. In Herren (2016) a support climate motives OCB more strongly than a climate of goals.

Social information processing theory (SIP) can be used as a theoretical ground base to explain this influence of a support climate in OCB. SIP states that the social context

influences worker attitudes and behaviours through the creation of meaning and through bringing salient information to his or her attention (Salanick and Pfeffer, 1978). In this way a support social context will bring salient information in the mind of the worker about collaborative behaviours of its co-workers. It will also create the meaning in the mind of the worker that in its context, it is acceptable and desirable to deploy collaborative behaviours, so it is reasonable to expect that this will lead to more OCB in the worker.

Then, based on theory and previous research we forecast that in our sample:

H1: OCB is more strongly related to a support climate than to any other type of climate.

The question yet unexplored in the research and that this study tries to answer is what variables mediate between this support climate and OCB. To explore it we introduce the JD-R model principles.

JD-R model

According to the JD-R model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), employees' well-being is affected by a range of workplace characteristics that can be clustered into two main classes: job demands, entailing those aspects that require effort and are therefore associated with physical and psychological costs, and job resources, defined as those job-related aspects that allow employees to cope with the demanding aspects of their job and stimulate their learning and development (Bakker & Demerouti, 2007).

In contrast to traditional stress models such as the Job Demands Control (JD-C) model (Karasek, 1979) and the Effort-Reward Imbalance (ERI) model (Siegrist, 1996), the JD-R model is not merely focused on specific demands and resources pertaining to the work context, but rather it conceives any demand and resource as a factor potentially able to influence employees' job-related and personal outcomes. In that sense, this model broadens the insight on the protective and detrimental features of the work environments and

developments of the model have enriched the model with variables such as personal resources, leadership and culture or climate.

These demands and resources, according to the JD-R principles, are related to attitudinal, performance and health variables by two distinct processes (Bakker & Demerouti, 2007). The so-called health impairment process postulates that a prolonged exposure to an excessive amount of job demands combined with lacking job resources may lead employees to experience a condition of cognitive and emotional exhaustion (i.e., job burnout) that, in the long run, may result in harmful consequences for employees (e.g., impaired wellbeing) and their job (e.g., inadequate job performance). On the other hand, the motivational process of the JD-R model hypothesizes that an adequate availability of job resources may foster employees' levels of work engagement that, in turn, lead to positive outcomes such as an improved job performance, well-being, organizational commitment, and motivation towards one's job.

Translating this to the variables in our study, we expect to find job demands and health negatively related in the health impairment line and job resources and job satisfaction positively related in the motivational line.

About the fit of climate in the JD-R model, climate is considered to be a job resource itself (Bakker et al, 2004) and a second order resource that generates further resources as we explain below.

A statement of the JD-R model is that a climate that satisfies worker´s need for advancement, self-fulfilment and job realization fosters work engagement (Bakker and Demerouti, 2007). An affective climate has an influence on the psychological working conditions (Levecque, Roose and Vanroelen 2014). In the JD-R framework, job resources may not be only valued as such, but also because they are instrumental for obtaining or protecting other valuable resources (Bakker et al., 2007). This is the case for the support

climate. It is the type of climate that best fits the idea of job resource as it bestows or protects resources that have been proved to lead to work engagement (Bakker et al. 2007). It encompasses the values of flexibility and internal focus and uses cohesion and morale to achieve human resources development. Both its means (cohesion and moral) and ends (human resource development) can be considered resource enhancing work engagement (Schaufeli & Bakker, 2004).

In particular, a support climate is linked to job satisfaction (Ahsraf and Rezaie, 2015). In a meta-analysis Hartneel, Ou and Kinicki (2011) found that job satisfaction was more strongly related to a collaborative environment than to the rest of environments.

In summary, a support climate is a resource itself that can act as a second order resource that generates further resources and subsequently lead to job satisfaction. So support climate is a variable that operates in the motivational process line.

But the support climate not only operates in the motivational line. It also plays a buffering role in the health impairment process. One of the principles of the JD-R model is that some job resources can buffer the relationship between job demands and outcomes (Bakker and Demerouti, 2007). This is the case of a support climate. In Mijakoski et al (2012) a collaborative climate is related negatively with work demands (physical, emotional and organizational) in a sample of nurses and physicians. According to Cox, Griffiths, and Rial (2000), the climate and the dominant culture in an organization have a great impact on the health of employees. Another example is in Clarke (2010), where the climate is related to the employee general health and accident rate. So we expect that support climate is negatively related to job demands and positively to health.

Therefore, we predict the existence of a dual process in our sample as follows:

H2: There is a health impairment line in which a support climate relates negatively to demands and these, positively to health.

H3: There is a motivational process line in which a support climate relates positively to resources and these positively to job satisfaction.

The question now is how OCB can fit in this dual process. Several studies have focused on the antecedents of OCB and they have found strong correlations between OCB and such attitudinal variables as job satisfaction, organizational justice, organizational commitment, perceived supervisor support and employee engagement (Omar & Uribe, 2005; Organ & Ryan, 1995; Shaaban 2018). It is known that an environment that is perceived as psychologically safe and meaningful by employees is related to a greater energy in the work of the organization (Brown and Leigh, 1996). So, OCB is related to positive outcomes in the JD-R model and therefore it is expected to be part of the motivational process line and as part of the motivational process line, is expected to be related to job resources. This is also consistent with Park (2019), where OCB is found to be related to work engagement and to the leadership style, that can be considered as a type of job resource. This close relationship between job resources, work engagement and OCB are also found in Marić et al (2019). In fact, these authors found that work engagement mediated the relationship between job resources and OCB, what is a clear indication that OCB is part of the motivational process line in the JD-R.

We also expect OCB to be related to job satisfaction. Research has already found that the relationship between psychological climate and performance is fully mediated by employees work attitudes as job satisfaction (Gregory et al, 2009). This was also found in a meta-analytical review by Parker et al (2003), in which job satisfaction mediates the effect between organizational culture and OCB. In fact, one recent study has also found some relationship between OCB, job satisfaction and climate (Asari, Abdullah & Wibowo, 2018).

Another recent study has also found job satisfaction influencing OCB (Gati, Mukhtar and Sujanto, 2018). So, it is reasonable to expect that job satisfaction as a work attitude will mediate the effect of the support climate on OCB behaviours.

Taking all above into consideration we propose

H4: A support culture influences worker OCB by increasing job satisfaction and worker resources.

In figure 1 there is a schematic representation of the relationships that have been forecasted in the previous hypotheses

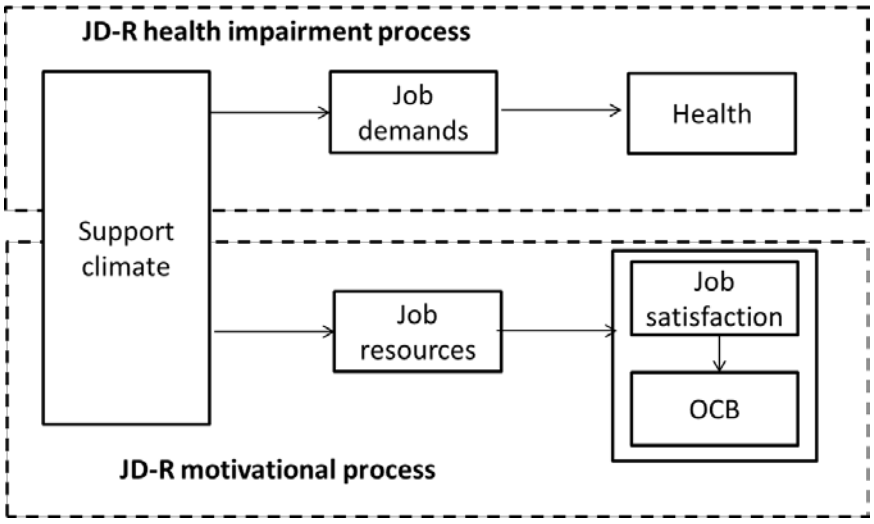

Figure 1.- Schematic of the relationships tested

Method

Participants were randomly selected out of the 3,000 workers of a department in a large transportation company. Participation was voluntary, guarantying at any time data confidentiality. A purpose-built questionnaire was delivered during working time. A total of 160 potential participants were contacted, the answer rate was 65%, so the final sample size was n=105.

The questionnaire included sociodemographic data: age, gender, tenure and education level. All workers were full time employees. 62% were men. Average age was 40.1 years (SD 6.6) and the average tenure was 18.2 years (SD 6.8). 28.5% hold a university degree.

The questionnaire was built with questions from existing scales. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest attitudinal assessment or frequency type of conducts related to the variable measured by each scale.

Climate was measured with the 40 items of the *FOCUS-93* questionnaire, by González-Romá, Tomás-Marco & Ferreres (1995). This scale classifies climate following the 4 dimensions from Cameron y Quinn (2006) model: support, innovation, goals and rules. All items start with "think in your organization as a whole. How often …?". Examples of questions for each dimension are: support (e.g., "…interpersonal conflicts are dealt?"), rules (e.g., "…works are done following established procedures"), innovation (e.g., "…new ideas about organization are empowered") and goals (e.g., "…do you have to reach a target level of performance"). The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest assessment and 5 the highest. The Cronbach alpha were .76 for support, .74 for innovation, .70 for rules and .72 for goals.

Demands and Resources were measured by the Job Content Questionnaire (Karasek, 1985) validated in Spanish language Escriba-Agüir, Más-Pons & Flores-Reus (2001). The Demands variable was measured by the 6 items covering physical demands (quantity and complexity of the work). One example of item is: "my jobs requires to work quickly". Resources variable was measured through 18 items covering the dimensions of decision latitude (9 items) and social support (9 items). Example of decision latitude is: "in my job I can take my own decisions". One example of social support is: "My supervisor helps me to do the task correctly". The punctuations followed a Likert type scale from 1 to 5, being 1 the

lowest frequency type and 5 the highest. The Cronbach alpha was .72 demands and .74 for resources.

Health was measure with 14 items from the Spanish version of SF36 questionnaire, by Alonso, Prieto & Anto (1995). The original questionnaire contains 35 questions about general health and covers 9 dimensions: physical function, physical role, body pain, general health, vitality, social function, emotional role, mental health and health transitioning. The 4 questions used in this investigation came from the dimensions of physical role (4 items), vitality (4 items), mental health (5 items) and social function (1 item). Example of the items include: “how often in the last four weeks did you feel tired?” or “how often in the last four weeks had plenty of energy”. The initial Cronbach alpha obtained was .62, but after deleting the item from social function raised to .79. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest frequency type and 5 the highest.

Job Satisfaction was measured by the questionnaire Brief Index of Affected Job Satisfaction (BIAJS) validated to Spanish language (Fernández Muñoz and Topa, 2018). It contains 7 items, 3 of them are distractor items. An example of one item is: “I really enjoy my job”. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest assessment and 5 the highest. The Cronbach alpha was .78.

OCB was measured by the scale of organizational citizen behaviours scale, adapted to Spanish by Dávila and Finkelstein (2010). It contains 15 items. Example of items are: “How often have you taken time to advise, coach, or mentor a co-worker” and “How often have you helped new employees get oriented to the job”. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest frequency type and 5 the highest. The Cronbach alpha was .85

Results

The results of the correlation between all variables along with the Cronbach alpha reliability figures are shown in Table 1. Table 2 contains the regression of OCB, resources and demands over the different type of climates. The control variables for the regressions are: age, gender, education level and tenure.

Table 1.

*Cronbach alpha and Pearson correlations (** p<.01, * p<.05)*

		1	2	3	4	5	6	7	8	9
1	**Support**	(.76)								
2	**Innovation**	.653**	(.74)							
3	**Rules**	.408**	.500**	(.70)						
4	**Market**	.519**	.574**	.411**	(.72)					
5	**Demands**	-.257**	-.032	-.175	.043	(.71)				
6	**Resources**	.558**	.523**	.310**	.496**	-.019	(.73)			
7	**Health**	.168	.201*	.212*	.274**	-.178	.077	(.79)		
8	**Job satisfaction**	.198*	.225*	.016	.160	-.027	.438**	.266**	(.78)	
9	**OCB**	.453**	.461**	.343**	.406**	.080	.543**	.240*	.635**	(.85)

Table 2

*OCB, resources and demands regression on type of climate (** p<.01, * p<.05)*

	OCB	**Resources**	**Demands**
Age	-.200	.033	.086
Gender	-.045	-.119	-.165
Education	-.041	.006	-.045
Tenure	.320	.065	-.097
Support	**.245***	**.325****	**-.439****
Innovation	.160	.178	.241
Rules	.078	-.019	-.231
Market	.166	**.220***	.195
R^2	.300	.408	.181

The regression of OCB over the different climate types, shows that a support climate is significantly related to OCB (*Beta* = .245 $p < .05$) and this relationship is higher than between the rest of climate types and OCB. In fact the regression does not show a statistical significant relationship of the rest of climate types with OCB. So OCB is more strongly related to a support climate than to any other type of climate as predicted by hypothesis 1.

Table 2 also shows that the support climate is positively related to resources (*Beta* = .325 $p < .01$) and negatively related to demands (*Beta* = -.439 $p < .05$). This is congruent with the prediction of hypotheses 2 and 3. Additionally, we run a regression between all well-being outcomes (health, job satisfaction and OCB) over demands and resources, with age, gender, education level and tenure as control variables. Results are shown in Table 3. As predicted by hypothesis 2, health and demands are related (*Beta* = -.199 $p < .05$), while job satisfaction (*Beta* = .406 $p < .01$) and OCB (*Beta* = .547 $p < .05$) are related to resources as predicted by hypothesis 3.

Table 3

*Regressions on demands and resources (** p<.01, * p<.05)*

	Health	**Job satisfaction**	**OCB**
Age	-.034	-.218	-.195
Gender	-.140	-.143	-.004
Education	-.002	-.006	-.044
Tenure	.020	.325	.258
Demands	**-.199***	-.040	.089
Resources	.044	**.406****	**.547****
R^2	.056	.225	.315

To explore the mediational model predicted in hypothesis 4, a mediator analysis with Hayes Process (Hayes, 2013) is run in SSPSS, with two mediational variables between support climate and OCB: resources and job satisfaction. The results are shown in Table 4. The mediation is not a fully mediation but a partial mediation as there are both a direct effect and an indirect effect. Looking at the bootstrapping intervals of all indirect paths, the only one that is not statistically significant is the path from support to job satisfaction to OCB.

To better interpret table 4 results, a path diagram with the significant paths is shown in Figure 1. So the results indicate that a support culture has a positive effect on resources (decision latitude and social support) and this has a positive effect directly on OCB and also indirectly through job satisfaction. The size of this indirect effect between a support climate and OCB is quite similar to the size of the direct effect.

Table 4.
Mediational analysis. Direct and indirect effects between support climate and OCB

		Bootstraping C.I. 95%	
	Effect	**LL**	**UL**
Direct	.42	.15	.69
Indirect	.33	.11	.55
Support climate -> resources -> OCB	.16	.03	.31
Support climate -> job satisfaction -> OCB	-.05	-.27	.11
Support climate -> resource ->jobsat -> OCB	.22	.12	.34

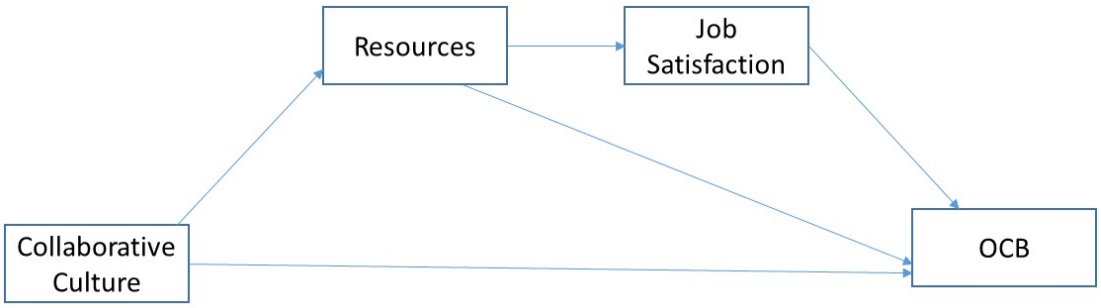

*Figure 1***.** Mediational paths statistically significant

Discussion

The present research examined how a particular context can influence employee behaviours. Specifically, we analysed how climate can affect OCB grounded in the JD-R principles.

Firstly, as the first hypothesis stated, the type of climate that has been found to be more influential on OCB is the support climate. The relationship is positive so the more the climate is perceived as supportive by the employee, the more OCB will deploy. To explain this relationship, we use the SIP theory, which states that the social context influences worker attitudes and behaviours through the creation of meaning and through bringing salient information to his or her attention (Salanick and Pfeffer, 1978). So, the supportive social context will bring salient information in the mind of the worker about collaborative behaviours of his co-workers, what means that in high support cultures the worker will be more likely to see positive collaboration behaviours of his co-workers. This salient information will create the meaning in the mind of the worker that in his context, it is acceptable and desirable to deploy collaborative behaviours, so it is reasonable to expect that

this will lead to more OCB in the worker. This is consistent with previous research findings (Kokt and Ramarumo, 2014; Herren 2016).

Secondly, hypotheses 2 and 3 can be grouped and interpreted as a cross sectional test of the JD-R two process line statement (Bakker & Demerouti, 2007). Our results back the predictions of hypotheses 2 and 3. In this way, following hypothesis 2, we can see that there is a health impairment line where the variables climate, job demands, and health operate. In this process line, the lower the support climate, the higher the job demands are and the more negatively the health is impacted. There is also a motivational process line as per hypothesis 3 where the variables support climate, job resources and job satisfaction operate. In this process line, the higher the support culture, the higher the job resources and therefore the higher the well-being (job satisfaction). Although this JD-R process line has been extensively studied in the body of research, there are not many studies including the variable climate as an antecedent of demands and resources. One of those studies is Albrecht et al. (2015). The model drawn in that study is fully in line with the sequence of variables that we have followed and the results we have obtained back the model from Albrecht et al. (2015) in the sense that there are two process lines and that organizational climate can be considered an antecedent of job demands and job resources.

Thirdly, the finding related to hypothesis 4 encapsulates the main contribution of our investigation. In this hypothesis we forecasted some of the mechanisms that links the support climate to the OCB grounded on JD-R principles. In order to test it, we performed a double mediational analysis. The expectation was that based on the principles of the JD-R model, a support climate would increase job resources, and this will increase job satisfaction. This increase of job resources and job satisfaction would explain partially why the workers increase their OCB. The results of the mediational analysis lead us to accept hypothesis 4. In fact, as can be seen in table 4, the strength of the direct path and indirect path are quite

similar, and we cannot state that one is higher than the other as the bootstrapping 95% confidence intervals overlap. This mean that just the increase of resources and job satisfaction would explain half of the effect of a support culture on OCB. Also, there is not any difference between the indirect mediation of increasing resources and the indirect mediation of increasing job satisfaction as both bootstrapping 95% confidence intervals overlap. This means that both effects are important to explain the indirect path. Another interesting result is that the effect of the support culture on job satisfaction is fully mediated by job resources. This is fully in line with the principles of the JD-R model and shows that the effect of the support culture is to increase job resources and from here everything else will take place.

Deep diving into it, the mechanism is that a high support culture will provide job resources in the form of social support (both supervisor support and co-worker support) and decision latitude to employees and this job resources will have a double function. First, they will provide extra resources to employee and by the conservations of resources theory (COR; Hobfoll, 2002), this surplus of resources will be used by the employees to increase their positive behaviours towards their colleagues and organisation. Secondly, the increase in job resources will increase job satisfaction and an employee satisfied will be more prone to develop OCB, as postulated by the principles of the JD-R where the outcomes of well-being reflects on the performance of the employee (Bakker & Demerouti, 2007).

It is worth mentioning that there are a couple of recent studies that analyse what variables influence OCB under the JD-R model framework, so they can be considered close studies to ours. In particular Ekawati and Tjahjono (2019) perform a mediation analysis to explain the influence of organizational climate on OCB. In this paper OCB has been found related to the organizational climate and the relationship between them is mediated by work engagement. This result is somehow parallel to ours as it shows that the relationship between OCB and organizational climate is mediated by attitudinal variables and that the process

takes place in the motivational line of the JD-R model. In our study we used job satisfaction as a mediator while Ekawati and Tjahjono (2019) used work engagement as a mediator. Our analysis is more complete in the sense that it includes other variables of the JD-R model (job resources, job demands and health) and proves that OCB is not related to the health impairment line (job demands and health variables). In other study Marić et al (2019) found that work engagement mediated the relationship between job resources and OCB, what is also a parallel finding to ours as it means that OCB is part of the motivational process line in the JD-R. This study however did not include other JD-R variables and it did not focus on organizational climate but shows the recent interest in looking at OCB under the lens of the JD-R model.

As a summary of the discussion, we have shown that from all types of organizational climates, a support climate is the one that elicits more OCB in the workers and that the mechanisms for that to happen, can be explained using the JD-R model as processes taking place in the motivational line, by means of increasing job resources and job satisfaction.

Limitations and future research

The cross-sectional design does not allow us to draw causal inferences among the variables. However, as we have based on JD-R theory the direction of the relationships, we have mitigated this limitation of the study. Future research could develop longitudinal designs to test our hypotheses.

This study has been conducted in a specific cultural set (Spain). Research shows that cultural issues have a strong influence in interpreting social variables, so generalization must be taken cautiously. Future research could work on cultural differences with a wider cross-cultural sample.

Another limitation of this study is that it did not include work engagement that it is a key variable of the JD-R model. It was somehow replaced by job satisfaction that shares many characteristics but that in reality, it is considered an outcome of work engagement. Future research could also consider including work engagement among the variables.

Another limitation of the study is that the measure of climate is at individual level. Although this has some advantages as explained in the introduction, it does not fully reflect the current trend in the development of the JD-R model that looks at the model from a multilevel approach. Further research should consider measuring variables at group level and apply multilevel methodology to take into account all interactions between variables.

Further research should also focus in studying the role of climate and culture not only as a distal antecedent in the JD-R model, but also as moderator and mediator variables in the model.

Practical applications

The findings of this study highlight the importance of measuring climate and designing interventions that search for a support climate. This would have the double effect of increasing job satisfaction and increasing OCB. As an example, in Rofcanin, Las Heras and Bakker (2017), a support climate development through formal and informal interventions, leads to the increase of family supportive behaviours in managers and this generates engagement and improved performance.

The recommendation for general HR functions is the development of a support climate by rewarding co-working support behaviour and by using communication channels to make aware to the rest of employees of the support behaviours among workers that take place in the organization

Findings are also important for managers and leaders at all levels, as they have an opportunity to influence perceptions of organizational climate through their behaviours and their leadership styles. If they show to their employees that their co-workers collaborate and that in the organization collaboration is rewarded, the employees will deploy more organizational citizenship behaviours.

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CAPÍTULO 5.

BUILDING HEALTHY ORGANIZATIONS TAPPING INTO THE MOTIVATIONAL PROCESS OF THE JOB DEMANDS-RESOURCES (JD-R) MODEL

CAPITULO 5: BUILDING HEALTHY ORGANIZATIONS TAPPING INTO THE MOTIVATIONAL PROCESS OF THE JOB DEMANDS-RESOURCES (JD-R) MODEL

Abstract

The JD-R model provides a conceptual framework to design and implement interventions that build healthy organizations. This chapter summarizes three studies that deep dive into three specific variables of the JD-R motivational process line (work engagement, job crafting, and organizational climate), that can be mobilized to promote a healthy organization, reach employee well-being and organizational effectiveness. The first study is a meta-analysis of 113 independent samples (N=119,420) on work engagement antecedents and consequents with a strong focus on moderation effects. Findings show differences in the strength of the relationships between engagement and its antecedents, with some differences between cultures, sectors, and occupations. The second research is a longitudinal study (N= 443) that proves that specific job crafting components (increasing challenging demands and increasing structural resources) can mediate between work engagement and job performance and therefore they can be a powerful mechanism to leverage job performance. The third research is a cross-sectional study (N=105) that relates a specific type of organizational climate (support climate) with job satisfaction and organizational citizenship behaviors (OCB) among employees. Practical applications of these findings, limitations and future research orientations are discussed.

Keywords: JD-R model; engagement at work; job crafting; demands and resources; healthy organizations.

BUILDING HEALTHY ORGANIZATIONS TAPPING INTO THE MOTIVATIONAL PROCESS OF THE JOB DEMANDS-RESOURCES (JD-R) MODEL

The challenge facing us today is to promote a healthier society through building healthy organizations with the focus on well-being from a cross-cultural perspective (Di Fabio, 2017). A healthy organization is defined by Salanova et al. (2012) as an organization that makes structured, preventive and long-term efforts to improve the processes and results of their employees and the organization. In a healthy organization, culture, climate, and practices create an environment conducive to employee well-being as well as organizational effectiveness (Lowe, 2010) and leads to a healthy and successful business (De Smet et al., 2007; Grawitch and Ballard, 2016).

The JD-R model offers an integrative conceptual framework for monitoring the workplace with the aim to increase employee well-being and organizational effectiveness (Schaufeli, 2017), leading to healthy organizations. The JD-R was initially developed by Demerouti et al. (2001) in an attempt to explain the antecedents of burnout. Schaufeli and Bakker (2004) differentiated in the model a motivational process line in parallel to a health impairment line. In this motivational process line, work engagement was a mediator between job resources and positive organizational outcomes.

Since then, further developments have enriched this model in several paths, and the three studies summarized in this paper belong to one the following JD-R model research trends.

(a) One research trend in the JD-R model is to extend the list of resources related to work engagement. In fact, one of the differential factors of JD-R model with traditional stress models such as the Job Demands-Control (JD-C) model (Karasek, 1979) and the Effort-Reward Imbalance (ERI) model (Siegrist, 1996), is that the JD-R model is not merely focused on specific demands and resources pertaining to the work context (job characteristics).

Instead, the JD-R model conceives any demand and resource as a factor potentially able to influence employees' job-related and personal outcomes. So, it was just a question of time that the model included personal variables and contextual variables. The inclusion of organizational resources, personal resources, and leadership resources enriched the model along the time. The first study of the present chapter contributes to this line of JD-R model development by meta-analysing the relationships of work engagement with resources and consequents.

(b) Other JD-R model research trend is to include the employee's active role in interpreting and modifying their working conditions. Job crafting is one of those employee active roles. Tims and Bakker (2010) proposed the integration of job crafting in the JD-R model. Job crafting in this JD-R model framework is a set of changes employees may make regarding their job demands and job resources to meet their abilities and needs (Tims, Bakker and Derks, 2013). The second study of the present chapter contributes to this line of JD-R model development by analyzing the role of job crafting as a mediator between work engagement and job performance and well-being

(c) Finally, one of the most recent trends in the JD-R model is to consider the multilevel interrelations between variables as in Bakker and Demerouti (2018). The initial research on job resources was mainly conducted at the individual level as an employee's perception of job characteristics. In contrast, the process linking these characteristics to occupational health and job performance involves different levels of analysis: the organizational level, the team level, the role of leaders and the employees' perceptions. At a broader level of analysis, HR practices concerning employee selection, socialization, performance management and employees' development may influence the organizational climate and the perception of demands and resources that, in turn, are related to the level of engagement and employees' well-being and performance (Albrecht, Bakker, Gruman,

Macey, & Saks, 2015; Croon, Van Veldhoven, Peccei, & Wood, 2015). Also, leaders' practices and behavior can significantly affect the employees' perception of the organizational context.

Overall, these empirical findings suggest that the application of the JD-R model should be articulated into different and interrelated levels of analysis reflecting the stakeholders that influence each other in the perception of the resource available in the organizational context, the experienced level of engagement and the positive outcomes stemming from this motivational state (Bakker and Demerouti, 2018). The study 3 of the present chapter contributes to this line of JD-R model development because, although it does not follow a multilevel methodology strictly, it introduces the mechanisms by which a group level variable (organizational climate), measured at an individual level, can lead to individual variables such as job satisfaction and organizational citizenship behaviors.

In the present chapter, we use the most recent version of Job Demands-Resources theory (Bakker & Demerouti, 2014; 2017) expanded with distal contextual variables (Albrecht, Bakker, Gruman, Macey, & Saks, 2015). Figure 1 shows a schematic version of the motivational process of the JD-R model, identifying the key variables targeted by each study.

In particular, the three topics considered by the studies are:

Study 1. Considering that work engagement is the critical concept in the JD-R motivational line, what influences engagement, what are its consequents and what moderates these relationships?

Study 2. What components of job crafting can lead from the engagement of the employee to better job performance and improved well-being?

Study 3. What mechanisms take place in the influence of a supportive climate to improve well-being and performance?

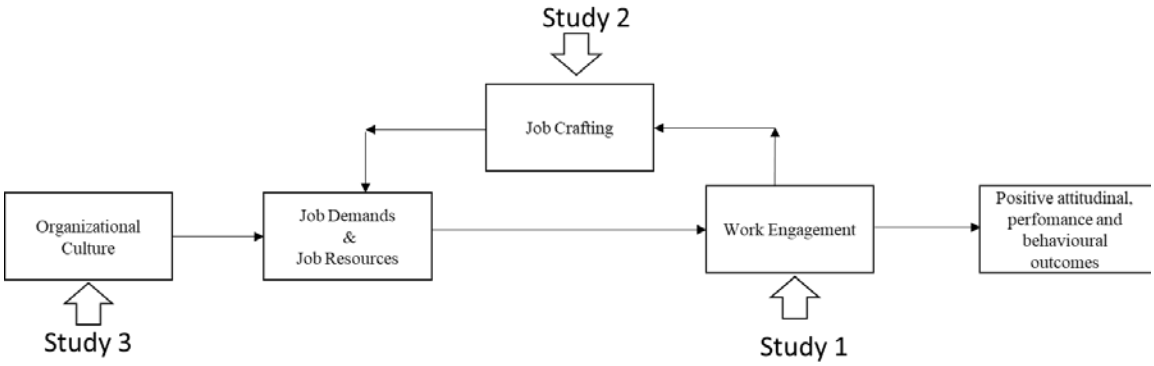

Figure 1. JD-R motivational process.

Summary study 1. Work engagement: a meta-analysis of empirical evidence

In this study, meta-analytic procedures were used to examine the relationships between work engagement and its antecedents, work outcomes and well-being correlates, using the Job Demands-Resources model. The Energy Compass (Schaufeli 2017) variable categorization was the ground base for the meta-analysis.

Method

The documents selected were research papers in English that measured work engagement with the UWES questionnaire, published between 2011 and 2017. In total 94 primary studies were coded that included 533 correlations from 113 independent samples (N = 119,420).

Results

The first concrete objective of the meta-analysis was to measure the strength of the relationships between work engagement, its antecedents, and consequents. Results show that some antecedents have a stronger relationship with engagement than others. The effect size

(ES) for development resources (r=.45, C.I. 95% [.40, .50]) and personal resources (r= .48, C.I. 95% [.42,.55]) was higher than for social resources (r=.36, C.I. 95% [.33,.40]) and work resources (r=.37, C.I. 95% [.34,.40]).

Results about work engagement outcomes show that work engagement is closer to attitudinal variables (job satisfaction and job commitment) than to a behavioral or intentional variable (like turnover intention, performance or health), having medium to high correlations. In this way, the ES for job satisfaction (r=.60, C.I. 95% [.56, .64]) and commitment (r=.63, C.I. 95% [.54-.71]) was higher than for any other work outcome or well-being correlate (turnover intention, job performance, health, psychological distress, and life satisfaction).

The second objective of the meta-analysis was to contribute to the debate about the engagement components from the component engagement relationship with antecedents and consequents. In fact, from the data it seems that absorption systematically has lower correlations with any variable than dedication and vigor and the difference is statistically significant between absorption (C.I. 95% [-.37, -.29]) and dedication (C.I. 95% [-.49, -.42]) in their relationship with turnover intention and job satisfaction.

The third objective of the meta-analysis was identifying moderator variables in the relationship between engagement and its antecedents and consequents. Moderator analysis showed that: (a) engagement influence on turnover intention among civil servants, volunteer workers, and educators is lower than in any other sector (Q=6.21, d.f.=2, p= .045) and occupation (Q=9, d.f.=3, p= .027); (b) collectivist cultural environments reported a more significant impact of feedback on engagement than individualist cultural environments (Q=13.51 , d.f.=1 , p= .001); (c) the influence of personal resources on the level of engagement was higher among graduate workers than among non-graduate workers (Q= 23.36, d.f.= 6, p=.000).

Discussion

Regarding the first objective, our findings supported that the right personal characteristics (resilience, self-efficacy, optimism, and proactivity) and high order motivational resources as development resources, are more connected to work engagement that merely job characteristics and contextual characteristics as work resources or social resources. Moreover, work engagement showed stronger relationships with job satisfaction and commitment than with any other work outcomes or well-being indicators, like health, distress or life satisfaction.

Summary study 2. Job crafting as a mediator between work engagement and employees' wellbeing

This longitudinal study aimed to test the mediating role of Job Crafting in the JD-R model. The first part of the study tested one of the principles of the JD-R model (Bakker and Demerouti, 2007) that states the existence of a motivational process line and a health impairment process line.

Method

In the study took part a sample of 443 Spanish workers from several sectors. 63% of the sample are women. The average age is 41 years old. Average tenure is 11.64 years. 73% of the people in the sample hold a university degree. 46% of the people in the sample are managers. There are a wide variety of sectors in the sample: 32.5% health and education, 8.9% industry, 7.8% banking, 4.2% civil servants and the rest hold a position in different services

We measured at T1 work engagement, workaholism, and emotional exhaustion. Job crafting was measured four months later (T2) and flourishing, job performance, job

satisfaction, and insomnia was measured another four months later in (T3) on the same sample of workers.

Work engagement was measured using the nine items of the UWES-9 scale (Schaufeli and Bakker, 2003) using the Spanish version (Hernández, LLorens, Rodríguez & Dickinson, 2016).

Workaholism was measured by to the ten items of DUWAS (Schaufeli & Taris, 2004), version adapted for Spain (Del Líbano, Llorens, Salanova & Schaufeli, 2010).

Emotional exhaustion was measured using five items from the MBI (Maslach and Jackson, 1981), Spanish version from Salanova, Schaufeli, Llorens, Peiró and Grau (2000).

Job crafting was measured using the 21 items of the Job Crafting scale developed by Tim et al. (2012) in the adapted version to Spanish by Ficapal-Cusí, Torrent, Boada, and Hontangas (2014).

Job Satisfaction was measured by four items of the BIAJS (Thompson & Phua, 2012), using the Spanish version (Fernández & Topa, 2018).

Flourishing was measured by eight items in the Spanish version (FS-SV) (Ramírez-Mestre et al., 2017) of Diener et al.'s Flourishing Scale (2010).

Insomnia was measured by eight items from the Athens Insomnia Scale, with the adapted version for Spanish people by Portocarrero, and Jiménez-Genchi, (2005).

Job performance was measured by the 7 item IRB scale developed by Williams and Anderson (1991). Due to the absence of any validated version of the job performance, the research group translated the scale from English to Spanish. Answers to all scales followed a five-point scale, ranging for (1) never to (5) very often. Alpha Cronbach was 0,93 for work engagement, 0,88 for workaholism, 0,90 for emotional exhaustion, 0,79 for job crafting, 0,92 for job satisfaction and 0,88 for flourishing well-being, 0,84 for job performance, and 0,90 for insomnia.

To collect the data, a broader study on employees' career planning has been proposed to some Spanish small and medium firms. Finally, the firms that agreed to participate have sent an email to their employees containing the study proposal. Those participants that agreed to continue receiving a second email with the information about the study, the anonymity of the data collection and the link for accessing the questionnaire developed by Google Form tools. In any case, the research group has not to access any private information of the participants, including their emails or IP directions, to preserve confidentiality.

Then, we conducted two hierarchical regression analyses: one of job crafting in T2 over T1 and another hierarchical regression of T3 variables on T3, T2, and T1 variables.

Results

The results showed that: (a) engagement is clearly an antecedent of job crafting (Beta= .52 p< .01); (b) there is not any significant influence of workaholism and emotional exhaustion in job crafting once we control for engagement; (c) job crafting is a predictor for job performance (Beta= .2 p< .01) and flourishing (Beta= .1 p< .05) but not for insomnia and job satisfaction. So, work engagement, job crafting, flourishing and job performance are variables mainly related to the JD-R motivational process. In parallel, there is a health impairment process where emotional exhaustion and workaholism influence over insomnia.

The second part of the study shows that job crafting mediates in the motivational process of the JD-R model by acting between work engagement and some well-being outcome variables. In particular, the job crafting mechanism of increasing structural job resources, mediates the positive effect of engagement on flourishing (direct effect = .31 indirect effect C.I. 95% [.07, .16]) and job performance (direct effect = .0 indirect effect C.I. 95% [.08, .16]) and the job crafting mechanism of increasing challenging demands mediates the positive effect of engagement on job performance (direct effect = .0 indirect effect C.I.

95% [.01, .08]). Results failed to support the mediational process for job satisfaction and insomnia. As some studies have demonstrated that job crafting also increases engagement (Bakker, Tims, & Derks, 2012; Vogt et al., 2016), we can anticipate the virtuous gain loop: engagement leads to job crafting that leads to more engagement that leads to more job crafting.

Discussion

Lastly, the study confirms that the component decreasing hindering job demands has a different behavior that the rest of the job crafting components. This differential behavior is found in many research studies and even in the original paper by Tims et al. (2012) for the development and validation of the Job Crafting Scale. In particular, in the results, decreasing job demands does not correlate with the rest of job crafting components, job performance, and well-being and it has a negative relation with engagement. Also, decreasing job demands correlates positively with emotional exhaustion while the rest of the components correlate negatively. In the mediation analysis, it seems clear that decreasing job demands is not a mechanism in the mediation between engagement and positive outcomes.

Summary study 3. Supportive organizational climate for improvement of people wellbeing

The third is a cross-sectional study performed in a Spanish transportation company.

Method

We contacted one hundred sixty potential participants, and the answer rate was 65%, so the final sample size was N=105. The questionnaire included sociodemographic data: age, gender, tenure, and education level. All workers were full-time employees. 62% were men. The average age was 40.1 years (SD 6.6), and the average tenure was 18.2 years (SD 6.8). 28.5% hold a university degree.

The questionnaire was built with questions from existing scales. The punctuations follow a Likert type scale from 1 to 5, being one the lowest attitudinal assessment or frequency type of conducts related to the variable measured by each scale. Measures included

Climate was measured with the 40 items of the *FOCUS-93* questionnaire, by González-Romá, Tomás-Marco & Ferreres (1995). This scale classifies climate following the 4 dimensions from Cameron y Quinn (2006) model: support, innovation, goals and rules. All items start with "think in your organization as a whole. How often …?". Examples of questions for each dimension are: support (e.g., "…interpersonal conflicts are dealt?"), rules (e.g., "…works are done following established procedures"), innovation (e.g., "…new ideas about organization are empowered") and goals (e.g., "…do you have to reach a target level of performance"). The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest assessment and 5 the highest. The Cronbach alpha were .76 for support, .74 for innovation, .70 for rules and .72 for goals.

Demands and Resources were measured by the Job Content Questionnaire (Karasek, 1985) validated in Spanish language Escriba-Agüir, Más-Pons & Flores-Reus (2001). The Demands variable was measured by the 6 items covering physical demands (quantity and complexity of the work). One example of item is: "my jobs requires to work quickly". Resources variable was measured through 18 items covering the dimensions of decision latitude (9 items) and social support (9 items). Example of decision latitude is: " in my job I can take my own decisions". One example of social support is: "My supervisor helps me to do the task correctly". The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest frequency type and 5 the highest. The Cronbach alpha was .72 demands and .74 for resources.

Health was measure with 14 items from the Spanish version of SF36 questionnaire, by Alonso, Prieto & Anto (1995). The original questionnaire contains 35 questions about

general health and covers 9 dimensions: physical function, physical role, body pain, general health, vitality, social function, emotional role, mental health and health transitioning. The 4 questions used in this investigation came from the dimensions of physical role (4 items), vitality (4 items), mental health (5 items) and social function (1 item). Example of the items include: “how often in the last four weeks did you feel tired?” or “how often in the last had plenty of energy”. The initial Cronbach alpha obtained was .62, but after deleting the item from social function raised to .79. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest frequency type and 5 the highest.

Job Satisfaction was measured by the questionnaire Brief Index of Affected Job Satisfaction (BIAJS) validated to Spanish language (Fernández Muñoz and Topa, 2018). It contains 7 items, 3 of them are distractor items. An example of one item is: “I really enjoy my job”. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest assessment and 5 the highest. The Cronbach alpha was .78.

OCB was measured by the scale of organizational citizen behaviours scale, adapted to Spanish by Dávila and Finkelstein (2010). It contains 15 items. Example of items are: “How often have you taken time to advise, coach, or mentor a co-worker” and “How often have you helped new employees get oriented to the job”. The punctuations followed a Likert type scale from 1 to 5, being 1 the lowest frequency type and 5 the highest. The Cronbach alpha was .85

Descriptive analysis and regression models have been applied to the data.

Results

The first step of the study highlighted that OCB is more strongly related to a supportive climate than to any other type of organizational climate. The regression of OCB, resources, and demands over the different organizational climate types showed that a

collaborative climate is significantly related to OCB (Beta= .245 p< 0,05) and this relationship is higher than between the rest of organizational climate types and OCB.

The second part of the study is devoted to explaining some of the mechanisms of that influence of the support climate on OCB, under the JD-R framework. The regression resources and demands shows that the collaborative climate is positively related to resources (Beta= .325p< .01) and negatively related to demands (Beta= -.439 p< .05). A regression between all well-being outcomes (health, job satisfaction and OCB) over demands and resources, shows that health and demands are related (Beta= -.199 p< .05), while job satisfaction (Beta= .406 p< .01) and OCB (Beta= .547 p< .05) are related to resources. A mediational analysis shows that there is an indirect effect between a support culture and OCB (direct effect = .42, Indirect effect C.I. 95% [.11, .55]), through job resources (Indirect effect C.I. 95% [.03, .31]) and through a double mediation by job resources and job satisfaction (Indirect effect C.I. 95% [.12, .34]).

Discussion

Our findings supported the stronger relationship between OCB and supportive climate in organizations. In the same vein, the collaborative climate has a positive relationship with resources and a negative with demands. Moreover, the mediation of job resources and job satisfaction in the relationships between climate and OCB provided evidence that expands JDR model implications.

Practical implications

The practical applications of the findings described above are useful to build healthy organizations. We group recommendation for different actors:

Selection departments. Based on the prevalence of personal resources as antecedents on work engagement found in the meta-analysis, it is vital to select people high on resilience, self-efficacy, optimism, and proactivity.

Training departments. It is essential to implement training programs that develop those personal resources and not purely task-related training. Also, training should be seen as a motivational activity by itself, as it builds development resources, highly related to work engagement. Finally, training on job crafting should be considered for the highly engaged employees (and not so much for the low engaged), as this will leverage their work performance by facilitating them to increase their challenging demands and structural resources.

Health and prevention departments. To avoid the health impairment process is useful to control hindering demands but it is also imperative to increase resources, as this will have a positive effect on health.

Managers. A supportive climate has beneficial effects on employees and the organizations, so managers should be aware of the impact they can have on employees and organization results by focusing on the development of supervisor support activities. It is also vital that supervisors make relevant to the employee's example of co-worker collaboration among their peers as this will promote the support climate and increase job satisfaction.

Intervention practitioners. First, the prevalence of some resources over others in their relationship with engagement can have practical applications at the time of designing interventions. Although promoting engagement depends very much on the specifics of each group of people, the findings provide guidelines about where to start the intervention when little knowledge about the group is available. In such a case it could be interesting to explore first a focus on leadership training and personal resource development. Personal resource building interventions focus on increasing individuals' self-perceived positive attributes and

strengths, often by developing self-efficacy, resilience or optimism, while leadership training interventions involve knowledge and skill-building workshops for managers and measure work engagement in their direct employees (Knight et al., 2017).

Moreover, the results of the meta-analysis on outcomes and well-being correlates, give some hints about what expectations to communicate when starting a work engagement intervention. It is clear that it is expected a higher impact in proximal factors like job satisfaction and commitment. Results on performance and health should be expected but in a lower degree and probably in a later moment.

Additionally, it is also interesting for practical purposes the combination of the finding of the absorption component and the UWES-3. It is advisable to consider this ultra-short version of the engagement questionnaire in order to facilitate employee participation. It is highly advisable when multiple tests are taking overtime periods. In any case, if the UWES-9 questionnaire is preferred, it could be interesting to consider just the dimensions of vigor and dedication. Lastly, about the moderator analysis, it is worthwhile highlighting two of the findings. When implementing interventions, culture could influence success, and in the collectivist culture environments, it could be interesting to develop positive feedback interventions. Also, the fact that civil servants, volunteer workers, and educators are not so much affected by engagement in their intention to leave, does not preclude from building work engagement interventions in these collectives, but somehow frames the expectations to have in such interventions.

Limitations and Future Research

As each study has a different methodology (meta-analysis, longitudinal and cross-sectional) each study has different limitations.

The main limitation of the meta-analysis is the shortage of relationships among the whole set of variables, so for some of the pairs of variables, the number of *k* was lower than desired. The above-described restriction is because few primary studies covered a broad scope of variables. Hence, conclusions regarding the statistical significance of differences between correlations were limited, as well as the findings that reached from the moderating analysis.

A further weakness of the present study is that despite all correlations referred precisely to the same engagement concept measured with a UWES scale; the other paired variable was less homogeneous in definition and measurement scale across the various studies. The variability among the instruments and constructs is somehow considered in the random effects models but leaves some room for subjectivity in the coding that could influence some of the results in the case of a small number of primary studies.

Future research could also consider limiting the scope of correlation pairs and to increase the number of studies by including older papers. In this way, *k* figures would be increased, and the most critical variables could be the focus of the analysis. This increase in the number of studies could also provide more examples in each category of the moderators and allow reaching new conclusions to the ones reached in this paper. Also, it is advisable to replicate the analysis in the future with a higher sample of UWES-3 questionnaires.

The main limitations of the study 2 come from weaknesses in the methodology used that could limit the extension of the findings. In particular, a stronger methodology would have considered measures of engagement in T2 and T3 to control for this variable along the time. Another limitation is that the most common measures of the job performance are self-ratings of in role performance and not by peer or supervisor reports of in role and extra-role. Also, a limitation could be the time between measures that could not have been enough to capture some effects over time.

About future research, only the engagement component of absorption is related to workaholism, and the job crafting component of increasing challenging demands is related to workaholism. In other studies, like Hakanen, Peeters and Schaufeli (2018) workaholics show a different pattern of behavior because they are also inclined to increase structural job resources. This difference should be further analyzed.

The main limitation of study 3 come from the fact that it is a cross-sectional study, so causation is not possible. Another limitation of this study comes from the fact that we assessed the organizational climate at the individual level instead of at the organizational level. Further research should apply longitudinal designs and multilevel methodology. This study includes only participants from a specific cultural set (Spain). Research shows that cultural issues have a strong influence in interpreting social influences, so generalization must be taken cautiously. Future research could work on cultural differences with a broader cross-cultural sample. Further research should also focus on studying the role of organizational climate and culture not only as a distal antecedent in the JD-R model but also as moderator and mediator variables in the model.

Conclusion

The present chapter has examined the possibility of increasing employee well-being and job performance by tapping into specific variables of the motivational process line in the JD-R model. In particular, the recommended steps are the following. First, an increase in job resources that promote work engagement, especially personal resources, and development resources. Second, facilitation of job crafting that provides challenging demands and increases structural job resources. Also, finally, to build a support climate. The above-described ways have been proven to have a benefit on a wide range of well-being and performance variables: higher job satisfaction, life satisfaction, job performance, job commitment, health, flourishing and OCB and lower turnover intention and psychological

distress. To sum up, the evidence-based intervention will create healthier organizations for the benefit of employees, organizations, and society in general.

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CONCLUSIONES FINALES

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En el capítulo 5 se puede ver el resumen detallado de los principales hallazgos de los tres trabajos de investigación de esta tesis, junto con las limitaciones, futuras líneas de investigación y las implicaciones prácticas y de intervención.

En esta conclusión final se lleva a cabo una consolidación global de las aportaciones de los trabajos a los objetivos inicialmente planteados para la tesis, con una visión de conjunto e integral.

Las que consideramos son las 8 principales aportaciones/conclusiones generales de la tesis aparecen a continuación, numeradas y ordenadas por bloques temáticos, según la pregunta de investigación en la que se encuadran.

Primera pregunta de investigación: ¿qué se puede extraer de los resultados de las investigaciones publicadas recientemente sobre lo que influye en el engagement, ¿cuáles son sus consecuencias y cuáles son los moderadores de estas relaciones?

(1). El meta-análisis sobre engagement del capítulo 1 indica claramente que las variables personales de resiliencia, optimismo y auto-confianza, tienen relaciones más fuertes con engagement que las variables puramente contextuales, como pueden ser el contenido del trabajo o las relaciones sociales dentro del trabajo. Lo que puede estar en el trasfondo es el debate sobre qué es más importante, si las características del individuo o el contexto de cara a la motivación del empleado. Lo que parece indicar nuestro estudio es que las variables personales tienen una fuerte relación, probablemente porque actúa desde muchos puntos de vista sobre el engagement del

empleado. Por un lado, un empleado con las características personales tales como las descritas tenderá a interpretar el trabajo, sus demandas y sus recursos de una manera positiva y favorable para el engagement suyo. Además, contará con habilidades adecuadas para afrontar los retos de su trabajo, aprovechar mejor los recursos e incluso adaptarlo a sus características personales. En nuestra opinión esto no denigra los modelos basados en características contextuales, ni rechaza las intervenciones basadas puramente en contenido de los puestos de trabajo, pero si invita a la reflexión sobre la conveniencia de considerar y gestionar siempre que se pueda el factor de habilidades y características personales en los modelos teóricos e intervenciones.

(2). El meta-análisis también apunta a que factores demográficos como sexo, edad, años de experiencia etc., no tienen influencia en las relaciones del engagement con sus antecedentes y consecuentes. Sin embargo, ciertos contextos psicosociales en los que se desarrolla el trabajo, pueden ser un factor moderador de la relación del engagement con sus antecedentes y consecuentes. Como ejemplo, los empleados de culturas colectivistas son más sensibles a la influencia del feedback en su engagement. Otro hallazgo relacionado con esto, en trabajadores de sectores públicos, educadores o de ONGs, el hecho de puntuar más o menos en engagement en el trabajo influye menos en su decisión de abandonarlo que en el caso de trabajadores del sector privado o de otras ocupaciones. Parece que estos trabajadores tienen otras razones para quedarse en su puesto de trabajo más allá de lo que miden los cuestionarios de engagement. En el caso de trabajadores del sector publico sería probablemente el hecho de tener un puesto de trabajo fijo y sin riesgo; en el caso de educadores, probablemente en muchos casos sea también lo anterior o una vocación por la profesión por encima de otros intereses; y en el caso de empleados de una ONG,

probablemente intereses altruistas y de aportación a la sociedad pesen más que una motivación concreta por las tareas que hacen.

(3). El componente de absorción por el trabajo ha demostrado tener un comportamiento distinto del de vigor y dedicación. El efecto diferencial parece ser pequeño y es estadísticamente significativo en la influencia que tiene el componente absorción en satisfacción laboral y en intención de permanecer en la compañía. Parece que el puntuar alto en absorción no se relaciona con una satisfacción laboral tan alta como el puntuar alto en vigor y dedicación. Así mismo, la intención de permanecer en la compañía está más relacionado con el vigor y dedicación del empleado que con la puntuación en absorción. Todo ello apoya ideas de trabajos anteriores que indican que el componente absorción tiene un aspecto positivo y cercano al concepto de "flow" y otro negativo más cercano al concepto adición al trabajo. Nuestra recomendación para las investigaciones sobre engagement sería tener cautela con el impacto generado en los resultados por incluir este componente.

Segunda pregunta de investigación: ¿puede ser job crafting o alguno de sus componentes un mecanismo explicativo de por qué un empleado motivado rinde mejor en su trabajo?

(4). Según nuestra investigación un empleado motivado no sólo es más propenso a generar conductas de job crafting como predecían investigaciones anteriores, sino que además gracias precisamente en parte a esos comportamientos de adaptación de su puesto de trabajo, el empleado consigue mejor rendimiento laboral. El job crafting es por tanto uno de los mecanismos explicativos por el cual empleados motivados consiguen tener más rendimiento laboral y bienestar. La explicación podría estar en

que el empleado motivado tiene más energía para llevar a cabo conductas que adapten su puesto de trabajo a sus habilidades. El resultado de esa adaptación sería no solo bueno para el bienestar del empleado, sino que además generaría mayor rendimiento del empleado.

(5). En esta adaptación de su puesto de trabajo por parte de un empleado motivado, son los mecanismos de aumento de recursos estructurales y de incremento de demandas retadoras los que generan un incremento de rendimiento laboral. Es decir, el empleado puede realizar conductas que modifiquen su puesto de trabajo de cuatro maneras: aumentando recursos estructurales, aumentando recursos sociales, incrementando demandas retadoras, disminuyendo demandas entorpecedoras. Sin embargo, las conductas que disminuyen demandas o incluso las que aumentan recursos sociales no han demostrado ser útiles para aumentar el desempeño laboral. Sólo las conductas que aumentan los recursos estructurales (como por ejemplo aumentar su formación) o que aumentan las demandas retadoras (como por ejemplo acometer proyectos nuevos) han demostrado ser útiles para el desempeño laboral. Las primeras seguramente porque dotan al empleado de más conocimientos y habilidades para realizar mejor su trabajo. Las segundas porque suponen un aumento del esfuerzo del empleado hasta su punto óptimo de forma que se maximiza el rendimiento laboral del empleado.

(6). El hecho de que el componente de decremento de demandas entorpecedoras tenga un comportamiento distinto del resto, apoya la idea de revisar si es apropiado o no incluir este componente dentro del constructo de job crafting. Si bien en nuestro estudio el componente de aumento de recursos sociales tiene un comportamiento

distinto al de los componentes de aumento de recursos sociales y de aumento de recursos estructurales, otros estudios han encontrado comportamientos similares entre ellos. Una interpretación es que dependiendo del contexto aumentar los recursos sociales pueden ayudar o no al desempeño y la motivación. Sin embargo, todas las investigaciones son claras en que disminuir las demandas no ayuda en la motivación ni en el desempeño. En nuestra opinión se debería ser cauteloso al incluir este componente en los estudios de job crafting, o tal y como hacen algunos estudios, directamente no incluirlo.

Tercera pregunta de investigación: ¿se puede utilizar el modelo JD-R para encontrar qué mecanismos tienen lugar en la influencia de un clima de apoyo para mejorar el bienestar y el rendimiento laboral?

(7). Nuestro trabajo del capítulo 4 utiliza el modelo JD-R para explicar por qué un clima de apoyo genera empleados más satisfechos y con conductas organizacionales más positivas. Una de las conclusiones de ese estudio es que, de todos los tipos de clima, el de apoyo es el que está relacionado con el aumento de conductas de ciudadanía organizacional. El estudio explica además por qué sucede esto siguiendo el lenguaje del modelo JD-R: un clima de apoyo aumenta los recursos laborales y la satisfacción del empleado. Los recursos laborales que se midieron fueron el apoyo social y la libertad de acción. El estudio demuestra que un clima de apoyo creará en la mente del trabajador la sensación de apoyo social y en cierta manera de libertad de acción (ambas cosas aumentan los recursos laborales) y esto dará lugar a más satisfacción del empleado. A su vez, el aumento de recursos y de satisfacción generará conductas de ciudadanía organizacional. Es decir, un clima de apoyo genera

conductas de ciudadanía organizacional parcialmente mediadas por incremento de recursos laborales y de satisfacción laboral. Por tanto, uno de los mecanismos que explica por qué un clima de apoyo genera conductas de ciudadanía organizacional consiste en que precisamente el clima de apoyo aumenta los recursos laborales del trabajador y su satisfacción laboral, lo cual hace que los trabajadores tengan más energía y motivación para llevar a cabo conductas de ciudadanía organizacional.

Cuarta pregunta de investigación: ¿cuál sería el esbozo de las líneas maestras de un método integral de intervención que genere bienestar en el empleado y aumente su rendimiento laboral?

(8). Tal y como se dice en el capítulo 5, en base a nuestra investigación, consideramos que hay tres elementos fundamentales que debería contener toda intervención que pretenda tener un impacto duradero en el bienestar del empleado y su rendimiento laboral.

En primer lugar, aunque el objetivo final sea el bienestar del empleado y su rendimiento, debería estar inicialmente enfocada a conseguir el engagement laboral del empleado, para lo que tendría que realizar acciones que incrementen sus recursos, especialmente los de desarrollo y los personales. Este último punto es de suma importancia porque un entrenamiento en habilidad de resiliencia, auto-confianza y positividad hemos demostrado que es lo que tiene un efecto más potente en la consecución de empleados con alto engagement, capaces de adaptarse mejor a los contextos actuales cada vez más cambiantes e inciertos.

En segundo lugar, una vez alcanzado este engagement del trabajador, hay que intentar hacerlo pervivir en el tiempo e incluso aumentarlo. La manera es haciendo al empleado dueño de su propio destino, con un entrenamiento en habilidades de auto

adaptación de su puesto de trabajo (job crafting). El enfoque de este entrenamiento tiene que ir dirigido a que el empleado consiga adaptar su puesto de trabajo de forma que se aumenten sus recursos estructurales y que se ponga a si mismo tareas consideradas retadoras por él. De esta manera se atacarían los dos componentes de job crafting que hemos visto generan la espiral de ganancia de recursos, engagement y rendimiento laboral.

En tercer y último lugar, hay que tener presente que el empleado se desenvuelve en una organización y que el resultado final de la intervención dependerá del contexto organizativo. En este sentido nuestra investigación indica que se ha de fomentar un contexto organizativo de apoyo, en el cual tanto líderes como trabajadores desarrollen comportamientos de apoyo entre ellos, tanto en apoyo tarea como en apoyo social. De esta manera se conseguirá un clima organizativo de apoyo, que, como hemos comprobado, llevará a un aumento de recursos de los trabajadores, a más satisfacción con el trabajo e influirá en el comportamiento final positivo de los trabajadores.