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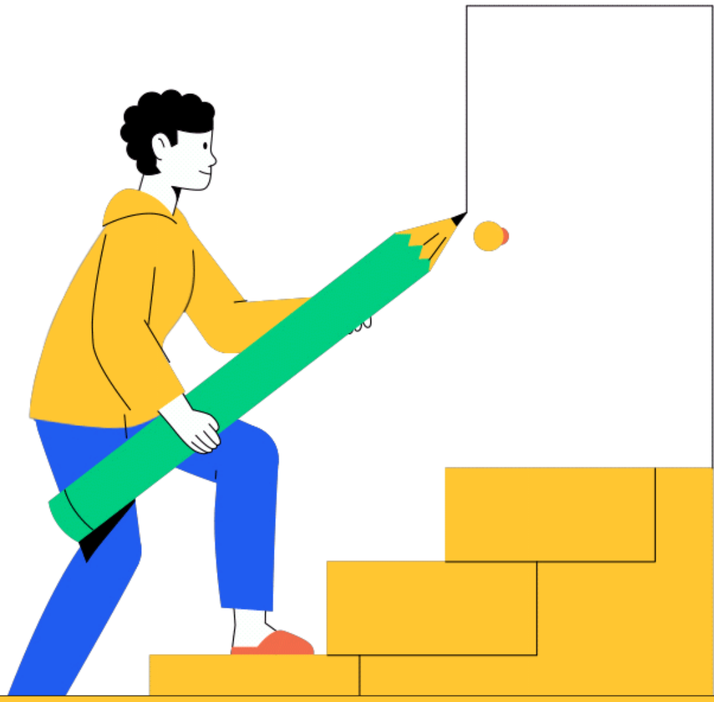
WOP-P
MASTER IN WORK,
ORGANIZATIONAL AND PERSONNEL PSYCHOLOGY

Playful Work Design Measure: Validation Study for a Portuguese Sample



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ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

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Work and work design

Work impacts the use of skills in the workplace, **well-being and morale**, and the existence of psychosocial risk factors

Anxiety, depression, heart attacks, substance abuse, lower job performance, **quality of life**, and job safety

(Organization for Economic Co-operation and Development [OECD]/International Labor Organization [ILO], 2017; Peeters et al., 2014; Fernandes & Pereira, 2016; Forastieri, 2013)

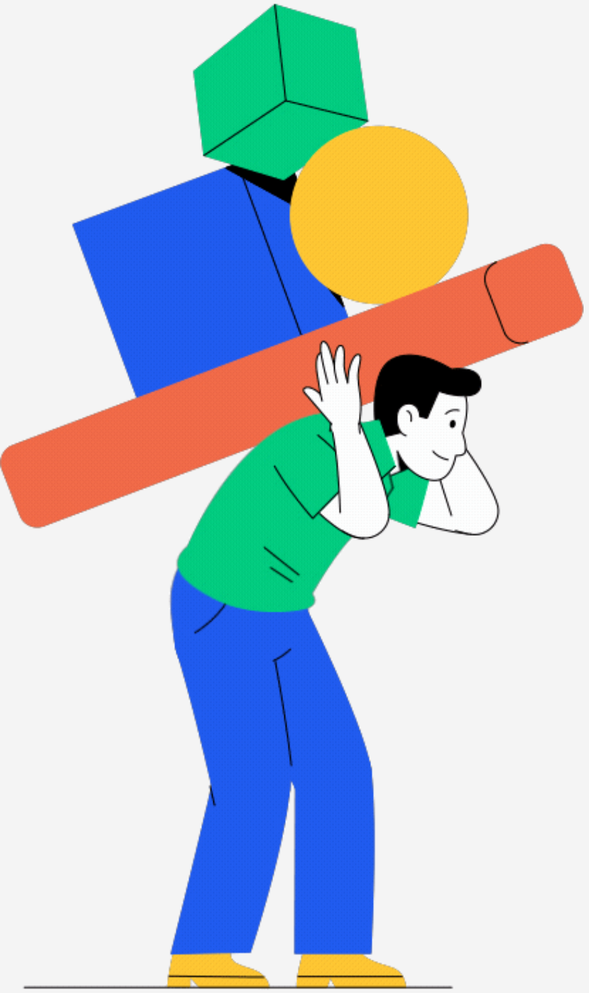
Work and work design

Work design: **characteristics and contents** of a task as well as the **relationships and responsibilities** around it (Parker, 2014)

It is a way of improving quality of life at work

Two strategies of work design: **job crafting and playful work design**

Job crafting



Bottom-up strategy

proactive shifts a person does when performing a task to deal with the **requirements** of a job (Tims et al., 2012);

Related to the **Job Demands-Resources Model (JD-R)** by Bakker and Demerouti (2007)

Job crafting

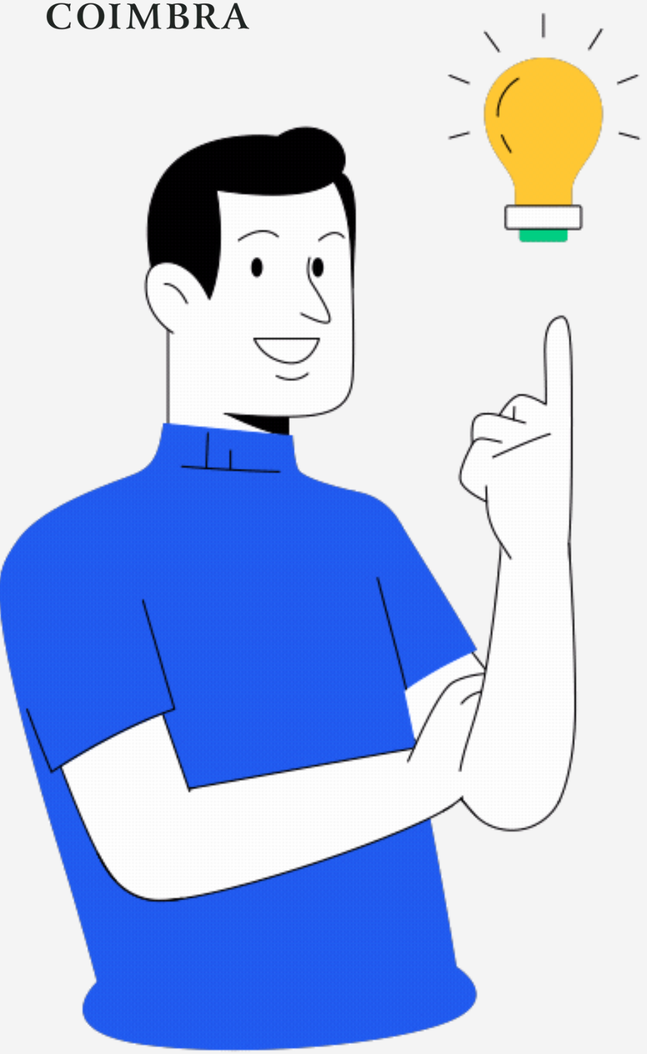
First dimension: increasing **structural** job resources

Second dimension: increasing **social** job resources

Third dimension: increasing **challenging** job demands

Fourth dimension: decreasing **hindering** job demands

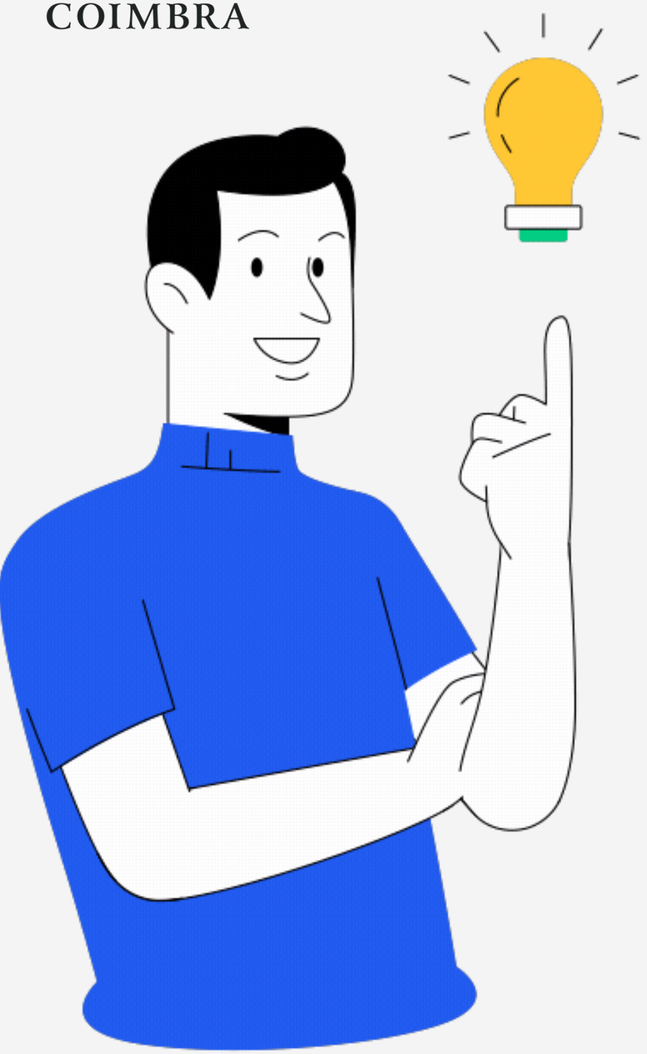
(Tims et al., 2012)



Playful Work Design

"approaching work activities as **ludic or agonistic play opportunities** (...) and performing them in a ludic or agonistic fashion (...) to attain positively valenced end-states" (Scharp et al., 2023, p. 515)

Workers adopt a **proactive attitude** to make their work environment and activities **more fun or enjoyable**

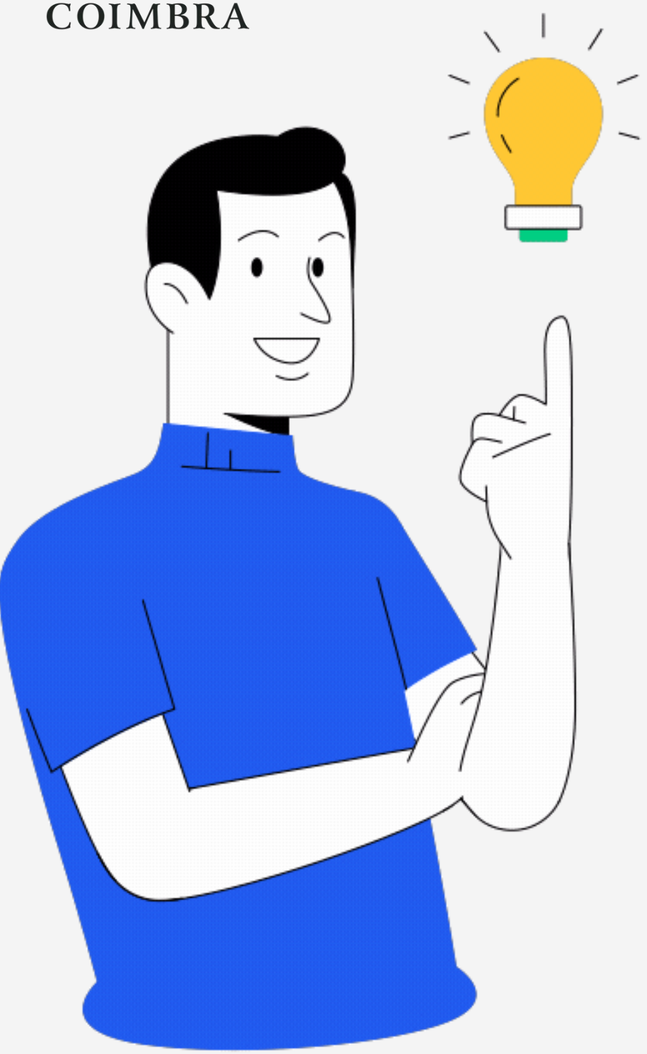


Playful Work Design

Different from organizational take on promoting team-building and fun activities

Prescribed tasks must be fulfilled; this concept intends to change the work experience (Bakker et al., 2020)

Two dimensions: **fun** and **competition**



Playful Work Design

Different from organizational take on promoting team-building and fun activities

Prescribed tasks must be fulfilled; this concept intends to change the work experience (Bakker et al., 2020)

Two dimensions: **fun** and **competition**

Therefore, **job crafting is a different concept from playful work design.**

AIM OF THE STUDY

(a) Differentiate the concepts of job crafting, playful work design and proactive personality

(b) Seek to understand whether these concepts relate differently to distinct work-related outcomes

Research Method

JOB CRAFTING SCALE
(Tims et al., 2012), adapted

21 items;
5 point Likert scale (1=Never; 5=Often);
5 to 6 items measuring each one of the four dimensions

PLAYFUL WORK DESIGN QUESTIONNAIRE
(Scharp et al., 2023)

12 items;
7 point Likert scale (1=Never; 7= Very often);
6 items measuring each one of the two dimensions

Research Method

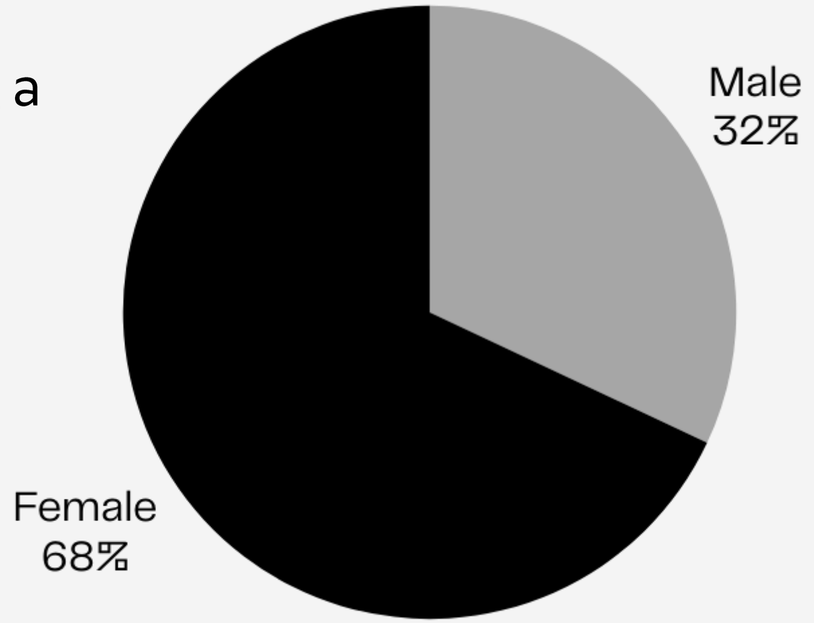
Participants had to be **18 years old or over and be in an active employment** situation (**N = 597**)

Mean age ≅ **40 years old** (M=39.94; SD=12.68)

Data was collected through a **quantitative** method using a **transversal** research design

Online research protocol

Self-response instruments + sociodemographic



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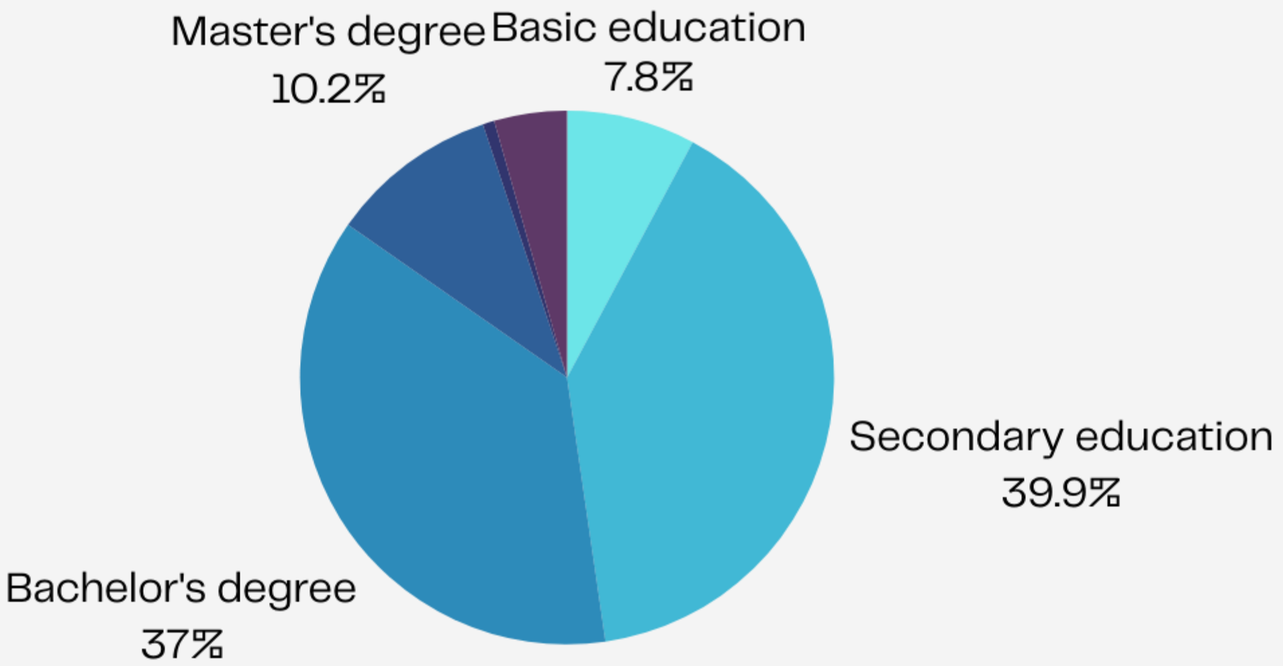

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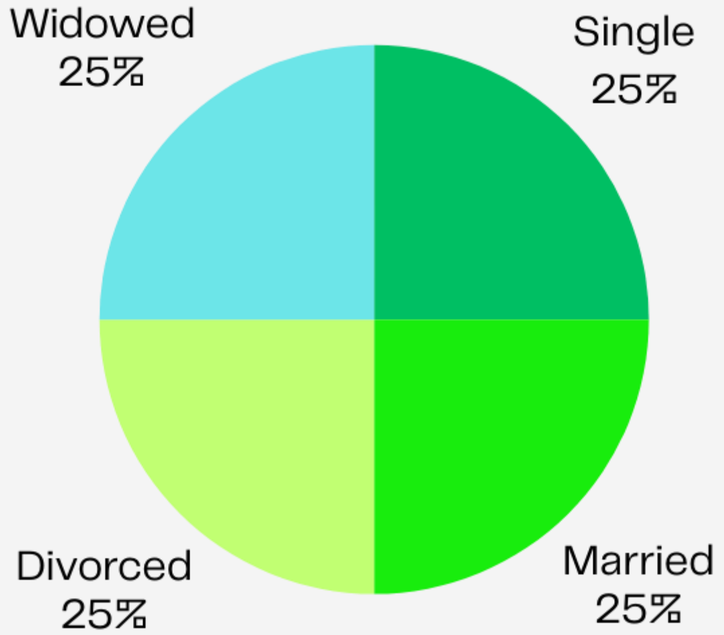

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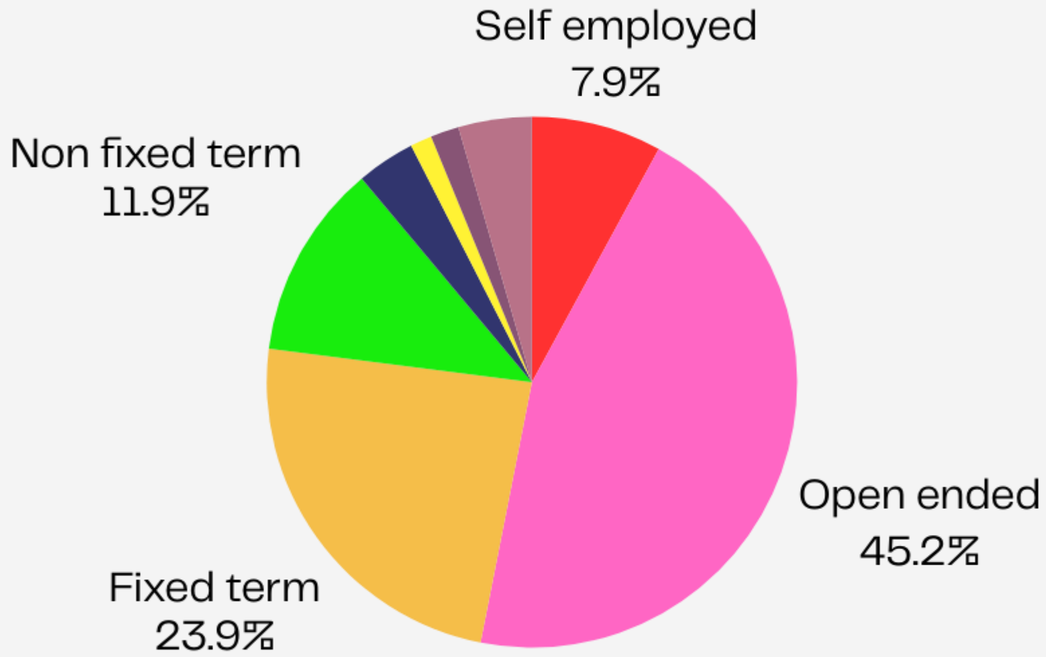

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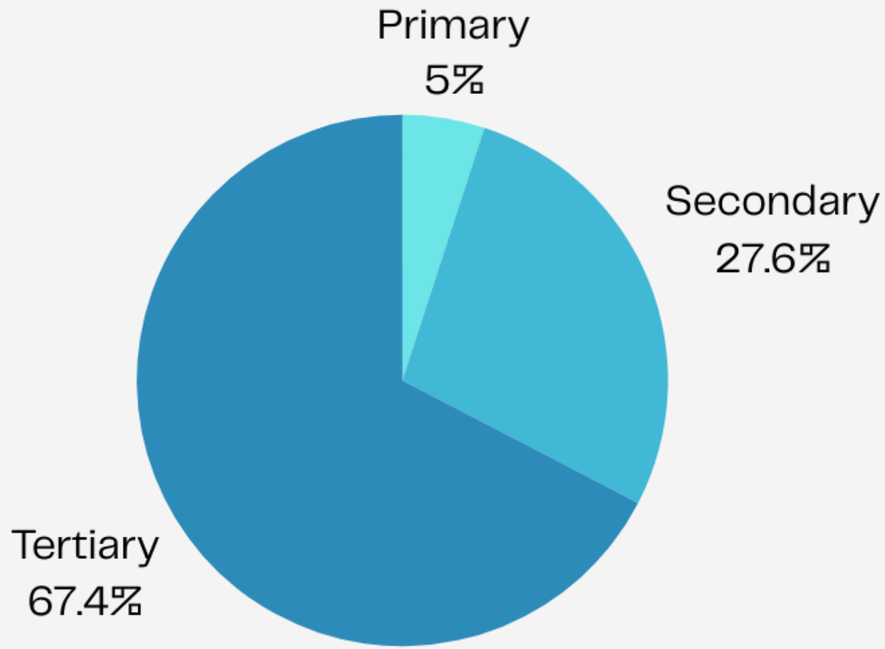


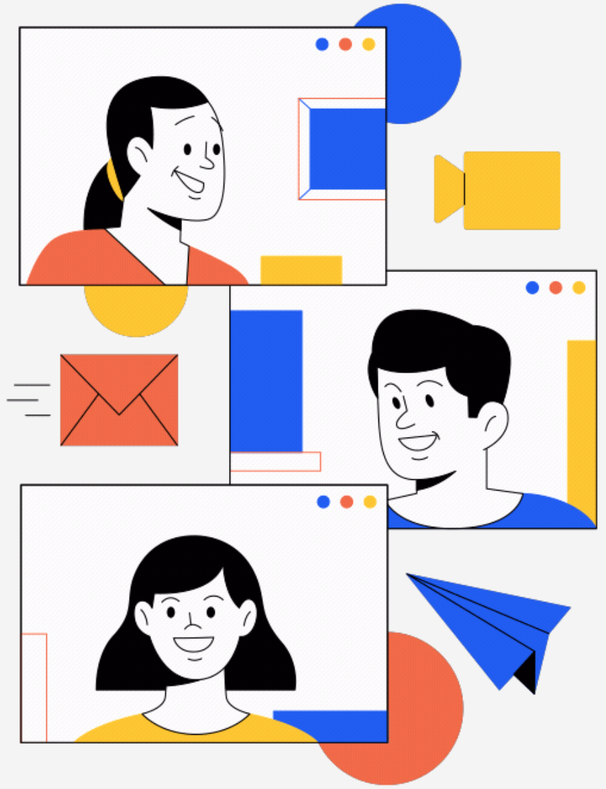
Research Method

Confirmatory factor analysis (Portuguese sample validation)

Assessment of the multivariate normal distribution (Curran et al.,1996), evaluation of **factor validity**, using the standardized factor loadings of the items (Marôco, 2021)

Descriptive and correlational analyses

Fornell and Larcker (1981) criterion



Results

There is evidence of factor validity and convergent validity.

All standardized factor loadings were **above the threshold of .50 and statistically significant** (p<.05) (Marôco, 2021)

Items **8 and 11 were removed** to improve the model's quality

Overall Model Fit Results

Fit index	Result	Comment
χ^2	160.886***	NA
GFI	.99	Very good fit
RMSEA	.08	Acceptable fit
90% CI RMSEA	[.07-.09]	NA
SRMR	.04	Good fit
CFI	.96	Very good fit
TLI	.95	Very good fit
χ2/df	4.88	Acceptable fit

Measurement Model Fit Results

	Standardized Factor Loadings*	ω	AVE
Playful Work Design		.91	
Designing fun		.90	.62
Item 1	.69		
Item 2	.64		
Item 3	.83		
Item 4	.84		
Item 5	.88		
Item 6	.81		
Designing competition		.78	.49
Item 7	.51		
Item 9	.64		
Item 10	.85		
Item 12	.79		

Note. ω= McDonald's omega coefficient; AVE=Average Variance Extracted coefficient; *p*<.05.

Although not all values for AVE were ⩾.50, (Bagozzi & Yi, 1988), they are **still >.24, which is the threshold for second-order factors** (Credé & Harms, 2015)

Results

There is evidence of discriminant validity.

AVE higher than the squared correlation values (Fornell & Larcker, 1981)

Discriminant Validity Assessment

	1	2	3	4	5	6	7
1. Designing fun	**.62**						
2. Designing competition	.29	**.49**					
3. Increasing structural job resources	.11	.10	**.51**				
4. Increasing social job resources	.06	.05	.04	**.42**			
5. Decreasing hindering job demands	.01	.01	.00	.01	**.48**		
6. Increasing challenging job demands	.14	.19	.23	.12	.00	**.46**	
7. Proactive personality	.34	.24	.14	.02	.03	.13	**.42**

Note. Bolded are the AVE values.

Results

Important findings on criterion validity:

PWD correlated **positively** with work engagement, job satisfaction, self-reported job performance, and affective commitment; and **negatively** with emotional exhaustion;

PWD dimensions are more **strongly** associated with **job satisfaction**

Discriminant Validity Assessment

	1	2	3	4	5	6	7
1. Designing fun	**.62**						
2. Designing competition	.29	**.49**					
3. Increasing structural job resources	.11	.10	**.51**				
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Key take-aways

The adapted version of the PWD questionnaire is **valid and reliable**, while showing enough evidence of factor, convergent, and discriminant validity for the PWD measure

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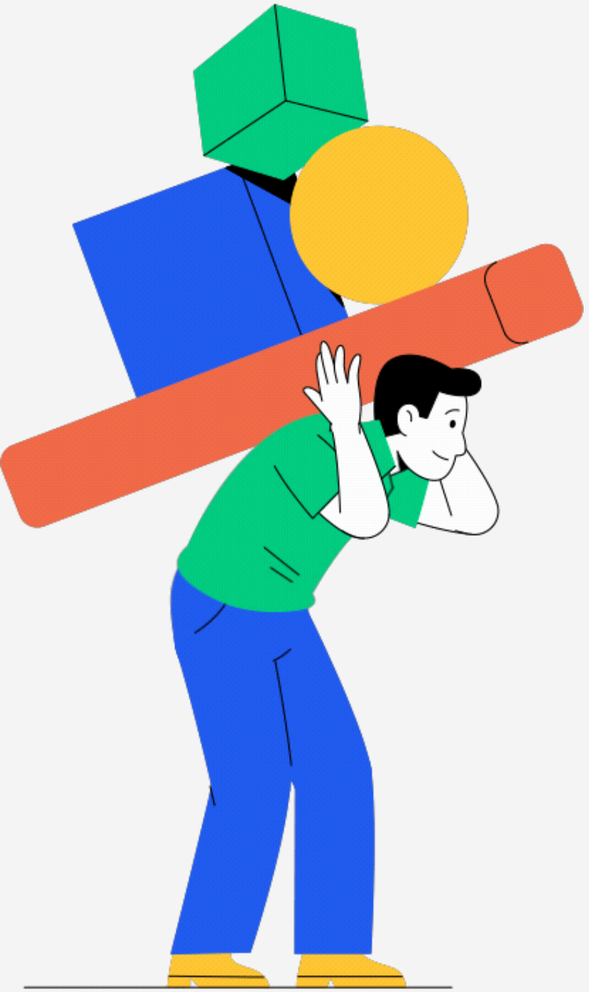
PWD showed the **expected correlation** with the work-related aspects; while showing its **differentiation from job crafting**

Key take-aways

The adapted version of the PWD questionnaire is **valid and reliable**, while showing enough evidence of factor, convergent, and discriminant validity for the PWD measure

PWD showed the **expected correlation** with the work-related aspects; while showing its **differentiation from job crafting**

Usability in academic and professional scenarios in **Portuguese**, which was unprecedented



Limitations

The study did not test if **PWD levels fluctuated** over time, and if there were any **reversed causality** relationships

The study only considered **one construct of a negative nature** (emotional exhaustion)

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