



## **Editorial**

Scand J Work Environ Health [2019;45\(5\):425-427](#)

doi:10.5271/sjweh.3845

### **Research strategies for precarious employment**

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**Key terms:** [editorial](#); [employment condition](#); [employment contract](#); [labor market](#); [precarious employment](#); [temporary employment](#); [working condition](#)

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## Research strategies for precarious employment

Past decades have been characterized by technological changes and globalization of the economy, which has led to a change in employment conditions worldwide. Flexible labor markets and decreased impact of trade unions have contributed to the increase and emergence of insecure 'non-standard' forms of employment, such as temporary agency jobs and zero-hour job contracts. During the past ten years, there has been an increase, albeit slight, in precariousness of work in developed countries (1). Although precarious employment is a societal issue with potential adverse effects on health, the majority of research activity has focused on proximal psychosocial working conditions within the workplace, which however, represents a small aspect of a complex system involving labor markets, employment and working conditions, psychosocial working conditions, and the relationship with health.

While an internationally accepted scientific definition is lacking, precarious employment can be conceptualized as accumulated unfavorable aspects of employment (contract) quality. These unfavorable aspects may include temporary job contracts, job insecurity, vulnerability, lack of control and employee rights, nonstandard or substandard working time arrangements, limited training and employability opportunities, and low salary (2). The point is that while any single dimension does not necessarily indicate precariousness, accumulating adversities result in precarious employment (3).

Young people in particular seem to be at risk of health problems when exposed to precarious employment (4). A recent systematic review also concluded that some dimensions of precarious employment were associated with occupational injuries and accidents (5).

In this issue of the *Scandinavian Journal of Work, Environment & Health*, Rönneblad et al (6) present the first systematic review and meta-analysis on the relationship between precarious employment and mental health. They found 16 studies that met their inclusion criteria: prospective studies with data on working age active labor market participants from European Economic Area, Switzerland, Australia, New Zealand, Canada, and the US during 2000–2017. In the included studies, the assessed exposure was single or multiple dimensions of precarious employment, and workers exposed were compared to those not exposed. Outcomes that were related to mental health were included. Of the included studies, only five studies used multidimensional exposure (ie, measured more than one dimension of precariousness).

The review was carefully conducted in accordance with the Preferred Reporting Items for Systematic Review and Meta-analysis Protocol (PRISMA-P) guidelines. The authors conclude that moderate quality evidence was found for adverse effect of job insecurity on mental health. Evidence of very low quality was found for single dimensions of temporary job contracts and unpredictable working hours on mental health. The quality problems in these studies included inconsistent evidence and limited total number of studies. No quality rating was conducted for the five studies using multidimensional measure of precariousness. However, a meta-analysis was performed, which gave a summary odds ratio of 2.01 (95% CI 1.60–2.53) for the association between precarious employment and poor mental health. This was interpreted as representing "an indication of where the effect sizes would probably disperse when studying more than one dimension of precarity simultaneously" (6).

The authors give a clear recommendation that observational studies with single exposures, particularly overly broad category of temporary employment and general job insecurity, should not be prioritised in future studies. Rather, high-quality studies using multidimensional exposure to precarious employment were found to be scarce, and the authors had to exclude many studies due to poor or inadequate study designs. It thus seems clear that we need to develop a common measure for precarious employment which is of high quality and widely used in the scientific community. This means development, testing, and validation studies for measuring precariousness,

and theoretical discussions on the concept. The Employment Precariousness Scale is a step towards this goal (7, 8). However, as the response rates to questionnaire data are decreasing internationally, and there are widely known biases in self-reported data such as 'common method bias' (9, 10), we may need additional data sources. Moreover, as Rönblad et al note, precarious employees are almost by definition, difficult to follow longitudinally.

Here, register data and secondary use of digital data sources ('big data') may provide additional information. For example, objective information on employment contracts, salaries, unionisation, and working hours are available through employers' registers, at least in the Nordic countries. The level of worker organization (union representation) and training are available through national registers (in Finland: Statistics Finland). In fact, Van Aerden and her colleagues (11) have used latent class cluster analysis of survey data and found that it is empirically possible to identify separate clusters of employment quality based on information on employment contract, income level, uncompensated work, long working hours, schedule unpredictability, involuntary part-time employment, training opportunities, information on occupational health and safety issues, and employee involvement. The majority of these measures could be identified through register databases.

Rönblad and his colleagues (6) further suggest that job insecurity should be studied as an outcome or mediator between other labor market exposures and health outcomes. This suggestion could be expanded to other indicators of precarious employment as well. For example, the model of sustainable employability by van der Klink et al (12) considers opportunities to develop new knowledge and skills (capabilities) as core element of sustainable employability. The model postulates a process where a worker can convert his/her resources into opportunities to achieve valuable goals. The major point of the model is that people are more likely to be sustainably employable if their work does not merely represent a means to earn a living. Precarious employees have a poor labor market status and, by definition (dimension of precarious employment), poor opportunities to develop their capabilities. Future research could thus investigate whether precarious employment, or dimensions of precariousness, mediate or moderate the relationship between work and labor market exposures and health-related outcomes.

The independent effect of precarious employment from adversity related to low income should be addressed. Furthermore, to date, research on precarious employment has been based on data with assessment of precarious employment at one time point only (1). However, the dynamic nature of the labor market sets requirements to future research so that we need to consider changes of employment relationships over time, across the individual's working life course. New methods, such as trajectory analyses and multi-state models would give valuable information on employment trajectories and dynamic intersections between precarious employment and other work and employment related characteristics across the working life course.

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