Brief original article

Measuring precarious employment in times of crisis: the revised Employment Precariousness Scale (EPRES) in Spain



Alejandra Vives^{a,b,c,d,*}, Francisca González^a, Salvador Moncada^e, Clara Llorens^{e,f}, Joan Benach^{b,g,h}

- ^a Departamento de Salud Pública, Escuela de Medicina, Pontificia Universidad Católica de Chile, Santiago de Chile, Chile
- b Health Inequalities Research Group, Employment Conditions Knowledge Network (GREDS-EMCONET),

Department of Political and Social Sciences, Universitat Pompeu Fabra, Barcelona, Spain

- c Center for Sustainable Urban Development (CEDEUS), Conicyt/Fondap/15110020, Santiago de Chile, Chile
- ^d Advanced Center for Chronic Diseases (ACCDiS), Conicyt/Fondap/15130011, Santiago de Chile, Chile
- ^e Union Institute of Work, Environment and Health (ISTAS), Barcelona, Spain
- f Department of Sociology, Political Sciences and Sociology Faculty, Universitat Autònoma de Barcelona (UAB), Bellaterra, Barcelona, Spain
- g Johns Hopkins University Universitat Pompeu Fabra Public Policy Center (JHU-UPF PPC), Barcelona, Spain
- h Transdisciplinary Research Group on Socioecological Transitions (GinTRANS2), Universidad Autónoma de Madrid, Madrid, Spain

ARTICLE INFO

Article history: Received 20 April 2015 Accepted 26 June 2015

Keywords:
Psychometrics
Employment
Employment precariousness
Spain

Palabras clave: Psicometría Empleo Precariedad laboral España

ABSTRACT

Objective: This study examines the psychometric properties of the revised Employment Precariousness Scale (EPRES-2010) in a context of economic crisis and growing unemployment.

Methods: Data correspond to salaried workers with a contract (n = 4,750) from the second Psychosocial Work Environment Survey (Spain, 2010). Analyses included acceptability, scale score distributions, Cronbach's alpha coefficient and exploratory factor analysis.

Results: Response rates were 80% or above, scores were widely distributed with reductions in floor effects for temporariness among permanent workers and for vulnerability. Cronbach's alpha coefficients were 0.70 or above; exploratory factor analysis confirmed the theoretical allocation of 21 out of 22 items. Conclusion: The revised version of the EPRES demonstrated good metric properties and improved sensitivity to worker vulnerability and employment instability among permanent workers. Furthermore, it was sensitive to increased levels of precariousness in some dimensions despite decreases in others, demonstrating responsiveness to the context of the economic crisis affecting the Spanish labour market.

© 2015 SESPAS. Published by Elsevier España, S.L.U. All rights reserved.

Medición de la precariedad laboral en tiempos de crisis: versión revisada de la Escala de Precariedad Laboral en España

RESUMEN

Objetivo: Este estudio examina las propiedades psicométricas de la versión revisada de la Escala de Precariedad Laboral (EPRES-2010) en un contexto de crisis económica y creciente desempleo.

Métodos: Muestra de personas ocupadas con contrato (n = 4750) provenientes de la segunda Encuesta de Riesgos Psicosociales (España, 2010). Se evaluaron la aceptabilidad, la distribución de puntuaciones, la consistencia interna y el análisis factorial exploratorio.

Resultados: La aceptabilidad estuvo en torno al 80%, con puntuaciones ampliamente distribuidas y una reducción del efecto suelo para «vulnerabilidad» y «temporalidad». La consistencia interna estuvo en torno a 0,70. El análisis factorial confirmó la pertenencia de 21 de 22 ítems a las escalas correspondientes.

Conclusión: La versión revisada de la EPRES demostró adecuadas propiedades psicométricas y mayor sensibilidad para medir la vulnerabilidad, así como la inestabilidad laboral en personas con contrato permanente. Además, fue sensible a incrementos de la precariedad en algunas dimensiones, a pesar de su disminución en otras, demostrando sensibilidad a los profundos cambios ocurridos en el mercado laboral español.

© 2015 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

The Employment Precariousness Scale (EPRES), developed by researchers from the Health Inequalities Research Group - Employment Conditions Network (GREDS-EMCONET), 1,2 was first validated in Spain with 2004-05 data, demonstrating good psychometric properties and construct validity, 3 with subsequent

^{*} Corresponding author. E-mail address: alvives@med.puc.cl (A. Vives).

applications in epidemiologic studies further reinforcing its construct validity.⁴

A revised version of the EPRES (hereafter EPRES-2010 for clarity), with changes aimed at overcoming limitations identified in the previous validation study,³ was included in the 2010 edition of the Psychosocial Work Environment Survey, a population-based survey conducted by the Spanish Union Institute of Work, Environment and Health (ISTAS).⁵

This revised version of the questionnaire (EPRES-2010) was applied in 2010, in the context of the highest unemployment rate (20%) seen in Spain since 1997, after which unemployment continued rising steeply, reaching 27% by the first trimester of 2012 and exceeding the highest unemployment rates observed since 1975. The importance of this lies in the fact that precarious employment is understood to be tightly linked to the unemployment rate: high unemployment rates reduce workers' bargaining power and capacity to refuse poor employment and working conditions, thus increasing the precariousness of employment overall.

Thus, this study serves the double purpose of assessing the psychometric properties of the revised version of the EPRES (EPRES-2010) and, by doing so in a context of high unemployment, assessing its suitability for use under adverse labour market circumstances.

Methods

Sample

The Psychosocial Work Environment Survey was conducted on nationally representative sample of workers, which for this study was restricted to salaried workers with a contract (n = 4,750). The survey protocol was approved by the Spanish Union Institute of Work, Environment and Health (ISTAS) Research Committee.

The revised Employment Precariousness Scale (EPRES-2010)

The EPRES is a six-dimensional scale, including 'temporariness', 'disempowerment', 'vulnerability', 'wages', 'rights', and 'exercise rights'. In the development of the revised EPRES-2010 version, changes were performed on the questionnaire based on previous validation results (see Online supplementary material).³ Significant changes (three subscales) included: changing one item in 'temporariness' to improve the assessment of instability among permanent workers and reduce floor effects; reducing one item and increasing response categories in 'disempowerment'; rewording of the items in 'vulnerability' to limit the subjective appraisal of experiences of defencelessness and avoid double barrelled questions, in order to reduce floor effects. Minor changes (three subscales) included: homogenizing the number of response categories in 'wages' items; reducing the number of items in 'rights' in order

to reduce questionnaire length and overlap with 'exercise rights'; adding one item in 'exercise rights' to distinguish between getting a day off for personal reasons or family affairs. Scale management followed the same steps as for the first version of the questionnaire.³

Analysis

Acceptability (proportion of subjects with at least one missing item), means and standard deviations, observed score ranges, and floor and ceiling effects (proportion of subjects with lowest and highest possible scores) were assessed separately for temporary and permanent workers. We assessed reliability with Cronbach's alpha coefficient, and the placement of items into subscales with principal axis exploratory factor analysis with varimax rotation. We calculated frequency distributions for individual items and item-scale and inter-scale Pearson correlations (available upon demand). Analyses were performed using SPSS v 19.0 for Windows.

Results

Study subjects (n = 4,750) are in greater proportion male (56.2%), aged 30 to 49 years (56.9%), have complete primary (30.6%) or secondary education (24.5%), work in commerce (16.8%) and manufacturing (12.2%), hold permanent contracts (75.9%), and report tenures greater than 5 years (48.2%).

All item response categories were used. The proportion of missing items was low, although somewhat higher for temporary than permanent workers. Means for 'disempowerment', 'vulnerability' and 'exercise rights' were roughly around 1, but lower for 'rights' and for 'temporariness' among permanent workers, and higher for 'wages' and for 'temporariness' among temporary workers. Standard deviations were roughly around 1, with few exceptions.

With the exception of 'temporariness', subscale score ranges coincided with the theoretical 0-4 range. Percentages of ceiling effects were low, but floor effects were high for 'rights' and 'disempowerment', and for 'temporariness' among permanent workers. Subscale reliability coefficients were all at or above 0.7. The global score ranged from 0 to 3.3, had neither floor nor ceiling effects, and a reliability coefficient of 0.82 (Table 1).

Table 2 shows all items presented the highest loading within their theoretical subscale; loadings were all above 0.35. The only exception was item 1 in 'vulnerability', which loaded highest in 'exercise rights' (0.31). The rotated factor model explained 51% of cumulative variance (and 53% if item 1 in vulnerability is removed).

Correlations between EPRES-2010 subscales were all lower than their reliability coefficients, indicating unique reliable variance is

Table 1Scale descriptive statistics: mean, standard deviation (SD), missing items, range, floor and ceiling effects, and Cronbach's alpha coefficient of the Employment Precariousness Scale (EPRES-2010). Salaried workers, PWES survey, Spain, 2010.

	Mean		SD		Missing items (%) ^a		Observed range		Floor (%) ^b		Ceiling (%) ^b		Cronbach's α
	P	T	P	T	P	T	P	T	P	T	P	T	
Temporariness	0.6	2.6	0.6	0.8	0.7	4.8	0-2	0.5-4	35.0	0.3	3.5	9.2	0.66
Disempowerment	1.0	1.2	1.2	1.4	0.1	0.2	0-4	0-4	56.4	50.3	1.6	3.8	0.91
Vulnerability	1.2	1.5	0.8	0.9	0.4	0.4	0-4	0-4	7.1	3.5	0.3	0.7	0.69
Wages	1.6	2.1	0.8	0.9	2.0	0.7	0-4	0-4	1.4	0.3	0.5	1.6	0.73
Rights	0.2	0.7	0.5	1.1	0.3	0.9	0-4	0-4	83.2	55.7	0.3	3.1	0.71
Exercise rights	1.0	1.4	0.9	1.0	3.8	5.8	0-4	0-4	25.8	15.9	0.5	1.4	0.86
EPRES score	0.9	1.6	0.4	0.6	7.1	12.4	0-2.9	0.3-3.3	0.0	0.10	0.00	0.1	0.82

EPRES: Employment Precariousness Scale; P: permanent; T: temporary; SD: standard deviation; PWES: Psychosocial Work Environment Survey.

^a Proportion of participants with any item missing on each subscale.

^b Proportion of participants with lowest (floor) and highest (ceiling) scores.

Download English Version:

https://daneshyari.com/en/article/1073016

Download Persian Version:

https://daneshyari.com/article/1073016

<u>Daneshyari.com</u>