

# Creating Sustainable Work 7-9 May 2025

Stockholm, Sweden



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# Oral presentations

Sida: 11 (176)

# Measuring Job Quality/ Employment Quality from a global perspective

2025-05-07 10:30 - 12:00

Measuring Job Quality/ Employment Quality from a global perspective

Sida: 12 (176)

#### **Employment Quality in the US Context**

#### 5. Theories and Method

#### Sarah Andrea<sup>1</sup>

Emily Ahonen<sup>2</sup>, Vanessa Oddo<sup>3</sup>, Megan Winkler<sup>4</sup>, Anita Minh<sup>5, 6</sup>, Anjum Hajat<sup>6</sup>

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- <sup>6</sup> Department of Epidemiology, University of Washington School of Public Health, USA

#### **Abstract text:**

The United States (US) has experienced marked declines in employment quality (EQ) in recent decades, occurring alongside growing inequities in economic, mental, and physical well-being. Importantly, addressing worsening EQ is hampered by our inability to accurately measure it. There are several challenges to the measurement of EQ in the US context where scales validated elsewhere, such as the EPRES, have yet to be translated, tested, and implemented. As a consequence, researchers rely on secondary data from cohort studies and surveys designed for other purposes to conduct EQ research, and are left to map scavenged items to create EQ measures for a construct originally developed in national contexts where social safety nets, employment-related institutions, and labor laws are stronger.

This presentation synthesizes findings from multiple studies that examined EQ impacts on health within the US with an additional focus on different life stages and birth cohorts. Relying on items available in secondary datasets, we discuss and evaluate the various summative and typological methods employed to create multidimensional measures of EQ and their related findings. Additionally, we integrate insights from US-based qualitative studies.

This work underscores the challenges and potential strategies for measuring EQ in the US, advocating contextually-tailored EQ metrics. Our findings highlight gaps in available data, particularly in areas critical for accurately capturing the experiences of the self-employed, and EQ dimensions such as interpersonal power. Further improvement to measurement of EQ in the US is critical to inform policy approaches to improve EQ and worker health.

Sida: 13 (176)

Validation of the Belgian Employment Precariousness Scale (EPRES-BE). A compact scale for investigating precarious employment among waged workers.

5. Theories and Method

#### Christophe Vanroelen<sup>1</sup>

Mattias Vos<sup>1</sup>

<sup>1</sup> Brussels Institute for Social and Population Studies (BRISPO), Vrije Universiteit Brussel

Abstract text: Background. Precarious employment is an important and still understudied social determinant of health. There is still a need for further sound evidence on causality and on the assumed mechanisms that explain associations between precarious employment and workers' health and well-being. This is partly due to the absence of good (longitudinal) data including appropriate multidimensional measurement instruments. Objective. This contribution concerns the validation of the Employment Precariousness Scale (EPRES), a by origin multidimensional scale developed in Spain, that was translated to Dutch and French and adapted to the Belgian context. An additional objective was to validate a compact EPRES-scale that is easier to integrate in official data collections and as a screening instrument. Method. We analyzed a pooled sample of 9,102 Belgian waged workers from different sectors (e.g., industrial workers, professional cleaners, retail workers, health care workers) who answered questions on precarious employment, job quality and health and well-being in three online surveys conducted in 2019, 2020 and 2023 facilitated by the Belgian trade unions. Validation analyses include descriptive statistics, exploratory factor analysis and confirmatory factor analysis. External validation is done by analyzing associations between EPRES-BE and its sub-dimensions with well-being outcomes (i.e., WHO5, self-rated general health and somatic complaints) using descriptive analyses and regression analyses. Results. Preliminary results show acceptable to good internal consistency of EPRES-BE and its subdimensions. EPRES-BE and several subdimensions serve as predictors of the health and well-being outcomes. Further analyses should refine this validation exercise on a unique sample of waged workers.

Sida: 14 (176)

#### Refining the concept of employment quality for the self-employed in the US

#### 5. Theories and Method

#### Anjum Hajat<sup>1</sup>

Sarah Andrea<sup>2</sup>, Jerzy Eisenberg-Guyot<sup>3</sup>, Will von Geldern<sup>4</sup>, Trevor Peckham<sup>5</sup>, Vanessa Oddo<sup>6</sup>, Heather Hill<sup>4</sup>

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- <sup>5</sup> Hazardous Waste Management Program King County Water and Land Resources Division, USA
- <sup>6</sup> Department of Kinesiology and Nutrition, College of Applied Health Sciences, University of Illinois Chicago, USA

#### **Abstract text:**

**Background**: Employment quality (EQ) is the contractual and relational aspects of the employer-worker relationship. Among the self-employed, employers and workers are often one and the same, requiring refinement of the EQ concept.

**Methods**: Drawing from a qualitative study of home cooks and US-based quantitative studies, we describe features of self-employment that relate to high and low EQ and evaluate the health impacts of self-employment.

Results: While available quantitative data on EQ of the self-employed is limited, studies find distinct typologies. Evidence suggests at minimum wealthy and less-wealthy self-employed groups. The wealthier self-employed tend to be more educated, work longer hours, and be in better health than the poorer self-employed. Importantly, wealthier self-employment is reserved for those with dominant social identities (e.g., white men) while self-employment generally was rare among women of color. One preliminary cluster analysis leveraging more comprehensive data among the self-employed revealed four typologies, with lower income immigrant women overrepresented in a solo self-employed typology. Qualitative interviews suggest those who do not fit well in the traditional labor market may prefer less lucrative self-employment as a viable alternative to precarious work. For example, our participants noted the flexibility of self-employment for balancing care responsibilities.

**Conclusions**: A deeper understanding of self-employment in the US should focus on attributes of EQ that affect health among the self-employed, including flexible working time arrangements on the one hand, and instability on the other. In addition, the disparate impacts of institutions and policies that affect self-employment need further evaluation.

Sida: 15 (176)

### Employment Quality: A Social Determinant of Health and Well-Being in a Changing Labor Market in Korea

5. Theories and Method

#### Julie Vanderleyden<sup>1</sup>

Hyojin Seo<sup>2, 3</sup>, Christophe Vanroelen<sup>1</sup>, Deborah De Moortel<sup>1</sup>

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- <sup>2</sup> Katholieke Universiteit Leuven
- <sup>3</sup> Tilburg University

Abstract text: Against the background of increased labor market flexibilization, health issues amongst employees have become a pressing social concern in Korea. Yet, little is known about the diversity in employment experiences and the associated health implications amongst employees. To accurately gauge labor market segmentation, whilst simultaneously accounting for health-risk factors, we employ the multidimensional Employment Quality (EQ) concept in a typological manner. This method differentiates various employment segments, with the Standard Employment Relationship (SER) serving as a benchmark. Using the 2017 Korean Working Conditions Survey (KWCS), we employ Latent Class Cluster Analysis on a sample of the salaried workforce (N= 25.376) to construct a typology of EQ. Via logistic regression, we link the EQ typology to poor mental well-being and poor self-rated general health. As a result, we find six distinct types of EQ arrangements in Korea: SER-like, Instrumental, SER Intensive, Instrumental Intensive, Precarious Intensive, and Precarious Unsustainable. We find that deviations from the SER-like segment are associated to poorer health and well-being outcomes, even when accounting for other confounding factors, with precarious EQ segments showing the most pronounced adverse health associations. This study furthers our understandings of health disparities within the salaried workforce. Our findings underscore the need for targeted reforms of workplace- and employment-related health policies to foster a healthier working population in Korea.

Sida: 16 (176)

#### The British Columbia Precarity Survey – Measurement and Implications

5. Theories and Method

#### Anita Minh1

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- <sup>2</sup> Senior Economist and Public Interest Researcher, Canadian Centre for Policy Alternatives BC Office, Canada
- <sup>3</sup> Co-Director, Understanding Precarity in BC Project, Canada

Abstract text: Background: Despite political will to improve employment for precarious workers in the Canadian province of British Columbia (BC), meaningful change has been hindered by a lack of evidence on the multiple dimensions of precarious employment. The BC Precarity Survey was developed to fill this gap. In this presentation for "Measuring employment quality: A global perspective", we provide an overview of the Survey's main findings, its strengths and weaknesses, and its role in stimulating public discourse.

**Methods**: The BC Precarity Survey was developed by the Canadian Centre for Policy Alternatives BC and Simon Fraser University in consultation with workers' advocates and organizations (Wave I 2019: n=3000, Wave II 2023: n=4000). The Survey included multiple indicators not captured by existing government surveys, including scheduling variability and notice, access to employer-provided benefits, contract length, temporary work, and workers' bargaining power.

**Results**: The Survey produced insights into the scale and impact of precarity in BC. Crucially, it allowed for analyses of the interaction between social location and precarity (e.g., the racialized gendering of seasonal, contract, and casual work), and its uneven impacts on racialized and immigrant communities, Indigenous peoples, women, and low-income families. It revealed challenges to the measurement of precarity.

**Conclusions**: Survey findings reflect inadequacies in the ability of Canada's system of labour laws and employment standards to guarantee workers benefits coverage, adequate income, certainty, and a 'voice' in the workplace. We discuss how this evidence was mobilized to strengthen programs and regulations that respond to current labour market realities.

Sida: 17 (176)

### The scope and implications of community-based methodologies in occupational health research: Insights from a research on precarious work and health.

#### 5. Theories and Method

#### Momtaz Begum<sup>1, 2</sup>

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- <sup>4</sup> Executive Director, South Asian Women and Immigrants Services (SAWIS), Canada
- <sup>5</sup> Project Support Worker, South Asian Women and Immigrants Services (SAWIS), Canada

Abstract text: Although there is a growing emphasis on academic-community partnered research across various disciplines, there is still a lack of comprehensive insights into such partnerships within the context of work and health research, particularly regarding collaboration throughout all phases of the research process from conceptualization to interpretation and dissemination of results. Engaging communities in research fosters firsthand knowledge, insights, and actionable solutions. Moreover, engaging community stakeholders helps reduce the marginalization of historically underserved communities. This study adopted a dynamic collaborative approach where both academic and community partners identified the research problem, decided on the research design, participated in implementation (e.g., data generation, analysis, interpretation), and disseminated results within the community. This paper discusses guiding principles and factors (e.g., interpersonal, operational) that facilitated or hindered the collaborative process. Shared visions of equity and social justice, and goals to improve the work and health experiences of marginalized populations, drove this community-engaged research. Research rigor and impact were ensured by mutual respect, trust and power sharing dynamics among partners. Facilitators included clearly defined roles, mutual trust and respect, open communication, effective conflict resolution, and positive community impact. Although the academic partner had control over resources, decisions on hiring, recruitment, remuneration, and other project related expenditures were made collaboratively. Despite efforts to minimize inequalities in resource control, challenges emerged throughout various phases of the project. Insights from this study can inform and provide guidance for future work and health researchers on effective communityengaged research practices.

Sida: 18 (176)

### Tracing the Impact of Precarious Employment on Health: Insights from Longitudinal Research

2025-05-07 10:30 - 12:00

Tracing the Impact of Precarious Employment on Health: Insights from Longitudinal Research

Sida: 19 (176)

### Good jobs, bad jobs, and 'deaths of despair': a longitudinal study of Canadian workers

1. Health, Safety and Well-Being

#### Faraz Shahidi<sup>1, 2</sup>

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#### **Abstract text:**

Deaths due to suicide, drug poisoning, and alcohol-attributable mortality (SDAM) are increasing among working-age people in many high-income countries. Employment quality is hypothesized to be an upstream and modifiable risk factor for these so-called 'deaths of despair'. This study examined the association between employment quality and risk of SDAM in Canada.

Census records from the 2006 Canadian Census Health and Environment Cohort (n=2,805,550) were linked to mortality data from 2006–2019. Latent class analysis identified five employment quality types: standard (secure and rewarding), portfolio (rewarding but demanding), marginal (limited hours and earnings), intermittent (sporadic and unstable), and precarious (insecure and unrewarding). Poisson regression models estimated sex/gender-stratified associations between employment quality type and SDAM.

SDAM rates were lowest among those in standard employment and highest among those in precarious employment. Compared to standard employment, precarious employment was associated with a 2.43 (95%Cl: 2.20–2.68), 3.58 (95%Cl: 3.21–4.00), and 1.77 (95%Cl: 1.57–1.99) greater risk for suicide, drug poisoning, and alcoholattributable mortality, respectively, among women, and a 1.69 (95%Cl: 1.60–1.79), 2.69 (95%Cl: 2.49–2.90), and 2.22 (95%Cl: 2.07–2.38) greater risk, respectively, among men. Associations were uniquely patterned by gender. For example, employment quality was a stronger predictor of suicide and drug poisoning deaths among women and a stronger predictor of alcohol–attributable deaths among men.

Sida: 20 (176)

**Conclusion:** Employment quality is an important determinant of suicide, drug poisoning, and alcohol-attributable mortality and may be a promising target for policy and programmatic interventions aiming to mitigate rising 'deaths of despair'.

Sida: 21 (176)

#### Precarious employment and occupational injury rate in Norway

1. Health, Safety and Well-Being

#### Karina Undem<sup>1</sup>

Rune Hoff<sup>1</sup>, Stine Fossum<sup>1</sup>, Theo Bodin<sup>2, 3</sup>, Karl-Christian Nordby<sup>1</sup>, Rachel Louise Hasting<sup>1</sup> National Institute of Occupational Health, Norway

- <sup>2</sup> Unit of occupational medicine, Karolinska Institutet, Sweden
- <sup>3</sup> Center for Occupational and Environmental Medicine, Stockholm Region, Sweden

**Abstract text: Background**: The objective of this study was to assess whether precarious employment in Norway is associated with an increased rate of occupational injuries.

Methods: Utilizing registry data, the study applied a multidimensional approach to quantify precarious employment based on SWE-ROPE. For employed individuals aged 18–65 in 2013, a summative precarious employment score was calculated based on five items: (i) contractual relationship insecurity (employed by a staffing agency), (ii) contractual temporariness (unstable employment), (iii) multiple jobs/industries, (iv) low income and (v) lack of union representation. Negative binomial regression analyses were conducted to estimate the incidence rate ratio (IRR) for occupational injuries, defined as the number of occupational injuries treated in specialist health care during 2014, between precarious employment and standard employment. Time at risk was defined as days employed in 2014.

**Results**: Among 846,246 men and 729,084 women in the study, 5% (men) and 7% (women) had precarious employment. 4748 injuries were registered among 4652 workers. Precarious employed workers had a higher rate of occupational injuries compared to those with standard employment after adjusting for age, gender, country of birth and education (IRR: 1.20; 95% Cl:1.07–1.35). Workers employed by an agency, had unstable employment or multiple jobs had increased rate, whereas workers with low income, lack of union representation or multiple jobs in multiple industries had decreased rate.

**Conclusion**: Precarious employed workers in Norway have an increased rate of occupational injuries. Contractual relationship insecurity, contractual temporariness and multiple jobs appear to be key factors in understanding the increased rate.

Sida: 22 (176)

#### Is precarious employment an occupational hazard? Evidence from Ontario, Canada

1. Health, Safety and Well-Being

#### Faraz Shahidi<sup>1, 2</sup>

Qing Liao<sup>1</sup>, Victoria Landsman<sup>1,2</sup>, Cameron Mustard<sup>1,2</sup>, Lynda Robson<sup>1,3</sup>, Aviroop Biswas<sup>1,2</sup>, Peter Smith<sup>1,2</sup>

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- <sup>2</sup> Dalla Lana School of Public Health, University of Toronto, Toronto, Canada
- <sup>3</sup> School of Occupational and Public Health, Toronto Metropolitan University, Toronto, Canada

#### **Abstract text:**

**Background:** This study examined the association between precarious employment and risk of occupational injury or illness in Ontario, Canada.

Methods: We combined compensation claims from the Workplace Safety and Insurance Board with labour force statistics to estimate injury and illness rates between January 2016 and December 2019. Precarious employment was imputed using a job exposure matrix and operationalised in terms of temporary employment, low wages, irregular hours, involuntary part-time employment and a multidimensional measure of 'low', 'medium', 'high' and 'very high' probabilities of exposure to precarious employment. Negative binomial regression models examined exposure to precarious employment in relation to risk of occupational injury or illness.

**Results:** After adjusting for age, sex and year, all indicators of precarious employment were associated with increased risk of injury or illness. Workers with 'high' and 'very' high' exposure to precarious employment presented a nearly threefold risk of injury or illness (rate ratio (RR): 2.81, 95% CI: 2.73–2.89; RR: 2.82, 95% CI: 2.74–2.90). Further adjustment for physical demands and workplace hazards attenuated associations, though a statistically and substantively significant exposure—outcome relationship persisted for workers with 'high' and 'very high' exposures to precarious employment (RR: 1.65, 95% CI: 1.58–1.72; RR: 2.00, 95% CI: 1.92–2.08).

**Conclusion:** Workers exposed to precarious employment were more likely to sustain an injury or illness on the job. Workplace health and safety strategies should consider the role of precarious employment as an occupational hazard and a marker of work injury risk.

Sida: 23 (176)

### Understanding the Occupational Health Needs of Residents in Two High-Hardship Communities

1. Health, Safety and Well-Being

#### Tessa Bonney<sup>1</sup>

Jeni Hebert-Beirne<sup>2</sup>, Sylvia Gonzalez<sup>1</sup>, Dolores Castaneda<sup>1</sup>, Melissa Chrusfield<sup>3</sup>, Adlaide Holloway<sup>3</sup>, Marjorie Kersten<sup>2</sup>, Caesar Thompson<sup>2</sup>, Genesis Vasquez<sup>2</sup>, Danielle Westnedge<sup>1</sup>

- <sup>1</sup> University of Illinois Chicago, Division of Environmental and Occupational Health Sciences
- <sup>2</sup> University of Illinois Chicago, Division of Community Health Sciences
- <sup>3</sup> Greater Lawndale Health Work Council

Abstract text: Background: The Greater Lawndale Healthy Work (GLHW) project is an on-going community-based participatory research project in two contiguous high-hardship neighborhoods in Chicago, Illinois, USA. To understand the occupational health needs of the most precariously employed residents, the GLHW conducted a mixed-methods needs assessment with to inform the development of community-based interventions to promote healthy work. In this presentation, we will present key findings from as well as our approaches to conducting this assessment.

**Methods**: The GLHW project is led by a team of academics and community stakeholders who contributed diverse expertise to the needs assessment. The team conducted 20 interviews, 12 focus groups, concept mapping with 292 residents, and surveyed 489 workers. Recruitment and data collection were overseen by the GLHW Council and led by community member co-researchers.

Results: Qualitative findings highlight structural and systemic factors preventing residents from accessing and sustaining healthy work, including discrimination, violation of rights and worker exploitation, and lack of community investment. Survey responses show high employment in non-traditional arrangements and indicate that low quality employment conditions, including hazardous occupational exposures, were significantly associated with high precarity work. The GLHW team co-developed evidence-informed, community-led roadmap to address community-level work conditions. Current foci include a worker certification program to shift to local ecology of jobs to healthy jobs, a feasibility study on neighborhood-level worker cooperatives, and a photovoice study on informal workers.

**Conclusion**: The GLHW's efforts to comprehensively characterize employment at a hyperlocal level provide a nuanced picture of opportunities for intervention to improve occupational health.

Sida: 24 (176)

# Precarious Employment: Economic, Health, and Psychosocial inequalities

2025-05-07 10:30 - 12:00

Precarious Employment: Economic, Health, and Psychosocial inequalities

Sida: 25 (176)

## Economic outcomes experienced by workers in non-standard employment during the COVID-19 pandemic: Findings from a six-country survey

#### 2. Society and Inequality

#### Virginia Gunn<sup>1, 2</sup>

Alejandra Vives<sup>3</sup>, Alessandro Zaupa<sup>4</sup>, Julio C. Hernando-Rodriquez<sup>2</sup>, Mireia Julià Perez<sup>5, 6, 7</sup>, Signild Kvart<sup>2</sup>, Wayne Lewchuk<sup>8</sup>, Eva Padrosa Sayeras<sup>5, 6, 7</sup>, Matthias Philippe Vos<sup>9</sup>, Emily Q. Ahonen<sup>10</sup>, Sherry Baron<sup>11</sup>, Kim Bosmans<sup>9</sup>, Letitia Davis<sup>12</sup>, Ignacio Díaz<sup>4</sup>, Nuria Matilla-Santander<sup>2, 13, 14</sup>, Carles Muntaner<sup>15, 16</sup>, Patricia O'Campo<sup>16, 17</sup>, Per-Olof Östergren<sup>18</sup>, Christophe Vanroelen<sup>9</sup>, Emilia F. Vignola<sup>19</sup>, Theo Bodin<sup>2, 20</sup>

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- <sup>6</sup> SDHEd (Social Determinants and Health Education Research Group), IMIM (Hospital del Mar Medical Re-search Institute), 08003 Barcelona, Spain
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- <sup>9</sup> Interface Demography, Department of Sociology, Vrije Universiteit Brussel, Pleinlaan 2, 1050 Brussels, Bel-gium
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- <sup>12</sup> Consultant, Boston, Massachusetts, USA
- <sup>13</sup> Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain
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- <sup>17</sup> Dalla Lana School of Public Health, University of Toronto, Toronto, ON Canada
- <sup>18</sup> Social Medicine and Global Health, Department of Clinical Sciences Malmö, Lund

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University, 20205 Malmö, Sweden

<sup>19</sup> Department of Epidemiology at the University of Washington School of Public Health <sup>20</sup> Center for Occupational and Environmental Medicine, Stockholm Region, 11365 Stockholm, Sweden

**Abstract text: Background:** The COVID-19 crisis has magnified existing social inequalities, including the employment and income insecurities, and deterioration of workplace rights experienced by workers globally.

**Methods:** We used data from an online survey conducted from November 2020 to June 2021 in Sweden, Belgium, Spain, Canada, the United States, and Chile to examine several employment-related determinants of economic and occupational safety outcomes affecting non-standard workers and unemployed workers. The six countries examined have different political economies and particular differences in welfare regimes, which influenced how they dealt with the crisis. Worker outcomes were explored in the context of type and duration of employment arrangements as well as employment transitions triggered by the COVID-19 crisis.

**Results:** During the pandemic, workers in non-standard employment arrangements or in unemployment across all six countries studied were affected by numerous changes in work hours, income, and benefits. Unsurprisingly, decreases in work hours, income, and benefits negatively impacted workers' ability to keep up with basic living expenses. Temporary agency workers, workers with short contracts and on-call work experienced the most difficulties. Furthermore, data from the survey indicated that the provision of personal protective equipment or other pandemic protection measures was unequal across different types of employment arrangements.

**Conclusion:** Findings from this survey add to the body of evidence suggesting that workers in non-standard employment and the unemployed have suffered from a range of adverse effects linked to the pandemic and would have benefited from tailored pandemic responses and recovery strategies that considered their situation and interconnected vulnerabilities.

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## Precarious Employment and Excess Mortality Among Spanish Salaried Workers During the COVID-19 Pandemic

2. Society and Inequality
Juan Pablo Salazar<sup>1</sup>

Amaia Ayala-Garcia<sup>2, 3</sup>, Fernando G. Benavides<sup>1, 3</sup>, Mireia Utzet<sup>1, 3</sup>

- <sup>1</sup> Centre for Research in Occupational Health (CiSAL-UPF, HMRI), Universitat Pompeu Fabra
- <sup>2</sup> Integrative pharmacology and systems neuroscience, Hospital del Mar Research Institute (HMRI)
- <sup>3</sup> CIBER of Epidemiology and Public Health (CIBERESP)

#### **Abstract text: Objectives**

This study examines the impact of the COVID-19 pandemic on mortality among salaried workers in Spain during 2020–2021, while investigating the relationship between excess mortality during the pandemic and employment conditions over the preceding decade.

#### Methods

We conducted a retrospective cohort study of salaried workers who died between 2015 and 2021 (N=5,527). We estimated excess mortality during the pandemic period (2020–2021) and potential years of working life lost (PYWLL), using pre-pandemic mortality rates from 2015–2019 as a reference. Poisson regression models were employed to calculate the excess mortality ratio (EMR) with 95% confidence intervals, focusing on employment conditions related to precariousness and stratified by sex.

#### **Results**

Both men and women experienced increased mortality during the pandemic years. Women showed higher excess mortality than men in 2020 (1.30 [95% CI 1.14–1.46] vs. 1.21 [95% CI 1.12–1.30]) and in 2021 (1.42 [95% CI 1.25–1.58] vs. 1.09 [95% CI 1.01–1.18]), with more than double the PYWLLs. Among men, precarious employment conditions, such as part-time work, low income, and periods of unemployment, were strongly associated with higher mortality in both pandemic years (e.g., 2020 fully adjusted EMR for low-income workers: 1.41 [95% CI 1.11–1.81]). Similar, though non-significant, trends were noted among women with low income and unemployment histories.

#### Conclusions

The COVID-19 pandemic had a profound impact on mortality among the working population Excess mortality related to precarious employment conditions was observed only in men. These findings underscore the importance of developing policies to address employment insecurity through gender-sensitive approaches.

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#### Lessons from COPE: The Reciprocal Relation Between Class and Precarious Employment

#### 2. Society and Inequality

#### Carles Muntaner<sup>1, 2</sup>

Patricia O'Campo<sup>2, 3</sup>, Virginia Gunn<sup>2, 4, 5</sup>, Melissa Perri<sup>2, 3</sup>, Pearl Buhariwala<sup>2</sup>, Elham Rasoulain<sup>2</sup>, Maryam Daneshvardfard<sup>2</sup>, Rachel Ma<sup>3</sup>, Wayne Lewchuck<sup>6</sup>, Sherry Baron<sup>7</sup>, Theo Bodin<sup>5, 8</sup>

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- <sup>7</sup> Barry Commoner Center for Health and the Environment, Queens College, City University of New York, Queens, NY, USA
- <sup>8</sup> Center for Occupational and Environmental Medicine, Stockholm Region, Stockholm, Sweden

Abstract text: This presentation examines the intersection of precarious employment and neo-Marxian class analysis, arguing that contemporary labour conditions both extend and challenge traditional understandings of class. Precarious employment, characterized by unstable contracts, irregular hours, and limited access to benefits, has become a defining feature of modern labour markets. This presentation contends that class analysis, particularly from a neo-Marxian perspective, must account for precariously employed workers' diverse and often fragmented experiences. By focusing on labour efforts outside the formal workplace—such as emotional labour, unpaid caregiving, and the constant search for employment—the presentation reveals how the boundaries of work and non-work are increasingly blurred. These forms of labour, while often invisible, sustain and reproduce capitalist relations of production, offering a perspective on the exploitation of labour power.

Conversely, the study highlights how class analysis can elucidate precarious employment's seemingly disparate characteristics. From gig economy workers to temporary migrant labourers, the precarious condition is shaped by various class-related economic and political factors. The class analysis provides a framework to understand the unifying forces behind these diverse experiences, showing how the precarious workforce is systematically disempowered and exploited within capitalist structures. By bridging labour efforts outside the workplace and class dynamics, the

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paper offers a more nuanced understanding of precarious employment and its centrality to modern capitalist economies, contributing to contemporary debates on labour, class, and inequality.

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### Occupational differences in expected time spent in precarious employment over the working career

2. Society and Inequality

#### Taina Leinonen<sup>1</sup>

Laura Salonen<sup>1</sup>, Elli Hartikainen<sup>1</sup>, Theo Bodin<sup>2</sup>, Svetlana Solovieva<sup>1</sup>

<sup>1</sup> Finnish Institute of Occupational Health, Finland

**Abstract text: Background:** Little is known of cumulative exposure to precarious employment over the working career among employee groups. We examined occupational differences in the expected time spent in precarious and other types of employment after age 25.

**Methods:** We used register data on wage-earners living in Finland in 2018 (N = 1779 190). Applying the Sullivan method, we calculated expectancies of time spent in precarious and non-precarious employment (based on a novel score measure with items on job instability, agency employment, multijob holding, underemployment, and employment income) as well as limited employment (due to which precariousness could not be assessed) between age 25 and 63 by main occupational group.

**Results:** Precarious employment expectancy was highest among Skilled agricultural, forestry and fishery workers, Elementary occupations and Service and sales workers (2.5–3.5 years among men and 2.7–4.9 years among women). These occupations also had the longest expected time spent in limited employment (4.3–6.6 years among men and 5.5–8.2 years among women). Skilled agricultural, forestry and fishery workers and workers in elementary occupations were expected to spend a large portion of their working careers (25% among men and around one third among women) in either precarious or limited employment.

**Conclusion:** Skilled agricultural, forestry and fishery workers, workers in Elementary occupations as well as Service and sales workers have notable accumulation of precarious and other potentially insecure employment over the working career. These occupational groups may require special attention to ensure that poor employment conditions do not compromise their health and work ability.

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### On-Location vs. Remote: Unveiling Job Quality Disparities in the Gig Economy of the UK and Denmark

2. Society and Inequality

#### Sangwoo Lee<sup>1</sup>

Beate Baldauf<sup>1</sup>, Trine Larsen<sup>1</sup>, Katharina Sarter<sup>1</sup>, Chris Warhurst<sup>1</sup>, Anna Ilsøe<sup>2</sup>, Silvia Girardi<sup>2</sup>

<sup>1</sup> University of Warwick

**Abstract text:** The 'gig economy' has become a significant theme in modern employment discourse, prompting governmental initiatives, such as the taxation of gig economy income. Despite growing research on platform work, a considerable gap remains in understanding job quality disparities within this sector, as extant literature often treats gig work as a singular category, characterising it as precarious or undesirable. This paper challenges this monolithic perspective of gig work by examining job quality disparities between on-location and remote gig workers in the UK and Denmark, two countries with distinct labour market models. Our analyses yield three key findings. First, university-educated individuals are less likely to engage in onlocation work, often leveraging their skills for supplementary income through remote gig work, which tends to offer better job quality. Second, on-location gig workers experience inferior job quality, reporting worse physical working environments and higher job intensity than remote workers in both countries, with some variations in social environment. Lastly, migrant status significantly influences job quality of gig workers in Denmark, but not in the UK, highlighting the importance of the national context. These findings carry significant theoretical and policy implications, challenging the conventional focus on gig work as a uniformly precarious form of employment. Our results underscore the importance of distinguishing between on-location and remote work when understanding the gig economy. This nuanced understanding is crucial for developing more targeted and effective policies to address the diverse challenges faced by different segments of the gig workforce.

<sup>&</sup>lt;sup>2</sup> University of Copenhagen

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### Precarious employment and mental health of migrant workers: a systematic review of quantitative and qualitative studies

2. Society and Inequality

#### Tobias Weinmann<sup>1</sup>

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<sup>1</sup> Institute and Clinic for Occupational, Social and Environmental Medicine, LMU University Hospital, LMU Munich, Munich, Germany

Abstract text: Background: Research suggests that precarious employment conditions can have detrimental effects on the mental health and well-being of workers. Migrants are discussed to be especially vulnerable to work under precarious conditions. Thus, we aimed to systemise the existing scientific literature on the association between precarious employment and the mental health of migrant workers.

Methods: Three electronic databases (Web of Science, PsycINFO and PubMed/Medline) were searched for original articles on quantitative and qualitative studies published from January 1970 to February 2022. Multiple dimensions of precarious employment were considered as exposure and various mental illnesses as outcomes. Narrative synthesis and thematic analyses were performed to summarise the findings of the included studies along with risk of bias and quality assessment.

Results: The literature search yielded 1557 original articles, 66 of which met the inclusion criteria. The most common exposure dimensions analysed in the studies included temporariness, vulnerability, poor interpersonal relationships, disempowerment, lacking workers' rights and low income. The outcome measures included stress, depression, anxiety and poor general mental health. The prevalence of these outcomes varied between 10–75% among the included quantitative studies. All qualitative studies reported one or more dimensions of precarious employment as an underlying factor of the development of mental health problems among migrants. Of 33 quantitative studies, 23 reported evidence for an association between dimensions of precarious employment and mental health.

**Conclusion:** The results of this review support the hypothesis that precarious employment is associated with the mental health and well-being of migrant workers.

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Sida: 33 (176)

### **Social Inequalities in Employment**

2025-05-07 14:15 - 15:15 Social Inequalities in Employment

Sida: 34 (176)

#### Gender inequities due to child Penalty and Labor Market Dynamics in Spain

2. Society and Inequality

#### Amaia Ayala-Garcia<sup>1</sup>

Laura Serra<sup>2</sup>, Jose Ignacio Silva Becerra<sup>2</sup>

Abstract text: Background: Gender differences in the labor market are well-documented, with women more exposed to temporary and part-time employment. Additionally, the birth of a first child can further accentuate structural gender inequalities in the Spanish labor market. This study aims to analyze the differential impact of the first child's birth on the employment trajectory of salaried workers, considering the sex of the parent.

**Methods:** Using Spanish administrative data from Social Security (MCVL), we analyze the labor market trajectories of women and men who had their first child between the ages of 18 and 45 over the period 2011–2018. We apply clustering and sequence analysis to explore common employment patterns, categorizing labor states as unemployment, part-time work, full-time work, and inactivity. This approach aims to identify common trajectories among men and women with and without children, providing insights into gendered labor market dynamics.

**Expected results:** We are currently awaiting the final data which will received by end of 2024; the results presented reflect our expected outcomes. We expect to observe more notable differences between men and women after having their first child. That is, we would expect women to have a more unstable working life in terms of part-time employment and periods of unemployment.

**Conclusions:** Insights gained from this study could potentially inform policies aimed at promoting work arrangements that support both men and women in balancing family responsibilities and career development. Ultimately, fostering equitable labor conditions not only enhances individual well-being but also contributes to a more inclusive and resilient workforce.

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<sup>&</sup>lt;sup>2</sup> Group in Statistics, Econometrics, and Health (GRECS), University of Girona

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### The Stakes of Reinstatement: Investigating Unfair Dismissal Claims among Indigenous Workers in Canada

2. Society and Inequality

#### Adam King<sup>1</sup>

Leah Vosko<sup>2</sup>

<sup>1</sup> Labour Studies, University of Manitoba, Winnipeg Canada

Abstract text: Most non-union workers in Canada can be terminated without cause. This absence of unfair dismissal protection heightens job and income insecurity, particularly for workers from historically oppressed groups. Only two jurisdictions in Canada, Quebec and the federally regulated private sector (FRPS), offer some statutory protection against unjust dismissal. The FRPS is especially unique. Although the provisions of the Canada Labour Code that address unjust dismissal were designed to promote reinstatement, research demonstrates that wrongfully terminated employees are more likely to seek compensation. However, no research has yet studied the unique experiences of Indigenous workers. This paper therefore seeks to understand how Indigenous unjust dismissal cases have been processed and resolved. The paper is an outgrowth of a broader project examining federal labour standards enforcement and the boundaries of the federal jurisdiction over Indigenous labour relations in Canada. Utilizing administrative data from the federal government's Labour Program, unjust dismissal case decisions from the Canadian Industrial Relations Board and Federal Court, as well as interviews with labour inspectors, this paper probes the unique experiences of Indigenous workers who have exercised their right to contest unfair dismissal. The paper argues that while federal unfair dismissal provisions are important, they frequently under-protect workers, which is especially true for Indigenous employees. Moreover, we contend that these issues are especially important because Indigenous workers often lack adequate employment alternatives and so depend on their current jobs more than non-Indigenous workers.

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Sida: 36 (176)

### Effect of employment and income instability on first birth: heterogeneities by migration background

2. Society and Inequality

#### Mimmi Lounela1

<sup>1</sup> Stockholm University, Department of Sociology, Demography Unit

Abstract text: Over the past two decades, Sweden has seen a rapid increase in immigration, with foreign-born individuals now comprising over 20% of the population. This demographic shift coincides with transformations in the Swedish labour market towards greater flexibility, resulting in increased uncertainty for workers. These changes in labour regulations have particularly impacted migrant populations, who are often overrepresented in precarious and non-standard employment arrangements. Migrants also present a unique demographic for studying life course trajectories, employment dynamics, and family formation, given their exposure to multiple social contexts over their lifetime. Understanding how these factors intersect can shed light on the relative role of structural versus cultural factors in fertility decisions, which is challenging to analyse through cross-country comparisons. This study focuses on both migrants, their descendants, and native-born individuals in Sweden to explore these dynamics within a single national context, over multiple migrant generations. Recent studies suggest that migrants have higher fertility rates when unemployed or inactive. However, these analyses typically focus solely on employment status. Given the contemporary labor market dynamics—characterized increasingly by flexible, short-term contracts and gig-based work—a more nuanced approach to operationalizing employment uncertainty is called for, encompassing past joblessness and low-income spells. This study aims to address this gap, using Swedish register data and employing an event-history research design, exploring the effects of past and present employment and income instability trajectories on family formation. Results will be available by the time of the conference.

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### Intersection of race and social position of women in the ELSA-Brasil cohort: perceived discrimination at work and (dis)satisfaction with body image

#### 2. Society and Inequality

#### Sheila Maria Alvim De Matos<sup>1</sup>

Emanuelle Goes<sup>1</sup>, Maria da Conceição Chagas de Almeida<sup>2</sup>, Ana Luisa Patrão<sup>3</sup>, Conceição Nogueira<sup>3</sup>, Estela Aquino<sup>1</sup>

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- <sup>2</sup> Gonçalo Muniz Institute, Oswaldo Cruz Foundation, Salvador, BA, Brazil
- <sup>3</sup> Faculty of Psychology and Educational Sciences, Center of Psychology, University of Porto, Porto, Portugal

Abstract text: Background: The most frequent forms of perceived workplace discrimination are racial and gender-based. Racism and the dominant white aesthetic are part of a system of domination that imposes Eurocentric beauty standards and impacts the body image satisfaction of Black women. We analyzed the association between race, social position, and body image satisfaction, exploring the role of perceived workplace discrimination among women from the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil). Methods: We studied 7.704 women who attended the baseline (2008-2010). The Lifetime Major Events Scale was used to capture perceived discrimination at work. Social position was defined by latent class analysis. The intersection of race and social position was separately evaluated. As-sociations were assessed using multivariate logistic regression analysis with adjustment for age, health behaviors, partner's race/color, and perception of health status. Results: Among Black women (18.7%) of low or high social positions, the most frequently perceived workplace discrimination was racial, followed by discrimination based on physical appearance. If discrimination in life was perceived, 68% of mixed-race women (95%CI 1.11-2.55) and 80% (95%CI 1.21-2.68) of Black women in middle social positions showed greater dissatisfaction with their body image. Among Black women in middle social positions, body image dissatisfaction was nearly three times higher (OR=2.75; 95%CI=1.04-7.22) in the group that perceived economic discrimination. Conclusion: The perception of discrimination strongly affects body image satisfaction in Black and mixed-race women. Face racism and discrimination in the workplace is urgent and could bring positive health outcomes.

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### Global Cross-Sectional Perspectives on Precarious Employment and Health

2025-05-07 14:15 - 15:15

Global Cross-Sectional Perspectives on Precarious Employment and Health

Sida: 39 (176)

### Employment quality, unpaid reproductive labor, and sleep duration among US adults: A cross-sectional analysis of American Time Use data

2. Society and Inequality

#### Emilia F. Vignola<sup>1</sup>

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Abstract text: Gender systems that build sexism into institutions such as work and family may produce gendered inequities in the prevalence and health effects of poor employment quality (EQ). However, the existing evidence is inconsistent and complex in ways that emphasize the importance of social context, including state support for families and rewards and penalties for participation in paid labor. Social reproduction and work-family conflict theories along with existing qualitative data suggest that demands outside paid work, such as those related to unpaid care work and housework, could alternately exacerbate or buffer the harmful health consequences of poor EQ. A potential and underexplored health consequence of these forms of paid and unpaid work is sleep duration, a health behavior associated with multiple chronic health conditions when it is both insufficient and excessive. Thus, this study aims to elucidate the links between EQ, unpaid reproductive labor, and sleep in a context characterized by limited state support for reproductive labor and penalties for labor market participation for some groups. We will use cross-sectional data from ~4,884 US wage workers participating in the Leave and Job Flexibilities Module of the 2018 American Time Use Survey to examine the relationship between EQ (operationalized as a multidimensional summative score) and sleep duration and whether this association differs by time spent on unpaid care work and housework in gender-stratified multivariable models. Findings will help deepen understanding of the intersection of unpaid and paid work as drivers of health inequities; policy implications of these findings will be discussed.

Sida: 40 (176)

## The real cost of life – or how the relationship between income and quality of life reveals a living wage level that shelters from misery

 Health, Safety and Well-Being Ines Meyer<sup>1</sup>
 Mathilda Tladi<sup>1</sup>
 University of Cape Town

Abstract text: In March 2024, the International Labour Organization (ILO) endorsed living wages as a wage floor which affords those who work and their families a decent and dignified standard of living. The ILO stipulates that living wage amounts need to derive, amongst others, from representative data and timely and reliable statistics. Different living wage organisations advocate for this data-based approach to be based on the cost of essential goods. In this presentation, we question the assumption underlying the argument that having the income to afford a set basket-of-goods translates into dignified and decent lives, and propose a quality-of-life approach based on working individuals' subjective experiences instead. Through five South African datasets (quantitative, cross-sectional) ranging in size from N = 960 to N = 39,434 we demonstrate across different quality-of-life indicators (depression, life satisfaction and choice over important life domains) that the positive relationship between income and quality-of-life is based on higher income removing extremely low quality-of-life experiences. A living wage, then, is the wage level from which onwards workers no longer express an absence of life quality. We conclude that it is possible - and preferable - to calculate living wages based on subjective, representative quality-oflife data which present a direct indicator of decent and dignified living. A living wage level determined in this way thus aligns more closely with the ILO's living wage definition and protects against some of the negative aspects associated with precarious work.

Sida: 41 (176)

### Multiple Job Holding and Psychological Well-Being: Longitudinal Evidence from Australia

 Health, Safety and Well-Being Inga Lass<sup>1</sup>
 Mark Wooden<sup>1</sup>
 The University of Melbourne

**Abstract text:** *Background:* Multiple job holders can face particular challenges, such as long working hours, lengthy commutes and difficulties juggling work and personal life. Nevertheless, the effects of this work mode on workers' psychological well-being have not received much attention in previous research. Longitudinal studies are especially lacking.

Method: We utilised data from 22,887 workers aged 18 to 64 years from 22 waves of the Household, Income and Labour Dynamics in Australia Survey, covering the period 2001 to 2022. Fixed-effects and dynamic correlated random effects models were deployed to investigate the association between multiple job holding and both mental health (as measured by the MHI-5) and life satisfaction. This approach allows accounting for unobserved confounders as well as selection into multiple job holding based on prior psychological well-being. We also control for a range of worker and job characteristics, such as age, relationship status, number of children, age of the youngest child, physical health, region as well as employment type and occupation in the main job.

Results: Compared to single job holding, multiple job holding is associated with better mental health among men, whereas there is no significant association for women. By contrast, there is a negative association between multiple job holding and life satisfaction for both genders.

Conclusion: Multiple job holding has varying effects on different facets of psychological well-being. While lowering life satisfaction, it comes with improved mental well-being, at least among men. The mechanisms behind this relationship have yet to be explored.

Sida: 42 (176)

### Digital Platform Work I

2025-05-07 14:15 - 15:15 Digital Platform Work I

Sida: 43 (176)

### Navigating the digital panopticon: The strategies of platform workers to protect their health

3. Digitalization and Platformization

#### Trine Pernille Larsen<sup>1</sup>

Anna Ilsøe<sup>2</sup>, Jamelia Harris<sup>1</sup>, Beate Baldauf<sup>1</sup>, Chris Warhurst<sup>1</sup>, Sangwoo Lee<sup>1</sup>, Eva Katharina Sarter<sup>1</sup>, Jessie Gevaert<sup>3</sup>, Meike Brodersen<sup>4</sup>, Anastasia Joukovsky<sup>4</sup>, Lluís Mangot-Sala<sup>5</sup>, Filippa Lundh<sup>5</sup>, Nuria Matilla-Santander<sup>6, 7, 8</sup>, Lauri Kokkinen<sup>9</sup>, Hanna Nurmi<sup>9</sup>, Mikko Perkiö<sup>9</sup>, Eva Padrosa Sayeras<sup>10</sup>, Theo Bodin<sup>5, 6</sup>

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- <sup>10</sup> SDHEd-Hospital del Mar Research Institute, University of Mar, Barcelona, Spain

Abstract text: Background: Algorithmic management and its associated day-to-day realities for platform workers have attracted much academic attention. This substantial literature often explores the drawbacks associated with algorithmic management such as work intensification, increased surveillance, reduced worker autonomy. Less researched are the coping strategies and the potential empowerment of platform workers when algorithmic management reshapes management responsibilities. This paper adds to this growing body of research by shedding light on the coping strategies of platform workers to protect their health as an indicative example of worker empowerment when navigating within the digital labour market

**Methods:** The paper raises the research questions: What are platform workers day-to-day experiences of algorithmic management? and what coping strategies do they develop to protect their health when navigating the platform economy? Analytically, we introduce the concept of the digital panopticon by drawing on the work by Foucault and Bentham in combination with literature on algorithmic management and worker strategies within the platform economy. Empirically, we draw on survey and interview data with platform workers in Denmark, Belgium, Sweden, Finland, Spain and the UK from the GIG-OSH project.

**Results:** We find that although the algorithmic management tools can be considered as a digital panopticon in terms of directing, evaluating and disciplining platform work,

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platform workers do also develop coping strategies to especially protect their health. **Conclusion:** The concept of the digital panopticon often captures the day-to-day realities of European platform workers, where many also push back and utilise the loopholes within the system to protect their health.

Sida: 45 (176)

## Algorithmic management differences in online and onsite digital platform work and general health in Sweden – The GIG-HEALTH project

3. Digitalization and Platformization

#### Nuria Matilla-Santander<sup>1, 2, 3</sup>

Filippa Lundh<sup>1</sup>, Funda Ustek Spilda<sup>4</sup>, Sherry L. Baron<sup>5</sup>, Jessie Gevaert<sup>6,7</sup>, Carin Håkansta<sup>1</sup>, Bertina Kreshpaj<sup>8</sup>, Theo Bodin<sup>1,9</sup>

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- <sup>9</sup> Centre for Occupational and Environmental Medicine, Stockholm Region, Stockholm, Sweden

**Abstract text: Background.** The aim of this study is to explore associations between different types of algorithmic management – for direction and evaluation purposes–, and general health among onsite and online platform workers.

**Methods.** This cross-sectional study is based on a cohort of digital platform workers in Sweden (n=997). Participants were recruited using various non-probabilistic sampling techniques and completed an online survey during 2023–24. We created two variables to measure AM-direction and AM-evaluation based on 10 items. Workers were classified as "not exposed" if they reported exposure to none or one indicator and as "exposed" if they reported exposure to two or more indicators. We calculated Prevalence Ratios (PRs) with 95% confidence intervals adjusted for employment and socio-demographic characteristics.

**Results.** Preliminary results show that 68% of workers are exposed to AM-direction and 44% to AM-evaluation. Surprisingly, we find that online platform workers are more exposed to AM-direction compared to onsite platform workers (81% vs 63%). Among all platform workers, 17% declare poor general health, being much higher among onsite compared to online platform workers (23% vs 8%). Regarding the associations between AM and health, we found a much higher prevalence of poor general health among those exposed to AM-direction (PR: 2.45, Cl95%: 0.98-6.02), and among those exposed to AM-evaluation (PR: 1.61, Cl95%: 1.05- 2.48). We find similar estimates for online and for

onsite platform workers.

**Conclusions.** Findings in this study point towards an association between exposure to algorithmic management for management and evaluation purposes and poor general health among digital platform workers.

Sida: 47 (176)

### Managing AM and workers health – comparison and interplay of risk assessments based on the Al-act and OSH-regulation in the EU.

3. Digitalization and Platformization

#### Johan Holm<sup>1</sup>

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- <sup>3</sup> University of New South Wales
- <sup>4</sup> Cape Breton University, NS, Canada

Abstract text: Algorithmic management (AM), can affect the health and well-being of workers. To secure the health of workers there is a comprehensive legal regulation of occupational safety and health (OSH). In the European Union the main legal instrument is the Framework directive on OSH (89/391/EEC). One important mechanism to ensure worker health and safety in this directive is the requirement evaluate the risks to the safety and health of workers. The idea is that, by requiring the employer to assess risk and take measures to avoid or minimize risk to worker health, all kinds of OSH-issues can be addressed. But risk assessment is not only prescribed in OSH-regulation. In the new Al-Act, the main mechanism to address safety issues posed by the use of Al systems is the requirement to establish and implement a risk management system when putting an Al-system on the market. This also applies to AM, which is considered a high-risk application of Al according to the Al-act.

This entails that when AI is developed for, and used at, the workplace, there is a dual requirement to make risk assessments – one based on OSH-regulation and one based on the AI-act. The purpose of this presentation is to discuss how these different legal requirements to make risk assessment should understood out when dealing with AM-systems. When should the risk assessments be carried out? How should they be carried out? What are the differences and similarities and what kind of interplay is there between these different kinds of risk assessments?

Sida: 48 (176)

## How do the platform work and migrant workers' residence status intersect? Exploring on-location workers' lived experiences on occupational wellbeing

3. Digitalization and Platformization

#### Mikko Perkiö<sup>1</sup>

Benta Mbare<sup>2</sup>, Lauri Kokkinen<sup>3</sup>, Meri Koivusalo<sup>4</sup>

- <sup>1</sup> University Lecturer
- <sup>2</sup> Doctoral Researcher
- <sup>3</sup> Research Director
- <sup>4</sup> Professor

**Abstract text:** The number of migrant workers is exceptionally high among on-location platform workers in the Nordic and Baltic countries. In Finland, both the self-employment model and weak residence status are prevalent among platform workers leading to exclusion from occupational health and social security. The residence-based social security forms a strict division among workers on how their social rights are protected.

This article analyses the lived experiences of migrant digital platform workers who conduct on-location work, namely ride-hailing and food delivery in Finland. The thematic phenomenological analysis tracks how migrant workers connect their residence status and their occupational wellbeing including their entitlements to occupational health and social security. The data consists of 20 semi-structured thematic interviews of Uber drivers in Helsinki in 2020, and 20 with food couriers in Helsinki and Tampere (Finland) in 2020–2021, 40 interviews in total.

The paper identifies contradicting tendencies among studied migrant workers. Job satisfaction meets psycho-social burden. The confusion and lack of knowledge of the entitlements co-exist with satisfaction of the job opportunities and some securities provided. The article demonstrates how residence status is a hidden structure influencing the platform workers' occupational wellbeing.

The strong role of residence status indicates a fragmented labour market and a division within social citizenship. Even an ambitious consolidation of the European Union's platform work directive into national legislation may not be sufficient if there is a lack of political will to enhance the labour rights of immigrants.

Sida: 49 (176)

### The growing gig economy, a platform for bullying and harassment – the Australian experience.

3. Digitalization and Platformization

#### Penny Wiliams<sup>1</sup>

Paula McDonald<sup>1</sup>, Robyn Mayes<sup>1</sup>, Andrew Stewart<sup>1, 2</sup>

<sup>1</sup> Queensland University of Technology

Abstract text: Background: Over the last decade, the gig economy has continued to grow, with increases in the number of digital platforms offering services across a wide variety of work contexts. Considerable research has expanded our knowledge on the prevalence of digital platform work in different country contexts and the varied experiences of digital platform workers. Algorithmic management of platform workers has been shown to contribute to increased risk taking and work intensification, but data on the extent to which workers experience bullying and harassment or other unsafe work conditions is limited, despite studies showing that it does occur.

**Methods:** Using data from two nationally representative surveys (n= >14,000) conducted in 2019 and 2023, this presentation will show how participation in the Australian gig economy has changed over time, presenting new data on workers' experiences of unsafe work conditions, including bullying and harassment.

**Results:** The findings demonstrate increasing platformisation in Australia, and growing participation connected to restricted employment during the pandemic and continued rising living costs. The findings also show the extent to which workers experience unsafe conditions, painting a concerning picture of limited protections from bullying, harassment and non-payment by clients.

**Conclusions:** Digital platform work is increasingly becoming a common experience for many in Australia, yet without the protections afforded by a standard employment arrangement, many are experiencing unsafe work conditions, facilitated by the power of the client to withhold payment or provide ratings or reviews that restrict future access to work.

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Sida: 50 (176)

## Investigating Multiple Subtypes of Health Perception of GIG-OSH Workers Through Cluster Analysis

1. Health, Safety and Well-Being

#### Anna Paszkowska-Rogacz<sup>1</sup>

Anna Paszkowska-Rogacz<sup>1</sup>, Dorota Merecz-Kot<sup>1</sup>, Agnieszka Lipińska-Grobelny<sup>1</sup>, Marta Znajmiecka<sup>1</sup>, Olga Zwardoń-Kuchciak<sup>1</sup>, Lauri Kokkinen<sup>2</sup>, Hanna Nurmi<sup>2</sup>, Mireia Julià Pérez<sup>3</sup>, <sup>4</sup>, Edgar Vicente<sup>3</sup>, Jessie Gevaert<sup>3, 4, 5</sup>, Jamelia Harris<sup>6</sup>, Trine Pernille Larsen<sup>6</sup>, Sangwoo Lee<sup>6</sup>, Chris Warhurst<sup>6</sup>, Silvia Girardi<sup>7</sup>, Anna Ilsoe<sup>7</sup>, Theo Bodin<sup>8, 9</sup>, Nuria Matilla-Santander<sup>8, 10, 11</sup>, Lluís Mangot-Sal<sup>9</sup>

**Abstract text:** The aim of this analysis was to examine whether the quality of the work environment can differentiate the health and well-being of GIG workers. The study included 2,951 respondents from seven European countries.

The variables considered in the analysis were: (1) General Health); (2) Total Health Symptoms-THS; (3) Stress; (4) Work-Life Balance-WLB; (5) WHO-5 Well-Being Index - WHO-5; and (6) four European Job Quality Index (JQI) dimensions. These dimensions, based on various sub-indices composed of individual indicators, provide a comprehensive view of the multi-dimensional nature of job quality.

A preliminary analysis using k-means clustering identified two groups based on job quality perceptions: (1) subjective high quality of work, characterized by high physical and social environment indexes, high autonomy index, and low work intensity index, and (2) subjective low quality of work, characterized by low physical and social

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environment indexes, low autonomy index, and high work intensity index.

Subsequently, ANOVA was applied to compare Stress, WLB, THS, WHO-, and General Health scores across the two job quality perception groups. The results indicated that individuals in the second group exhibited significantly poorer health outcomes, more frequent health symptoms, higher stress levels, and greater difficulty maintaining a work-life balance.

To examine cultural and gender differences, MANOVA was conducted, with gender and country as the between-subjects factors, and all five health-related scales as the dependent variables. The analysis revealed no significant interactions between gender and country. The findings suggest that work intensity has the greatest impact on the perceived health of the respondents.

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### Policy, Resistance and Intervention 1

2025-05-07 16:00 - 17:00

Policy, Resistance and Intervention 1

Sida: 53 (176)

### Effects of US Minimum Wage and Work-Related Tax Credit Policies on Food Insecurity among Households with Children

4. Policy, Resistance and Intervention

#### Megan Winkler<sup>1</sup>

Rachel Clohan<sup>2</sup>, Kelli Komro<sup>1</sup>, Melvin Livingston<sup>1</sup>, Sara Markowitz<sup>2</sup>

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Abstract text: Background: Food insecurity among households with children is a persistent US challenge with federal food assistance programs unable to fully address. Accordingly, interest in the role labor and economic policies could play in bolstering household food security has grown. Two relevant state-level policies include the minimum wage (MW) for hourly workers and the earned income tax credit (EITC) designed for low-wage workers with children. We examined the potential beneficial effects MW and EITC generosity have on US child food security.

Methods: We used 2001–2022 food security data from the Current Population Survey. Our sample included 136,475 households with children that could benefit from more generous policies (i.e., limited parent education). State MW and EITC policies derived from legal sources. We used a causal inference approach to test whether changes in state-level policies are associated with food insecurity controlling for household and state-level confounders.

Results: We found that increases in state MW and EITC were both associated with statistically significant reductions in child food insecurity among households with limited parent education. For instance, states with a minimum wage twice the federal minimum had a 3.9% reduction (95% CI= -7.4, -0.4) in past month food security. We also found that these beneficial policy effects were similar across a variety of social groups and household characteristics.

Conclusion: Our findings indicate that policymakers that elected to more generously increase their state MW and EITC policies have also improved childhood food security among households at risk for economic hardship in their state.

Sida: 54 (176)

#### Sustainable Work in the Informal Economy: Insights from the Global South

2. Society and Inequality

#### Mahim Saxena<sup>1</sup>

<sup>1</sup> University of Nebraska at Omaha

Abstract text: Background: Over two-thirds of the world's population, that is over 61% of the global workforce lives in the informal economy, which is known to suffer serious decent work deficits including precarity, financial stressors, poverty, exploitation, and poor health among others. In many countries as much as >90% of the economy operates in the informal sector. Thus, supporting work in the informal economy is of utmost importance.

Work in the informal economy is often considered low/under-skilled work. However, recent psychological research is challenging this notion (Saxena & Tchagneno, 2023), revealing (Spector, 2017) how informal economy work can also be highly skilled, intergenerationally meaningful, derived from traditional systems of knowledge, and support positive affect, creativity, flow experiences, intrinsic motivation and a choice to continue that aligns with workers' sense of identity and agency (Saxena, 2021). This work, referred to as psychology sustainable work, particularly as relevant to the informal economy (Saxena, 2021), supports intergenerational occupational continuity and interconnectedness with nature, environmental conservation, and a sense of reverence for the world that we inhabit. In doing so, it buffers against the structural inequities of poverty due to being a part of the informal economy and supports resilience and intergenerational hardiness and continuity. However, the notion of poverty needs immediate attention.

**Purpose:** This talk will discuss sustainable work as it relates to the informal economy in the Global South. Research directions and evidence-driven suggestions for alleviating decent work deficits related to poverty and supporting sustainable work for practitioners and policy-makers, will be presented.

Sida: 55 (176)

### State, county, and local policymaking efforts aimed at improving employment quality in the United States

4. Policy, Resistance and Intervention

#### Elizabeth Piekarz-Porter<sup>1</sup>

Vanessa M. Oddo², Emily Stiehl¹, Elizabeth T. Powers³, Sage J. Kim¹

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- <sup>2</sup> University of Illinois Chicago, College of Applied Health Sciences
- <sup>3</sup> University of Illinois Urbana-Champaign, Economics Department

**Abstract text:** Background: In the United States (U.S.), employment quality (EQ) has decreased over the last three decades, particularly for women and individuals racialized as non-White. However, due to federal inaction, local jurisdictions have taken the lead in adopting novel policies (i.e., beyond minimum wage) that may improve EQ.

Methods: Local codes/ordinances were collected in 10 U.S. counties and 10 municipalities based on recent action/inaction on local minimum wage from MuniCode or American Legal Publishing as of July 1, 2023. State laws were collected for all 50 states and D.C. as of July 1, 2023 from Westlaw and LexisAdvance. Policies on minimum wage, secure scheduling, paid/unpaid leave, "gig" worker protections, and family-friendly policies were scored using an ordinal coding scheme.

Results: Within counties and municipalities, policies that mandated pay above the federal minimum wage were identified most often (5 counties, 9 municipalities). Secure scheduling practices (e.g. advance notice of schedule, schedule changes) were seen only in Chicago, San Francisco, and Seattle. Family leave was addressed (3 counties, 6 municipalities) more often than sick leave (2 counties, 4 municipalities). Seattle was the outlier in addressing "gig" worker protections (minimum wage), with additional protections planned in coming years. State laws focused almost exclusively on minimum wage– though preemption laws were more common in this domain (i.e., state law taking away the power of local governments).

Conclusion: County and municipal policymaking designed to improve EQ can inform broader state or federal efforts.

Sida: 56 (176)

### "It's good to have a contract, but financially, it's terrible": Navigating employment and health challenges in Spain's gig economy under the Rider Law

4. Policy, Resistance and Intervention

#### Eva Padrosa<sup>1, 2</sup>

Astrid Escrig-Piñol<sup>1, 2</sup>, Ferran Muntané Isart<sup>3, 4</sup>

- <sup>1</sup> Social Determinants and Health Education Research Group (SDHEd), Hospital del Mar Research Institute, Barcelona, Spain
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  <sup>4</sup> UPF Barcelona School of Management (UPF-BSM), Barcelona, Spain

Abstract text: Background: Spain's *Rider Law* (RL), which addresses the country's high prevalence and intensity of digital platform labour, emerged as a pioneering regulation for the platform economy, inspiring initiatives such as the European Platform Work Directive. However, three years after its enactment, the RL's impact on delivery platform workers remains unclear. Serving as a case study on the effects of such regulations, this paper assesses delivery workers' employment conditions and occupational safety and health (OSH) under the RL.

**Methods:** We employed a mixed-methods case-study design, integrating survey data (n=97) and semi-structured interviews (n=6) with delivery platform workers. Descriptive analyses compared workers' employment conditions and OSH across platforms. A thematic analysis strategy was applied to qualitative findings. Quantitative and qualitative findings were synthesized, providing a comprehensive understanding of the RL's impact within its socio-political context.

Results: Survey data revealed significant differences in law enforcement across platforms, including disparities in the proportion of employed workers, provision of personal protective equipment, and access to OSH information. However, this did not translate into better health. Interview findings elucidated this gap by exposing mixed experiences with the law: while it provided job security and access to employee benefits, workers reported reduced income and continued issues with algorithmic transparency, inconsistent payment for extra hours, and limited employer accountability. Participants highlighted significant physical and mental health challenges.

**Conclusions:** Preliminary findings underscore the need for stronger regulatory enforcement, but also improved employment and health rights and protections in the platform economy.

Sida: 57 (176)

# Employment Uncertainty and Health Outcomes: The Digital and Youth Dimensions

2025-05-07 16:00 - 17:00

Employment Uncertainty and Health Outcomes: The Digital and Youth Dimensions

Sida: 58 (176)

## Dependency on platform work and the association with health and occupational injuries – a cross-sectional study in Europe. The GIG- OSH project.

1. Health, Safety and Well-Being

#### Filippa Lundh<sup>1</sup>

Lluís Mangot-Sala¹, Jessie Gevaert²,³, Silvia Girardi⁴, Jamelia Harris⁵, Anna Ilsoe⁴, Lauri Kokkinen⁶, Trine P. Larsen⁴,⁵, Sangwoo Lee⁵, Agnieszka Lipińska-Grobelny³, Hanna Nurmi⁶, Mireia Julià<sup>8, 9</sup>, Sandra Verdaguer<sup>8</sup>, Chris Warhurst⁵, Theo Bodin¹,¹⁰, Nuria Matilla-Santander¹,¹¹,¹²

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- <sup>10</sup> Center for Occupational and Environmental Medicine, Stockholm Region, 11365 Stockholm, Sweden.
- <sup>11</sup> Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain.
- <sup>12</sup> Universitat Pompeu Fabra (UPF), Barcelona, Spain.

Abstract text: Background: The aim of this study is to explore if platform dependency – the degree to which a worker relies on platform income– is associated with poorer physical health and injuries amongst digital platform workers in Europe and to investigate if this association differs according to type of digital platform work (onsite and online), migration status, and country.

Methods: Cross-sectional study based on a cohort of digital platform workers working in Sweden, Denmark, Finland, Spain, UK, Belgium, Poland (N=3573). Data was gathered using several non-probabilistic recruitment strategies with an online survey during September 2023–May 2024. We analysed bivariate associations between platform dependency (measured as having only platform work as a job and having more than 50% of the earnings coming from platform work), physical health and injuries. These were stratified by work type, European sub-cohort, and migration status. Structural Equation Modelling (SEM) will be employed to evaluate these associations.

**Results:** Preliminary results show that platform-dependent workers report higher levels of health problems compared to non-dependent workers. Specifically, onsite dependent platform workers report higher prevalence of lower body musculoskeletal pain (39% vs. 29%) and occupational injuries (34% vs. 22%) compared to non-dependent. Also, online dependent platform workers report higher prevalence of headaches and eyestrain (49% vs 42%) compared to non-dependent.

**Conclusions:** Preliminary findings indicate that workers who rely heavily on platform income experience higher prevalence of poor health compared to non-dependent workers. These disparities suggest that platform dependency exacerbates specific health outcomes. Further research is needed to explore underlying mechanisms.

Sida: 60 (176)

### Precarious Paths to Adulthood: Examining the Expressions and Effects of Precarity on Youth Emotional Wellbeing

1. Health, Safety and Well-Being

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Abstract text: Background: There is a concern about the emotional wellbeing of the young in Europe, especially since the COVID-19 pandemic crises. The social determinants of health perspective highlights the importance of understanding this phenomenon in connection with the current context of protracted and increasingly precarious youth transitions to employment, economic independence, and family formation. Our research aims to expand the evidence on the mental health effects of precarious employment by capturing the complex, overarching, and dynamic nature of precarity among the young and its impact on emotional wellbeing.

Methods: Our research draws on data from the Catalan Youth Survey 2022, a CAWI survey of 3,000 individuals aged 15–34 years old in Catalonia (Spain). The survey includes retrospective data on employment trajectories, residential, and family transitions, along with information on respondents' emotional wellbeing through the WHO–5 wellbeing index. We categorized participants according to their transitions and social location using Latent Class Analysis and analysed the relationship with emotional wellbeing using logistic regressions.

Results: The findings suggest that precarious career paths, economic insecurity and disrupted transitions into adulthood negatively affect young people's emotional wellbeing. Moreover, the typology of youth socioeconomic configurations showed the strong interrelation among these factors, revealing the existence of diverse expressions of youth precarity that harmed emotional wellbeing.

Conclusion: Expressions of youth precarity adversely affecting youth mental health stem from economic but also social inequities, overexposing some groups of young people to income insecurity, labour market exclusion and residential vulnerability. Structural interventions are thus needed to improve youth emotional wellbeing.

Sida: 61 (176)

Measuring and understanding employment quality and its relation to mental well-being in the Belgian platform economy. Towards an empirical assessment.

1. Health, Safety and Well-Being Elief Vandevenne<sup>1</sup>

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Abstract text: Employment Quality (EQ) is a social determinant of well-being. However, whether the EQ concept—originally developed to assess waged workers applies to platform workers is disputed. This study develops and validates a new measure for EQ applicable to various types of platform work and investigates its relationship with mental well-being. It also assesses whether intrinsic quality of work (IQW) mediates this relationship and explores important differences between main platform workers (those working over 24 hours per week) and supplementary workers (those working fewer than 24 hours). The validity of the new EQ measure (termed EPRES-gw) was tested through confirmatory factor analysis on primary survey data from 397 Belgian platform workers. Structural equation modeling was employed to explore the relationships between EPRES-gw, mental well-being, and IQW. The EPRESgw demonstrated strong construct validity, but measurement invariance was not established, indicating significant differences in how EQ is assessed between main and supplementary workers. A strong, positive relationship was observed between higher EPRES-gw scores, indicating adverse EQ, and poorer well-being among main platform workers. This relationship remained significant even after accounting for IQW. IQW mediated this relationship mainly through high work intensity, physical demands, and low social support among main platform workers. For supplementary workers, low autonomy was the primary mediator. This study underscores the critical role of EQ in the well-being of platform workers and presents the EPRES-gw as a valuable tool for examining the dynamics between EQ and well-being, highlighting the necessity for future research to differentiate between main and supplementary workers.

Sida: 62 (176)

### Job quality and well-being among Belgian student workers and labour market entrants

1. Health, Safety and Well-Being

#### Karen Van Aerden<sup>1</sup>

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#### **Abstract text: Background**

In Belgium, as in several other European countries, a notable increase in student work has been witnessed over the past years. However, little is known about the modalities and consequences of this type of work for students' results, their health and well-being and their transition to the labour market. In this study, we aim to tackle this issue by studying job quality and the relationship with well-being among both student workers and labour market entrants in Belgium. We specifically address topics such as hybrid work/educational contexts, career prospects and the school-to-work transition.

#### Methods

This study uses data that were collected among Belgian higher education students and labour market entrants using a quantitative survey methodology (primary data collection). The data will be analysed using both descriptive and more advanced techniques for statistical analysis.

#### Results and conclusion

As data collection is currently ongoing, at the moment we cannot present results stemming from our statistical analyses. The results that will be presented at the conference will cover the following topics:

- \* Job quality of student jobs
- \* Job quality among labour market entrants
- \* Career prospects for students and young workers
- \* The transition to first labour market experiences and the role of student work
- \* The (mental and work-related) well-being of students, student workers and young workers

Sida: 63 (176)

### Digital Platform Work II

2025-05-07 16:00 - 17:00 Digital Platform Work II

Sida: 64 (176)

#### Digital Platform Work Across European Countries: a Multidimensional Description

3. Digitalization and Platformization

Francesc Belvis<sup>1, 2</sup>

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Abstract text: Background: Digital platform work is an emerging phenomenon that raises concerns about employment quality and workers' health. This study characterizes digital platform workers across various European countries by examining (a) task types, (b) employment conditions, and (c) mental health.

**Methods:** Data were sourced from the GIG-OSH database, a cross-sectional survey performed in Sweden, Belgium, Denmark, Finland, Poland, Spain, and the UK (n = 3,164). Nonlinear canonical correlation analysis was used to explore relationships across digital platform work variables including: (a) 'main task'; (b) 'work arrangement', 'monthly time commitment', 'income from platform work as a percentage of median income'; and (c) the dichotomized WHO-5 index as a supplementary variable.

**Results:** Monthly hours in digital platform work showed a U-shaped distribution (M = 50.5, SD = 71.1), significantly below the standard full-time work month of approximately

160–180 hours. The first dimension in the data (0.2113 inertia) was associated with 'main task,' 'monthly hours worked,' and 'income from platform', contrasting 'remote microtasks' requiring fewer hours (up to 15) and often involving 'no contract' or 'unknown arrangement', with other tasks demanding >15 hours and formal work arrangements. The second dimension (0.1642 inertia) distinguishes remote tasks such as professional or marketing roles, often done by self-employed workers dedicating 15–55 hours per month, from on-location tasks (transport, delivery) that require >55 hours time commitments. No evident association with the WHO–5 index was found.

**Conclusions**: The intensity of hours dedicated to platform work and the distinction between on-location and remote work are key factors in developing a typology.

Sida: 66 (176)

### In dependence – the dynamics of platform workers' 'unlikely' mobilizations in Belgium

3. Digitalization and Platformization

#### Meike Brodersen<sup>1</sup>

Anastasia Joukovsky<sup>1</sup>

<sup>1</sup> Université Libre de Bruxelles

**Abstract text:** While the disruptive effect of platforms may at times have been exaggerated – platforms tend to pursue the ongoing trends of externalisation of labour and contingency (Brodersen & Martinez, 2022) – the specific brand of externalisation aided by algorithmic management poses challenges to worker voice and representation, however substantial to the sustainability of jobs.

Since platforms position themselves as neutral intermediaries, the absence of an accountable employer is an obstacle for established, institutionalised forms of collective bargaining and representation. At the same time, the physical dispersion of workers, the often temporary and fragmented nature of platform work, high levels of dependency on platform income and the sanctions associated with algorithmic management practices, make worker mobilisation overall more challenging.

Obstacles notwithstanding, platform workers across sectors have found ways not only to create communities of solidarity and circumvent constraints linked to their employment conditions, but also to collectively mobilise in the name of shared interests, in what may upon first glance appear as 'unlikely mobilisations' (Brugière, 2019; Abdelnour & Bernard, 2019; Tassinari & Maccarronne, 2020).

We draw on extensive qualitative evidence from two large-scale projects in Belgium to clarify the factors that hinder and enable worker representation, union activity and collective mobilisation in platform labour. Based on participant observation and indepth interviews with workers, managers, union representatives and other stakeholders, we show what labour movements in the platform economy over the past 5 years reveal about the nature of platform work itself, notably, about the diverging versions of discretion, independence and agency at stake (Brodersen & al., 2023).

Sida: 67 (176)

### Sustainable Livelihoods Through Platform Work: Assessing Their Potential for Positive Social Change

3. Digitalization and Platformization

#### Nadine Adréa Veldsman<sup>1</sup>

Neva Bojovic<sup>2</sup>, Ines Meyer<sup>1</sup>, Johannes Kraak<sup>2</sup>, Zonke Zungu<sup>1</sup>, Sara Velez Zapata<sup>2</sup>, Bianca Arendse<sup>1</sup>

Abstract text: South Africa's platform economy has grown rapidly, driven by high unemployment, favourable regulations, urbanisation, and widespread mobile internet access. The rise of platform work has generated extensive research, largely emphasising its negative effects on workers' livelihoods. The FairWork Foundation (2019-2021) highlighted considerable variation in platform working conditions, with local platforms generally providing better conditions than international ones. These findings suggest that, under the right circumstances, platform work can promote positive social change. Local platforms, being more attuned to the South African context, often strive to balance financial stability with decent working conditions. Building on FairWork's findings, we explore the business models of locally founded platforms to derive insights that could inform socially just platform work worldwide. Specifically, this research addresses how platform businesses can contribute towards positive social change by enabling decent work and sustainable livelihoods for workers and their own financial sustainability. We are conducting semi-structured interviews with platform founders, management, and platform workers to understand their motivations, strategy, and business model. Thematic analysis will be used to identify recurring themes, with analyses expected to be completed by March 2025. Our findings will identify how platforms employ social practices to create financial sustainability, compare business models' social impacts, and shed light on the social consequences of platform work. Ultimately, this study seeks to amplify the South African platform community's voice, proposing best practices and principles that other platforms could learn from to enhance their social and economic impact.

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Sida: 68 (176)

### Mental Well-being in the Gig Economy: How Gender and Work Modality Shape the Effects of Workplace Discrimination - The GIG-OSH Project

1. Health, Safety and Well-Being Sandra Verdaguer<sup>1</sup>

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- <sup>5</sup> Brussels Institute for Social and Population Studies, Department of Sociology, Vrije Universiteit Brussel, Belgium
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- <sup>7</sup> Unit of Occupational Medicine, Institute of Environmental Medicine (IMM), Karolinska Institutet, 11365 Stockholm, Sweden
- <sup>8</sup> Center for Occupational and Environmental Medicine, Stockholm Region, 11365 Stockholm, Sweden
- <sup>9</sup> University of Lodz, Institute of Psychology, Poland

**Abstract text: Background:** This study explores the relationship between perceived workplace discrimination and mental well-being among digital platform workers, with a focus on the influence of gender and work modality (on-site versus online).

Methods: A cross-sectional online survey was conducted across seven European countries, involving 3882 digital platform workers [male: 2297; non-male: 1585]. Linear regression models were used to examine the relationship between perceived workplace discrimination and mental well-being, measured using WHO-5 scores. Analyses were stratified by gender and work modality, adjusting for confounding factors such as migratory status, age, and country.

**Results:** Perceived discrimination was significantly associated with reduced mental well-being across gender and work modalities. Among male workers, discrimination was linked to a significant decrease in mental well-being ( $\beta$ = -4.88, p<0.001), while the effect was more pronounced among non-male workers ( $\beta$ = -6.15, p<0.001), after adjusting for relevant factors. When stratifying for work modality, on-site workers

experienced a stronger negative impact ( $\beta$ = -6.96, p<0.001) compared to online workers ( $\beta$ = -2.19, p=0.20). Country-specific variations were also observed, with non-male and online workers in Finland demonstrating a positive relationship with mental well-being in adjusted models.

Conclusion: Perceived workplace discrimination negatively impacts the mental well-being of digital platform workers, with non-male and on-site workers being particularly vulnerable. The results emphasize the need for targeted interventions to reduce discrimination and foster inclusive work environments in the platform economy. Additionally, country-specific differences highlight the importance of understanding and addressing contextual factors that influence these disparities.

Sida: 70 (176)

### Occupational Safety and Health of Riders Working for Digital Food Delivery Platforms in Milan, Italy

1. Health, Safety and Well-Being

#### Luca Boniardi<sup>1</sup>

Laura Campo<sup>1</sup>, Sofia Prudenzi<sup>2</sup>, Luciano Fasano<sup>2</sup>, Paolo Natale<sup>2</sup>, Dario Consonni<sup>3</sup>, Michele Carugno<sup>1,3</sup>, Angela Cecilia Pesatori<sup>1,3</sup>, Silvia Fustinoni<sup>1,3</sup>

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- <sup>3</sup> Occupational Health Unit Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

**Abstract text:** The consolidation of food delivery platforms raises significant occupational safety and health (OSH) concerns, highlighting riders' vulnerability due to precarious employment, migrant status, and outdoor working conditions. This study examines OSH challenges for Milan-based riders, addressing key gaps in health and safety insights.

In autumn 2022, we surveyed Milan's food delivery riders, voluntarily engaged at city meeting points, using a validated questionnaire developed through literature review and expert input to collect data on personal characteristics and OSH aspects.

The study involved 240 predominantly male, young, migrant food delivery riders in Milan, with 77% lacking Italian citizenship and 34% experiencing language difficulties. Precarious employment was widespread, with 56% working autonomously or on unstable contracts. Many riders reported extensive working hours, with 23% working over 8 hours daily and 44% working seven days per week. Overworking was notably frequent among non-Italian citizens and riders using flexible "free login" platforms or working across multiple platforms (25%). Health issues were common, including back pain (59%) and fatigue (49%) linked to long hours, type of vehicle, and backpack use. Riders also faced significant risks of physical or verbal aggression. Additionally, 39% reported road accidents, with e-bike riders particularly vulnerable, especially when fatigued.

Our findings underscore the need for multifaceted OSH interventions to promote decent work for riders, aligning with the 2030 Agenda for Sustainable Development goals to enhance health, safety, and fair working conditions.

Sida: 71 (176)

### The impact of precarious work in Poland on health and well-being: a comparison of online and on location platform workers. The GIG-OSH project

1. Health, Safety and Well-Being

Dorota Merecz-Kot<sup>1</sup>

**Agnieszka Lipinska-Grobelny**<sup>1</sup>, Anna Paszkowska-Rogacz<sup>1</sup>, Marta Znajmiecka<sup>1</sup>, Olga Zwardon-Kuchciak<sup>1</sup>, Lauri Kokkinen<sup>2</sup>, Hanna Nurmi<sup>2</sup>, Mireia Julià Pérez<sup>3, 4</sup>, Theo Bodin<sup>5, 6</sup>, Filippa Lundh<sup>5</sup>, Lluís Mangot-Sala<sup>5</sup>, Nuria Matilla-Santander<sup>5, 7, 8</sup>

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Abstract text: Due to the lack of legal regulations, platform work in Poland is counted as a new form of work. Moreover, the demanding employment (i.e. salaries, contract) and working conditions (i.e. job insecurity) accompanying platform work, cause it to be classified as precarious work. The aim of the ongoing research was to examine the relationship between selected platform working and employment conditions and the general health and well-being of platform workers in Poland. An additional differentiating variable was the form of work provision on the platform.

A cross-sectional study, based on a cohort of digital platform employees working in Sweden, Denmark, Finland, Spain, the UK, Belgium and Poland, involved 1604 working on location, 1667 remotely and 638 pursuing dual-mode work. In Poland, 511 respondents worked on location, 168 remotely and 171 realised dual-mode work, participated in the study.

Obtain results indicate that workers working online, on location and dual-mode differ significantly in their assessment of selected working conditions (i.e. number of working hours, accidents at work, productivity during illness), and employment conditions (i.e. rate of pay, form of employment) and also health and well-being assessment. Regarding the association of selected working and employment conditions with the health and well-being of platform workers, we found that only one employment condition (pay), and two working conditions (presenteeism and being involved in accidents at work) remained significant variables.

Sida: 72 (176)

Based on the preliminary results obtained, the number and strength of these relationships suggests that other psychologically well-established variables need to be taken into consideration.

Sida: 73 (176)

### Policy, Resistance and Intervention 2

2025-05-08 10:30 - 12:00

Policy, Resistance and Intervention 2

Sida: 74 (176)

# Precarious Work and Mental Health: From Transdisciplinary Knowledge to Integrated Policies - Findings from the Spanish PRESME Commission

4. Policy, Resistance and Intervention Joan Benach<sup>1, 2, 3, 4</sup>

**Ferran Muntané**<sup>1, 2</sup>, Fernando Alonso<sup>5</sup>, Diego Álvarez-Alonso<sup>6</sup>, Lucía Artazcoz<sup>7, 8, 9, 10</sup>, Edgar Cabanas<sup>11</sup>, Belén González Callado<sup>12</sup>, Núria Matilla-Santander<sup>13, 14, 15, 16</sup>, Carles Muntaner<sup>17</sup>, María Gema Quintero Lima<sup>18</sup>, Remedios Zafra<sup>19</sup>, Pablo Ruisoto<sup>1, 2, 20</sup>

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Sida: 75 (176)

### **Abstract text: Background**

The rise of precarious work in today's dynamic labour market is a well-established determinant of mental health, yet a comprehensive, policy-driven approach to address these challenges is missing. This study, prompted by Spain's Ministry of Labor, involved a pioneering transdisciplinary committee that integrated diverse fields, from sociology, epidemiology, and public health to psychiatry and labor law. Their collaborative work, encapsulated in the PRESME report, aimed to consolidate evidence on precarious work's impact on mental health and guide actionable policies for labor health reforms.

#### Methods

A diverse group of experts synthesized existing research and empirical data from global studies on precarious work, mental health, and the social determinants of health. By using multidimensional metrics, intersectional analysis, and evidence, the committee established a cohesive framework that informs policy interventions aimed at reducing the harmful effects of precarious work.

#### **Results**

The findings demonstrate that precarious work is a key social determinant with profound impacts on mental health. Analysis of legal and structural factors contributing to work precarisation highlighted policy gaps and potential interventions that can mitigate these effects. A multidimensional model provides a nuanced view of the mechanisms linking precarious work to mental health.

#### Conclusions

This study offers an integrated, policy-oriented resource that contributes to understanding precarious work's impact on mental health and presents concrete, evidence-based policy recommendations. These insights are essential for policymakers, social actors, and the global health community in creating more equitable, health-focused labour policies, promoting worker's well-being, and addressing the global rise of precarious employment.

Sida: 76 (176)

### Essential gig work during the pandemic in Chile: Were occupational health and safety lessons learned?

4. Policy, Resistance and Intervention

Marisol Ruiz<sup>1</sup>

Valentina Alvarez<sup>2</sup>, Alessandro Zaupa<sup>3</sup>, **Alejandra Vives**<sup>3</sup>

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- <sup>2</sup> Departamento de estudios territoriales y diálogos interculturales, Universidad de Playa Ancha, Valparaíso, Chile
- <sup>3</sup> Escuela de Salud Pública, Pontificia Universidad Católica de Chile, Santiago, Chile

**Abstract text:** Platform work, the labour dimension of the gig economy, resorts to non-standard forms of employment that mimic own-account work. Indeed, a key issue with platform/gig work is that unless recognized as *employees*, several risks and responsibilities are shifted towards the individual workers, including catering to their occupational health and safety.

During COVID-19, dramatic job loss and mobility restrictions increased both the supply of labour and the demand for platform-based services. In Chile, as elsewhere, workers involved in the delivery of goods were considered "essential workers", performing a variety of tasks coordinated through apps, in order to sustain the mobility restrictions implemented to contain viral transmission. However, although gig and own-account workers were recognised by the ILO as being among the groups most vulnerable to COVID-19, their occupational health and safety (OH&S) was largely overlooked. In consequence, their experiences during COVID-19 represent an exacerbation of their OH&S vulnerabilities, shedding new light on the needs and barriers these workers face in the protection of their health.

In Chile, new regulations for own-account and platform work place a strong emphasis on social security –and, for the latter, on labour regulation–, but have a weaker consideration of OH&S protection. Drawing on in–depth interviews with own–account and gig–workers conducted during COVID–19 in Chile (the PWR project), we explore how their concerns, health protection strategies and perceived health consequences can shed light on these regulatory gaps, seeking to further and contribute to the much–neglected discussion on the protection of the health and safety of these workers.

Sida: 77 (176)

### Platform Governance in United States Cities: The case of app-based food delivery work

4. Policy, Resistance and Intervention

#### Nevin Cohen<sup>1, 2</sup>

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- <sup>3</sup> Barry Commoner Center, Queens College, City University of New York

Abstract text: As delivery platforms transform urban food systems and labor markets, cities face complex challenges establishing effective regulation of this evolving sector. This paper examines how the governance of platform-based food delivery work emerges through interactions among policymakers, advocates, platform companies, and workers in Seattle and New York, US cities that have regulated pay and working conditions, and Chicago, which has not. Through analysis of secondary data and key informant interviews about policy development, the paper shows that platform governance occurs not only because of top-down regulation but also through contested processes involving multiple stakeholders with varying power and influence. The paper illustrates how delivery workers, despite their status as independent contractors, actively shape municipal policies through collective action ranging from support networks to organized advocacy, worker-led initiatives that have advanced regulations around wages, working conditions, and job security. Simultaneously, platform companies have used various strategies to influence governance structures, including lobbying, litigation, enlisting workers to oppose regulations, and making strategic changes to their platforms. The paper challenges simplistic notions of the policymaking process by showing how policies and regulations have emerged, or have been thwarted, through negotiations among city officials, platforms, and worker coalitions. This multi-stakeholder dynamic creates a complex governance landscape in which regulations may need to be continuously adapted and updated after enactment. By examining how business responses and worker actions vary across different cities, this paper will increase our understanding of the iterative nature of platform governance.

Sida: 78 (176)

### Platform strategies towards health & safety regulations in the gig economy:-from rule preventers to rule makers

1. Health, Safety and Well-Being

#### Trine Pernille Larsen<sup>1</sup>

Lauri Kokkinen<sup>2</sup>, Chris Warhurst<sup>1</sup>, Anna Ilsøe<sup>3</sup>, Beate Baldauf<sup>1</sup>, Meike Brodersen<sup>4</sup>, Jessie Gevaert<sup>5</sup>, Astrid Escrig-Pinol<sup>6</sup>, Ferran Muntané Isart<sup>6</sup>, Nuria Matilla Santander<sup>6, 7, 8</sup>, Hanna Nurmi<sup>2</sup>, Marta Zajmiecka<sup>9</sup>, Dorota Merecz<sup>9</sup>, Theo Bodin<sup>7, 10</sup>

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Abstract text: Background: Digital platforms continue to expand and challenge the foundation of most labour market and welfare institutions. They often offer patchy social and employment protection and, in many instances, circumvent the traditional employer responsibility of employee protection. However, some digital platforms have opted for a different approach towards legislation and collective bargaining. This paper aims to explain why the approach of digital platforms and social partners more broadly towards health and safety regulation differs across Europe.

Methods: We focus on recent institutional developments in Denmark, Finland, Sweden, Belgium, Spain, Poland and the UK. Our research questions are: How are platform workers covered by national health and safety regulations? And what are the strategies of digital platforms and social partners towards regulating health and safety? Empirically, we draw on desk research of policy documents, collective agreements and health and safety laws. Analytically, we draw on power resource theory and the regulatory welfare state literature.

**Results:** We find that while digital platforms initially tended to exploit the regulatory grey zones to circumvent employee protection, they are increasingly utilising social dialogue to develop unilateral, bipartite and in some instances tripartite health and safety initiatives to protect platform workers. This shift from being what can be characterised as rule-preventers towards being rule-makers appear largely driven by

Sida: 79 (176)

the pressures from the broader institutional setting, where the national context appears pivotal.

**Conclusion:** To push forward new regulation, digital platforms, especially trade unions and employers' organisations have utilised their institutional power resource, but often in different combinations.

Sida: 80 (176)

### Mental health, work, and social security: learnings from a new data linkage

4. Policy, Resistance and Intervention

#### Sarah Ledden<sup>1</sup>

Ira Madan<sup>2</sup>, Matthew Hotopf<sup>1</sup>, Nicola Fear<sup>3</sup>, Sharon Stevelink<sup>1</sup>

- <sup>1</sup> Institute of Psychiatry, Psychology & Neuroscience, King's College London
- <sup>2</sup> King's College London
- <sup>3</sup> King's Centre for Military Health Research, King's College London

**Abstract text:** Background: Approximately 1.8 million people in the UK face long-term sickness absence of 4 weeks or longer, costing the economy £100billion each year. Mental health conditions have become one of the most common reasons for sickness absence and long-term disability. There is a need for better understanding of the interrelationships between work, mental health and social security.

Methods: We have established a unique data linkage between mental healthcare records from the South London and Maudsley (SLaM) NHS Foundation Trust with benefits records from the Department for Work and Pensions. 448,404 IDs of patients who accessed secondary mental healthcare services at SLaM were sent to the DWP, including personal identifiers. Data from SLaM covered years 2007–2019, whereas data from DWP covered years 2005–2020. A deterministic data linkage approach was used.

Results: We achieved a linkage rate of 93%. We found women, those from a racial and ethnic minority background and younger patients were less likely to be linked. State benefit receipt was high among patients, with 83% of patients having received benefits during the 15-year follow-up period. Benefits most frequently received included unemployment related or income replacing disability benefits.

Conclusion: This data linkage is the first of its kind to demonstrate the use of routinely collected mental health and state benefits data in the UK. This dataset provides opportunities to generate high-quality evidence that can be used to inform policy and practice, and identify the needs of vulnerable groups.

Sida: 81 (176)

### Impacts of Employment Quality on Families and Caregiving

2025-05-08 10:30 - 12:00

Impacts of Employment Quality on Families and Caregiving

Sida: 82 (176)

### Impact of Precarious Employment on the Health and Well-being of Workers and their Families in Ontario, Canada During the COVID-19 pandemic

1. Health, Safety and Well-Being

#### Melissa Perri

Patricia O'Campo<sup>1, 2</sup>, Paneet Gill<sup>1, 2</sup>, Virginia Gunn<sup>3, 4</sup>, Rachel Ma<sup>1, 2</sup>, Pearl Buhariwala<sup>1</sup>, Elham Rasoulian<sup>1</sup>, Wayne Lewchuk<sup>5</sup>, Sherry Baron<sup>6</sup>, Theo Bodin<sup>4, 7</sup>, Kazumi Tsuchiya<sup>2</sup>, Carles Muntaner<sup>2, 8</sup>

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### **Abstract text:**

Research has associated precarious employment (PE) with workers' poor mental health and well-being; however, this association has been studied primarily using quantitative methods. This presentation highlights the mechanisms between PE and mental health, qualitatively, in the context of the COVID-19 pandemic in Ontario, Canada. Semi-structured interviews were conducted with 40 individuals aged 25–55 (55% identifying as women) in Ontario, Canada who were engaged in PE during the first wave of the COVID-19 pandemic or whose employment was terminated due to the pandemic. Interviews focused on the ways in which PE influenced insecurities of workers and their families and were analyzed thematically.

The findings showed that PE amplified mental health symptoms and illnesses for workers and their families. These experiences were described as chronic, where impacts were more amplified on precariously employed workers through systemic discrimination and racism, colonialism, workplace hierarchies, and gendered ideologies. PE negatively impacted mental health through emotional stress about employment and income instability, insecurity, and loss; added pressure for households where both partners are engaged in PE; as well as impacted their ability to maintain or improve overall health and well-being; and social connectedness.

This presentation characterizes multiple dimensions of PE and the consequences they each have on the mental health of workers and their families. This presentation will

Sida: 83 (176)

offer unique insight into elements of non-standard employment which need to be addressed to support workers and their families.

Sida: 84 (176)

# The Impact of Parental Precarious Employment on Child Mental Health: A Cluster-Based Analysis

1. Health, Safety and Well-Being

#### Mireia Julià<sup>1, 2</sup>

Edgar Vicente-Castellvi<sup>1</sup>, Eva Padrosa<sup>1, 2</sup>

- <sup>1</sup> Social Determinants and Health Education Research Group (SDHEd), Hospital del Mar Research Institute
- <sup>2</sup> Hospital del Mar Nursing School (ESIHMar), Universitat Pompeu Fabra-affiliated, Barcelona, Spain

#### **Abstract text: Introduction:**

Precarious employment is increasingly recognized as a social determinant of health that impacts not only workers but also their families. This study aimed to analyze the effects of parental precarious employment on children's mental health through cluster-based analysis of different employment types.

#### Methods:

A sample of 1,413 parents (686 mothers, 727 fathers) of 1,002 children aged 4-14 years from the Catalan Health Survey (ESCA) of 2023 was analyzed. Participants were grouped into clusters based on their employment type: precarious, self-employed, and standard. Child mental health was assessed using the Strengths and Difficulties Questionnaire (SDQ). Logistic regression models were fitted to estimate the association between parental employment type and child mental health, stratified by parent gender.

#### **Results:**

Children of parents in precarious employment were more likely to experience mental health problems compared to those with parents in standard employment. Among mothers, precarious employment was most significantly associated with child emotional problems (OR=1.95; 95%Cl: 1.26–3.04). Among fathers, it was associated to higher odds of conduct problems (OR=1.56; 95%Cl: 1.13–2.15), hyperactivity (OR=1.39; 95%Cl: 1.02–1.90), relational problems (OR=1.44; 95%Cl: 1.07–1.94) and prosocial difficulties (OR=2.66; 95%Cl: 1.58–4.48). Children of self-employed parents had lower odds of mental health problems compared to those with parents in standard employment.

#### Conclusions:

Parental precarious employment is associated with adverse mental health outcomes in children. These findings highlight the need for targeted policies aimed at reducing precarity to protect children's well-being.

Sida: 85 (176)

### Parental precarious employment and the mental health of adolescents: a Swedish registry study

1. Health, Safety and Well-Being

#### Amanda Aronsson<sup>1, 2</sup>

Emelie Thern<sup>2</sup>, Nuria Matilla-Santander<sup>2</sup>, Signild Kvart<sup>2</sup>, Julio C. Hernando-Rodriguez<sup>2</sup>, Kathryn Badarin<sup>2</sup>, Mireia Julià<sup>3, 4, 5</sup>, Samira Alfayumi-Zeadna<sup>6</sup>, Virginia Gunn<sup>2, 7</sup>, Bertina Kreshpaj<sup>8</sup>, Carles Muntaner<sup>5, 9, 10</sup>, Theo Bodin<sup>2</sup>, Lluís Mangot-Sala<sup>2</sup>

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**Abstract text: Objective**: This study investigates the association between parental precarious employment (PE) and the mental health of their adolescent children, with a particular focus on how the association differs based on whether the mother or father is in PE.

Materials and Methods: This register-based study used the Swedish Work, Illness, and Labour-market Participation (SWIP) cohort. A sample of n=117,437 children aged 16 years at baseline (2005) were followed up until the age of 20 (2009). A multidimensional construct of PE (SWE-ROPE 2.0) was used to classify parental employment as either "precarious", "substandard" or "standard employment". The outcome, adolescents' mental disorders, was measured as a diagnosis of a mental disorder using ICD-10 codes or by prescribed psychotropic drugs using ATC codes. Crude and adjusted Cox regression models produced Hazard Ratios (HR) with 95 %

confidence intervals (95% CI) to estimate the association between parental PE and adolescents' mental health.

**Results:** Adolescents with parents in PE exhibited a higher risk of developing mental disorders. The association was more pronounced for paternal PE (HR 1.22 95% CI 1.10–1.35) compared to maternal PE (HR 1.11, 95% CI 1.00–1.21). These associations largely persisted after adjusting for important confounders, including parental mental health conditions.

**Conclusion:** This study addresses a significant gap in the literature on parental PE and adolescents' mental health. As PE is growing more common across countries, this study provides relevant insights into the intergenerational role that parental low-quality employment may have in terms of mental health within families.

Sida: 87 (176)

### The intergenerational transmission of precarious employment

1. Health, Safety and Well-Being

#### Sarah Andrea<sup>1</sup>

Anita Minh<sup>2</sup>, Vanessa Oddo<sup>3</sup>, Áine Huntington<sup>1</sup>, Anjum Hajat<sup>4</sup>

- <sup>1</sup> Oregon Health & Science University-Portland State University School of Public Health, USA
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- <sup>4</sup> Department of Epidemiology, University of Washington School of Public Health, USA

**Abstract text: Background:** Evidence demonstrates that poor employment quality (EQ) produces economic insecurity and poor health in workers. Yet, less is known about the intergenerational impacts of EQ, and consequently its role in reproducing inequities. We examined the association between parental EQ at ages 35–44 years with their adult children's EQ and self-rated health at ages 25–34 years.

**Methods:** Using Panel Study of Income Dynamics data on employment stability, material rewards, working-time arrangements, collective organization, and power relations from N=5,427 respondents (i.e., adult children) and their parents collected between 1985-2019, we constructed a multidimensional EQ score with principal component analysis and subsequently examined patterns in age-standardized EQ tertiles (low; medium; high).

**Results:** Parental EQ was lowest among mothers, racialized parents, and the lesseducated. Sixty-seven percent of adult children of single-breadwinner parents in low EQ and 57% of adult children with two parents in low EQ entered low EQ themselves while only 10% and 13% experienced upward mobility into high EQ, respectively. In contrast, 50.4% of adult children with two parents in high EQ entered high EQ themselves. Risk of poor self-rated health in adulthood ranged from 3% of those with both parents in high EQ to 12% of those with both parents in low EQ.

**Conclusion:** Preliminary evidence supports intergenerational transmission of EQ. By shifting attention to the intergenerational consequences of EQ, we identify actionable insights into structural mechanisms for early intervention on health and social mobility.

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### Precarious employment and mental health – moderation by family composition and disposable income? A Swedish register study

1. Health, Safety and Well-Being

### Signild Kvart<sup>1</sup>

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- <sup>7</sup> ESIMar (Mar Nursing School), Parc de Salut Mar, Universitat Pompeu Fabra-affiliated, Barcelona, Spain.
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**Abstract text: Background:** The Swedish labour market increasingly features precarious employment (PE), linked to rising mental ill-health. Understanding the mechanisms connecting these phenomena is crucial. This study examines how family composition and household disposable income influence the relationship between PE and mental ill-health.

**Methods:** Using data from the Swedish Work, Illness, and Labour-market Participation cohort (SWIP), the study included individuals aged 25–65 employed in 2016 (n=2,612,982). PE was measured using the Swedish Register-based Operationalization

of Precarious Employment (SWE-ROPE). Mental health disorders during 2017–2019 were identified from national registers, as well as data on family composition and household income in 2016. Cox regression models estimated PE's effect on mental health, with two-way interaction terms assessing moderating effects.

**Results:** At baseline, 10% were in precarious, 30% in substandard, and 60% in standard employment. During follow-up, 160,237 individuals (6%) experienced mental ill-health. Adjusted models showed increased mental ill-health risk for those in PE compared to standard employment, across all income levels and family types. A positive interaction effect was found for high household income (HR 1.24 CI95% 1.15-1.33), indicating a less than expected protective effect for those in PE. Regarding interaction from family composition the negative impact of PE appears stronger for those with children, especially single parents (interaction effect HR 1.22 CI95% 1.12-1.33).

**Conclusion:** The link between PE and mental ill-health varies by family type and income level. Higher income reduces risk but is less protective for those in PE, highlighting the complex, multidimensional nature of PE as a mental health risk factor.

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# Population level survey data to examine racial inequities in intergenerational impacts of precarious employment in the US

1. Health, Safety and Well-Being

#### Anita Minh<sup>1, 2</sup>

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- <sup>2</sup> University of Washington, Department of Epidemiology, School of Public Health, USA
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- <sup>4</sup> University of Illinois Chicago, Department of Kinesiology and Nutrition, College of Applied Health Sciences, USA

Abstract text: Background: Rich evidence links racial inequities in household poverty to inequalities in children's health and social mobility; however, less is known about how parental precarious employment (PE) drives these phenomena. Key gaps pertain to the racialized gendering of parents' unpaid labour caregiving, access to workers' rights and protections, and their impacts on children. Without nationally linked registrars to elucidate the intergenerational implications of PE in the US, we first rectify challenges with existing datasets. Specifically, interlocking systems of oppression that disproportionately allocate populations to PE on the basis of race, gender, and ability, contribute to differential selection into and out of intergenerational cohorts, limiting examinations of those most marginalized. Integration of data across multiple cohort studies may help address these issues.

**Methods:** In place of nationally linked registrars, several study cohorts and administrative datasets collectively support inquiries into intergenerational PE. We will be characterizing the quality and completeness of PE features across generations in several US cohorts (e.g., the Panel Study of Income Dynamics and the Future of Families and Child Wellbeing Study) with special attention paid to race, ethnicity, documentation status, sexuality, gender, disability status.

Results and Conclusions: This presentation for the "Impacts of EQ on Families and Caregiving" special session, highlights gaps and opportunities to examine PE within, between, and across US intergenerational cohorts, including areas of overlap and areas of little or no coverage. The resulting publicly available data catalogue is a key step to future data integration for examination of the intergenerational impacts of PE.

Sida: 91 (176)

### Algorithmic Management

2025-05-08 10:30 - 12:00 Algorithmic Management

Sida: 92 (176)

### Implementing a new measurement tool to understand the implications of algorithmic management on work design and mental well-being.

3. Digitalization and Platformization

### Carsten Röttgen<sup>1</sup>

Britta Herbig<sup>2</sup>, Tobias Weinmann<sup>2</sup>, Andreas Müller<sup>1</sup>

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<sup>2</sup> Institute and Clinic for Occupational, Social and Environmental Medicine, LMU University Hospital, LMU Munich, Munich, Germany

**Abstract text:** Algorithms are taking over the management of workers in more and more jobs (algorithmic management, AM). Data-driven, these systems set goals, plan actions, schedule and monitor tasks and provide feedback.

Recent, mostly qualitative, research indicates that AM systems can affect the human centered work design and with that also the mental well-being of employees. As part of a survey program, the *Completeness of Algorithmic Management Scale* (COMAMA) was validated to measure central functions of AM in the work environments of crowd work (n = 435), logistics (n = 132), delivery (n = 42) and a convenience sample with a wide spectrum of occupations (n = 273). In addition, scales were used to measure the quality of work design (e.g., job autonomy) and mental well-being (e.g., cognitive and emotional irritation).

Results indicate that AM is related with higher job (hindrance) demands like time pressure and lower job resources, like job autonomy, but also with lower job (challenge) demands like task complexity. Moreover, results suggest that AM is related with lower mental well-being.

Findings indicate that the COMAMA scale enables a more accurate discussion about the benefits and risks implementing AM systems at work. As strength and direction of associations seem to be dependent on job context, further job specific studies are needed to understand the impact of these increasingly frequently used systems.

Sida: 93 (176)

### Safe and healthy algorithms in non-platform work: action and strategies in an industrial relations context

3. Digitalization and Platformization

#### Carin HAKANSTA<sup>1</sup>

Ruben Lind<sup>1</sup>, Karin Nilsson<sup>1</sup>, Min Kuyng Lee<sup>2</sup>, Michael Quinlan<sup>3</sup>

- <sup>1</sup> Karolinska Institutet, Stockholm, Sweden
- <sup>2</sup> University of Texas at Austin, Austin, U.S.A
- <sup>3</sup> University of New South Wales, Sydney, Australia

Abstract text: Background: Algorithmic management (AM) is gradually spreading beyond platform work into the regular labour market. Drawing on the Pressure, Disorganisation and Regulatory failure (PDR) framework, this explorative study describes and compares strategies of the government and social partners in Sweden related to associations between AM and occupational safety and health (OSH).

Methods: Data was gathered from trade union and government documents and semi-structured interviews (focus groups and one-to-one) with representatives of government, trade unions and employer organisations in 2022-2024. These data were triangulated and analysed through the lens of the PDR framework.

Results: We found more and earlier interest in and action on AM among the trade unions than among the other two actors. We suggest that while Economic Pressure explains the spread of AM and rationale for employers to use it, Reward Pressure explains the OSH risks and engagement of trade unions. Disorganisation manifests as lack of knowledge about OSH effects of AM, leading to ineffective procedures at workplaces. Regulatory Failure was evident among all actors due to inability to apply existing legislation to this new phenomenon and the stalling of new regulations due to EU membership.

Conclusion: The study illustrates the important role of trade unions in awareness raising and pushing the agenda of emerging risks. It also makes a theoretical contribution by extending and modifying the PDR model, with broader ramifications not just for AM but for the on-going dynamic that compromises OSH historically, today and in the future.

Sida: 94 (176)

# Effects of Algorithmic Management on Safety, Health, and Wellbeing in Logistics: A Mixed-Methods Case Study

3. Digitalization and Platformization

#### Ruben Lind<sup>1</sup>

Carin Håkansta<sup>1</sup>, Pille Strauss Raats<sup>1</sup>, Michael Quinlan<sup>2</sup>, Virginia Gunn<sup>1,3</sup>, Theo Bodin<sup>1</sup>, Nuria Matilla-Santander<sup>1</sup>, Lluís Mangot-Sala<sup>1</sup>

- <sup>1</sup> Karolinska Institute
- <sup>2</sup> University of New South Wales
- <sup>3</sup> Cape Breton University

**Abstract text: Background**: This study investigates how algorithmic management (AM) affects occupational safety and health (OSH), and well-being in a non-platform work context with worker representation and OSH management structures.

**Methodology**: Using a mixed-methods case study design at a Swedish logistics company implementing AM, this research captures AM's influence on physical and psychosocial work environments. In the qualitative phase, on-site observations and semi-structured interviews with 26 workers, managers, and representatives inform the development of a survey to be launched in January 2025 to approximately 3000 workers. Qualitative and quantitative results will be integrated to analyze AM's effects on health.

**Results**: Preliminary findings show that AM impacts vary by professional role, employment type, and skill level. Collaboration between management, labor unions, and safety representatives during implementation mitigates severe negative effects, emphasizing the importance of "negotiating the algorithm" in reducing health risks. However, external market pressures could increase the use of more intense AM practices, which in turn risks deteriorating job quality.

**Conclusion**: By examining AM's safety, health, and well-being implications through integrated methods, this study identifies factors that may either mitigate or exacerbate AM-related risks. The findings highlight the need for strong representation and regulatory frameworks in AM implementation, providing valuable insights for policymakers addressing AM.

Sida: 95 (176)

### Worker Health under Algorithmic Management: Health Risks in Sweden's Algorithm-Driven Logistics Sector

3. Digitalization and Platformization Karin Nilsson<sup>1</sup>

**Pille Strauss-Raats**<sup>1</sup>, Min Kyung Lee<sup>2</sup>, Emma Brulin<sup>1</sup>, Carin Håkansta<sup>1</sup>, Theo Bodin<sup>1</sup> Department of Occupational Medicine, Institute for Environmental Medicine, Karolinska Institute, Stockholm, Sweden

Abstract text: Background: Algorithmic Management (AM), defined as the use of software algorithms to automate organizational functions traditionally carried out by human managers (Wood et al., 2021), is increasingly implemented across different sectors. While potential detrimental effects of AM on job quality have been pointed out, less is known about associated health impacts for workers. This study explores the association between AM and health outcomes, such as psychological distress, injuries, pain, and sleep disorders, among logistics workers in Sweden.

**Methods**: This cross-sectional study, conducted February–June 2024, is based on a cross-sectional survey targeting workers in the Swedish logistics sector. The survey assessed workers' exposure to AM practices, categorizing this into low, moderate, and high exposure. Health outcomes were measured using self–reported items on sleep quality, psychological well–being, injuries, headaches, and pain. A logistic regression analysis was performed in STATA.

**Results**: Preliminary analysis (n=1208) shows significant associations between AM exposure and adverse health effects across all measured outcomes. The effects of AM are most pronounced in psychological distress (Cl95%: 2,59;6.88), pain (Cl95%: 1.85;4.91) and injuries (Cl95%: 1.41;4,2). Associations with sleep disorders (Cl95%: 1.29;3,42) and headaches (Cl95%: 1.13;3,51) were more modest but still significant.

**Conclusion**: The association between AM exposure and adverse health across a range of outcomes suggests that AM poses a risk for work-related health. Our results call for caution when implementing AM technologies in the logistics sector, and bring attention to the need for risk mitigation strategies to foster more sustainable working conditions.

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Sida: 96 (176)

### Regulating Algorithmic Management: A Multi-Stakeholder Study of Challenges in Aligning Software and the Law for Workplace Scheduling

4. Policy, Resistance and Intervention Jonathan Lynn<sup>1</sup>

Rachel Kim², Sicun Gao³, Daniel Schneider², Sachin Pandya⁴, **Min Kyung Lee**¹

- <sup>1</sup>UT Austin
- <sup>2</sup> Harvard
- <sup>3</sup> UC San Diego
- <sup>4</sup> University of Connecticut

Abstract text: The impacts of algorithmic management on worker well-being have led to increasing calls for efforts to regulate these managerial practices in order to prevent further worker harm. Yet existing work in aligning software with the law reduces compliance to just one piece of the entire process of regulating algorithmic management — which involves rule implementation, software use, and enforcement. We interviewed key stakeholders involved in enforcing or complying with workplace scheduling law — regulators, advocates, defense attorneys, managers, and workers (N = 38). Based on their beliefs and experiences, we describe how scheduling software affects beliefs about and compliance with workplace scheduling law. In so doing, we discuss the challenges and opportunities in designing software as a tool for compliance and also illustrate how multi-stakeholder interviews can aid software design that aims to support law compliance and enforcement.

Sida: 97 (176)

### Job Quality, Career Trajectories, and Regional Dynamics

2025-05-08 14:30 - 15:30

Job Quality, Career Trajectories, and Regional Dynamics

Sida: 98 (176)

### The experience of inferiority among non-standard workers in Belgium - A qualitative study

1. Health, Safety and Well-Being

### Kim Bosmans<sup>1</sup>

Christophe Vanroelen<sup>1, 2</sup>

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**Abstract text:** Background: Workers in non-standard employment arrangements are often perceived as belonging to the periphery of the labour market. Consequently, many suffer from feelings of inferiority. This study explores how inferiority is expressed and experienced in the work life of non-standard workers and beyond.

Methods: Interviews with 38 non-standard workers from Belgium were analysed thematically.

Results: Inferiority expresses itself through a series of metaphors: a jack of all trades, disposable product, and outsider. In addition, not having financial independence feeds into feelings of inferiority. Moreover, the labour market and social security regulations have created disparities between standard and non-standard workers that have accordingly fed experiences of inferiority as well. Finally, inferiority is perpetuated beyond the work context, for example, in the form of discrimination on the housing market and in the general image of non-standard employment as inferior by many people in society.

Conclusion: This study highlights that governments and employers need to increase their efforts to equalise the rights and treatment between non-standard and standard workers. This could decrease non-standard workers' feelings of inferiority and consequently improve their overall well-being.

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Sida: 99 (176)

### Precarity or Stability? Work-Family Quality and Mental Health among Dual-Earner Employees: A Typological Lens

2. Society and Inequality

#### Meixuan Li<sup>1</sup>

Deborah De Moortel<sup>1</sup>, Christophe Vanroelen<sup>1</sup>, Rebeka Balogh<sup>2</sup>

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Abstract text: Emerging research underscores that precarious or non-standard employment detrimentally affects mental health outcomes. Employment itself is inherently gendered, and its interaction with family arrangements may influence mental well-being in gender-sensitive ways. Relying on the employment quality framework and the work-family resources model, this study adopts a novel, person-centred approach to examine the mental health implications of diverse work-family configurations within dual-earner households.

Drawing on the sub-sample of married or cohabiting adults aged 21-65 (N=6338) from the UK Household Longitudinal Study (UKHLS), Latent Class Cluster Analysis (LCCA) is applied to classify the participants into "quality of work-family arrangements profiles", considering multidimensional features across domains of work and family. We subsequently employ regression analyses to explore associations between typologies and mental health three years later.

Preliminary results reveal an optimal solution of six profiles and indicate notable gender differences in the associations with mental health at the first time point. Men and women engaged in SER-like employment with balanced family roles reported the smallest gender gap. Women predominantly occupied clusters characterized by greater family responsibilities, correlating with poorer mental health. Conversely, men were more prevalent in clusters with favourable employment features, lighter family responsibilities, and higher income, linked to mental health benefits. The most burdensome arrangement – high effort balanced partner – affects women in mental health, but not in men, with the presence of children identified as a key determinant of health.

This study enhances our understandings of work-family quality disparities across employment of varying quality levels (high versus low) among dual-earner employees.

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Sida: 100 (176)

### First-generation immigrants' experiences of entering and remaining at the Swedish labour-market in a sustainable way (preliminary title)

### 2. Society and Inequality

### Maria Brendler-Lindqvist<sup>1, 2</sup>

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Abstract text: In Sweden, the unemployment rate of foreign-born is substantially higher than among Swedish-born and immigrants are overrepresented in temporary and low-skilled jobs with poor career prospects. Most research on immigrants' labour market participation has focused on newly arrived immigrants getting their first job, while labour market participation over time was less studied. Moreover, few studies have investigated the labour market integration process from the immigrants' perspective.

This qualitative study aims at exploring immigrants' experiences of entering and remaining at the Swedish labour market in a sustainable way. Individual semistructured interviews were held with 18 non-European immigrants who lived in Sweden between 4 to 38 years and who had experienced periods of work and unemployment. Education level varied from four years of primary school to university degree. Interviews were analysed with thematic analysis applying an inductive approach.

Preliminary results showed that for most respondents the labour market situation did not improve over time, despite more work experiences, language skills and education. Sense of capability, usefulness and inclusion was stressed as important aspects of employment. Social support was crucial for maintaining well-being and motivation despite the feelings of disappointment, exploitation and hopelessness arising when not getting a permanent job.

To conclude, immigrants' labour market trajectories are influenced by individual wishes and needs as well as contextual constraints. Support needs to be extended over time, including periods of employment and unemployment. Further research is needed on how to strengthen the role of the workplace in promoting sustainable working life for immigrants in Sweden.

Sida: 101 (176)

### Decent and precarious work in nursing and care work: A mixed-method systematic review

2. Society and Inequality

### Marja Hult<sup>1, 2</sup>

Marjo Ring<sup>2, 3</sup>, Heta Siranko<sup>1, 2</sup>, Mari Kangasniemi<sup>1</sup>

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- <sup>2</sup> South Eastern Finland University of Applied Sciences
- <sup>3</sup> University of Eastern Finland

#### **Abstract text:**

In the care sector, the rationalization, privatization and commercialization have turned sector towards precarious; therefore, decent work has been called for care work by ILO. Existing health and social care systems, and societies, seem to fail to provide care workers with secure, predictable, and ethically sustainable decent working conditions.

A systematic review searched six databases original studies where authors explicitly stated that studies targeted to decent/precarious work in the care sector. The dimensions of decent and precarious work were analyzed deductively using the Employment Quality Framework. After screening 6,272 records and 92 full-texts, five decent work and 13 precarious work studies were included.

Five contextual factors were common, though opposite, in both decent and precarious work studies: employment contract, position, financial situation, age, and work experience. Decent and precarious work studies included all the dimensions outlined in the Employment Quality Framework. Three outcomes were also common. Decent work increased, and precarious work decreased physical and mental health and empowerment, whereas turnover was decreased by decent work and increased by precarious work.

Scarce evidence was available on decent work in the care sector, whereas rich indepth and experiential data described precarious work. Migrant care workers in long-term care environments faced pronouncedly precariousness, which poses challenges in ethical recruitment policies globally. Also, young care workers should be provided opportunities to fully engage in their work and organizations. Training is also crucial for managers, as it decreases authoritarian and controlling management practices.

**Conclusions**. Favorable psychosocial working conditions appear to enhance RNs' capacity to mentor students, potentially improving their learning experiences and clinical performance. Healthcare institutions should thus focus on RNs' working conditions to support present and future quality care.

Sida: 102 (176)

# Intersecting Inequalities: Precarious Employment and Health Disparities

2025-05-08 14:30 - 15:30

Intersecting Inequalities: Precarious Employment and Health Disparities

Sida: 103 (176)

### DECENT AND SUSTAINABLE WORK IN AGRICULTURE: ANALYZING GENDER EQUITY, RISK MANAGMENT AND JOB STABILITY IN SOUTHERN ITALY

1. Health, Safety and Well-Being

### Angela Stufano<sup>1</sup>

Riccardo Ravallese<sup>1</sup>, Roberto Ravallese<sup>1</sup>, Gabriele Sacino<sup>1</sup>, Arianna Abbasciano<sup>2</sup>, Claudia Gesmundo<sup>2</sup>, Vito Sandro Leccese<sup>2</sup>, Irene Canfora<sup>2</sup>, Ivo Iavicoli<sup>3</sup>, Piero Lovreglio<sup>1</sup>

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- <sup>3</sup> Department of Public Health University of Naples Federico II, Naples, Italy

#### Abstract text:

Decent work ensures workers' rights to freedom, equity, and dignity, essential for human rights and sustainable development. This study aims to explore key factors impacting decent work in the agricultural sector, where labor conditions remain critical to achieving sustainable work practices.

From September to December 2023, a cross-sectional study was conducted among agricultural workers in the Apulia area. Workers were recruited during union assemblies or directly at the private farms. Participants completed anonymously the Decent Work Italian Scale (DWS), and a general questionnaire covering personal and employment information and safety and health at work.

Among 171 agricultural workers—84 from private farms and 87 from trade union meetings— the workers recruited during union assemblies reported higher job stability, longer fixed-term contracts, and better occupational risk management. Gender-based inequalities persisted with female workers (82 vs 89 male) facing more fixed-term contracts, harassment, and wage discrimination. Fixed-term contracts were widespread, representing 66.3% of employment types, and limited access to essential work facilities affected all workers. According to the DWS, workers recruited during union assemblies perceived their work conditions as less physically and interpersonally safe compared to those recruited at private companies.

The study identifies notable gender differences in reported labor inequalities across questionnaire topics. It turned out that workers recruited during union assemblies reported occupational health and pay, yet substantial gender disparities and contract instability persist. Policy interventions are recommended to strengthen protections for female and seasonal workers, fostering equitable and fair working conditions in agriculture.

Sida: 104 (176)

### Mental health consequences of poor-quality employment in Germany: the role of value incongruence for men and women

1. Health, Safety and Well-Being

#### Deborah De Moortel<sup>1, 2</sup>

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Abstract text: Using a large representative German panel dataset, we investigate an underexplored pathway between employment quality (EQ) and mental health. We also test whether value incongruence between one's values and one's employment model might exacerbate the relation between poor-quality employment and poor mental health. By means of a Latent Class Cluster Analysis, EQ clusters are built and linked to mental health two years later. We assess interactions between EQ clusters and work values (i.e., importance of success at work) and family values (i.e., importance of having children). We found six EQ clusters: SER-like, precarious unsustainable, precarious fulltime, SER-light, portfolio and protected part-time employment. Controlled for sociodemographic characteristics, precarious unsustainable employment for men and precarious full-time employment for women is linked to a deterioration in mental health after two years. The interaction models yield evidence for adverse mental health consequences of a value incongruence for high work- and family-centered men in protected part-time employment, and for high work-centered men in precarious unsustainable employment. High family-centered men in SER-like jobs also experience a deterioration in mental health two-years later. The findings suggests that value incongruence is an important contributor to a deterioration in mental health for precarious workers, and that gender differences are notable.

Sida: 105 (176)

### A Feasibility Study Exploring Precarious Employment and Stress-Related Health Among Women in Chicago, Illinois

1. Health, Safety and Well-Being

#### Vanessa Oddo<sup>1</sup>

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- <sup>5</sup> Department of Epidemiology, School of Public Health, University of Washington, Seattle, Washington, USA

**Abstract text: Background:** Stress is a hypothesized mechanism through which precarious employment (PE) may contribute to poor health; however, there is a limited understanding of this potential mechanism in the U.S. This study aimed to test the feasibility of at-home collection of stress biomarkers, c-reactive protein (CRP) and salivary cortisol among women in Chicago, IL, USA.

**Methods:** We recruited 101 working-age women between August-October 2023. An online survey collected information on demographics, PE, and self-reported mental and physical health. We mailed home-collection kits to collect capillary blood (120 uL) and saliva (6 samples). We used 27 employment indicators to construct a multidimensional PE score (PES) (range:O-10) and estimated descriptive statistics overall and by tertile of PE.

Results: We reached our recruitment target of ~50 women/month, and 70% returned the test kits. The sample was diverse in age (18–40 years: 57%, 41–64 years: 43%) and education (highschool: 11%, some college: 29%, bachelor's: 60%). Non-Hispanic (NH)-Black (33%) and Hispanic (36%) women were over-represented, compared to NH-White (28%). The average PES was 3.6 (SE=0.3). The most precariously employed women identified as NH-Black and Hispanic, had lower educational attainment, experienced discrimination, and had poorer self-reported health. Biomarker patterns across PE tertiles were inconsistent; however, there was some suggestive evidence that the highest PE group may have lower recovery cortisol trends compared to the low and mid PE groups.

Sida: 106 (176)

**Conclusions:** We demonstrate the feasibility of at-home data collection of biospecimens among a sample of racialized women. Larger studies of PE and health in the U.S. are warranted.

Sida: 107 (176)

### Psychosocial Risk Factors in the Workplace and Mental Health at the Intersection of Employment and Migration Status Precarity in Québec, Canada

Health, Safety and Well-Being
 Aline Lechaume<sup>1</sup>
 Simon Coulombe<sup>1</sup>
 Université Laval (Canada)

Abstract text: Despite being a crucial part of the Canadian economy, temporary migrant workers (TMWs) are disproportionately employed in precarious jobs that are dirty, dangerous, and demanding (what are called "3D" jobs). According to several studies, most of which were conducted outside of Quebec and qualitative in nature, the risk of poor psychological and physical health is higher for TMWs than it is for other workers. This is largely due to their exposure to psychosocial risks in the workplace. However, quantitative survey research is needed to gain an understanding of those psychosocial risk factors particular to TMWs, whose employment and immigration status render them in a situation that is doubly precarious.

The proposed research program, which consists of two complementary studies, will address this gap by investigating multiple dimensions of precariousness in relation to a wide range of psychosocial risk factors and psychological health outcomes. These outcomes include negative aspects, such as distress as well as positive ones, such as workplace well-being.

The presentation will outline the conceptual and methodological framework that we use in our research to explore how the precariousness of both employment and immigration status interacts to influence psychosocial risks and psychological health of temporary migrants in Quebec. We adopt a co-design approach that involves TMWs and labor market stakeholders to redefine and improve measures of psychosocial risk to better reflect the diverse temporary statuses common in today's workforce. This will enable a more accurate identification of psychological health risks and contribute to improved prevention efforts.

Sida: 108 (176)

### An intersectional approach to investigating the relationship between precarious employment and mental health

1. Health, Safety and Well-Being

### Emily Kaner<sup>1</sup>

<sup>1</sup> Department of Community Health Sciences, University of California, Los Angeles, USA

**Abstract text:** In the past decade, precarious employment has emerged as an important social determinant of health, in large part due to advances in technology that have enabled the rapid growth of the gig economy. The expansion of a workforce characterized by non-standard working arrangements compounded by the covid-19 pandemic, has underscored the need to understand and address the health vulnerabilities embedded within these precarious working conditions.

Despite increased recognition of precarious employment as a significant determinant of health, previous research has been limited in its ability to operationalize precarious employment as a multidimensional construct, and has yet to incorporate an intersectional lens. This is particularly concerning given that members of historically marginalized groups are disproportionately represented in precarious forms of employment.

Survey data from the California Work and Health Survey (CWHS) collected by the California Labor Lab from November 2022 – April 2023 will be used in this analysis. The CWHS interviewed 4,014 California adults ages 18–70 about employment circumstances and health outcomes. The dataset is weighted to be representative of the California population, and includes questions that examine evolving work dynamics.

Preliminary analysis of the data reveals the mental health impact of precarious working conditions. Future analyses will employ an intersectional approach to understand how social structures relating to gender and race/ethnicity influence employment experiences to impact mental health outcomes. We hypothesize that the prevalence of poor mental health will be disproportionately higher among minoritized groups who experienced precarious working conditions. Results presented will focus on final models.

Sida: 109 (176)

### Algorithmic Management and Gig Work measurement issues

2025-05-08

14:30 - 15:30

Algorithmic Management and Gig Work measurement issues

Sida: 110 (176)

#### What Can Theory Tell Us About Gig Work and Health Inequalities

5. Theories and Method

#### Mustafa Hussein<sup>1, 2</sup>

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- <sup>2</sup> Institute for Research on Poverty, University of Wisconsin-Madison, Madison, WI
- <sup>3</sup> Barry Commoner Center for Health and the Environment, Queen's College, CUNY, New York, NY
- <sup>4</sup> CUNY Urban Food Policy Institute, New York, NY

Abstract text: The rapid rise of 'gig' work and diffusion of algorithms and artificial intelligence tools in low-wage labor markets, e.g. in ride hail and food delivery, introduce consequential shifts in how work shapes health inequalities. Growing evidence shows that 60% of gig workers fully depend on platform work for their income. To illuminate the implications of platform work for health inequalities, we integrate perspectives from four relevant theories: the social basis of health disparities (Diderichsen et al), fundamental cause theory (Link & Phelan), ecosocial embodiment (Krieger), and biological allostasis (McEwen et al). We identify three key empirically testable claims. First, dependence on platform work, which closely tracks socioeconomic position, acts as a "fundamental cause" or axis of health inequality in these labor markets, predisposing fully dependent workers to worse health through differential exposure to work-related risk factors, including prolonged algorithmic management, intense workloads, risk-taking, and job insecurity. Second, 'embodied' disadvantage in the form of cumulative wear and tear of physiologic stress response (allostatic load) among fully dependent workers increases susceptibility to negative health effects from platform work-related risks than among partially dependent, less disadvantaged workers. Third, lack of 'flexible resources' that can minimize health risks, including household economic resources, employment protections, and political power, predisposes fully dependent workers to worse socioeconomic consequences and downward social mobility. In an ongoing study of delivery workers in New York City, we demonstrate how these theoretically-grounded pathways guide the design, interpretation of findings, and advocacy efforts to improve resilience and make platform labor markets more equitable.

Sida: 111 (176)

# A qualitative approach to explore job demands and resources related to algorithmic management

5. Theories and Method

#### Heidi Lahti<sup>1, 2</sup>

Virpi Kalakoski<sup>1</sup>, Pille Strauss-Raats<sup>3</sup>, Carin Håkansta<sup>3</sup>

- <sup>1</sup> Finnish Institute of Occupational Health, Helsinki, Finland
- <sup>2</sup> Tampere University, Tampere, Finland
- <sup>3</sup> Karolinska Institutet, Stockholm, Sweden

Abstract text: Background: Algorithmic management (AM) is increasingly used in traditional (non-platform) workplaces, but its effects on job demands, resources, and worker safety, health, and well-being are not fully understood. Additionally, sociotechnical factors that may shape AM's influence on job characteristics have received little attention. In this qualitative study we develop a method to explore and understand the job demands (challenges and hindrances) and resources related to AM that manifest in daily work in traditional workplace contexts.

Methods: A semi-structured observational interview method was developed. Employees and supervisors from several organizations are recruited. Data will be analyzed using a priori coding guided by the Job Demands-Resources and Challenge-Hindrance Stress models, supplemented by bottom-up thematic analysis. The focus is on psychosocial, cognitive, and physical demands and resources, along with the sociotechnical factors that may moderate AM's influence on work characteristics.

Results: The strength of our method lies in its ability to capture both predefined, theoretically informed categories and new insights into how AM influences work characteristics in daily work contexts. By gathering data during actual AM-related tasks, this study provides a nuanced understanding of how employees perceive and experience job demands and resources in real time.

Conclusion: Our approach offers a robust framework for exploring the complex interactions between AM and job characteristics. By detailing the methodological approach, this research supports future studies on AM's impact on job demands and resources, and the development of practical tools for organizations and policymakers to better assess and address these issues in increasingly digitalized workplaces.

Sida: 112 (176)

# Policy conference using concept mapping to establish road map for safe and healthy algorithms in non-platform work

5. Theories and Method

#### Lisen Löwstedt<sup>1</sup>

Ninni Norlinder<sup>1</sup>, Carin Håkansta<sup>1</sup>

<sup>1</sup> Karolinska Institutet, Stockholm, Sweden

**Abstract text:** *Background:* As algorithmic management (AM) spreads beyond platform work into the regular labour market, concern about health and safety is emerging. We use Concept Mapping to establish a road map for policy and action that ensures safe and healthy use of AM in the future.

Methods: Concept Mapping integrates perspectives of individuals with differing experiences, interests, or expertise into a common visually depicted framework, and ranks composite views on key dimensions such as urgency, centrality, priority, and feasibility. We will use software developed specifically for research purposes in a workshop gathering about 50 key stakeholders in Stockholm in November 2024, including government organisations, trade unions, employer organisations. The participants will rank 23 policy and action suggestions according to their feasibility and desirability and discuss the results in small groups.

Results: Due to time constraints (one day), the first phase of the method (generation of ideas and sorting in clusters) will be done by us. To make up for this, we are including a session towards the end of the day when the participants can add suggestions they found missing from the prepared list. Our aim is to combine visual data from the software with qualitative data from the discussions in a policy report that can be used by the stakeholders after the conference.

Conclusion: Concept mapping is a useful tool for discussions and visualizations of complex issues such as the effects of digital technology on the organization of work.

Sida: 113 (176)

# Towards a Standardized Definition of Algorithmic Management: A Modified Delphi Approach

#### 5. Theories and Method

#### Virginia Gunn<sup>1, 2</sup>

Pille Strauss-Raats<sup>2</sup>, Ruben Lind<sup>2</sup>, Nuria Matilla-Santander<sup>2, 3, 4</sup>, Johan Holm<sup>5</sup>, Mairi Bowdler<sup>6</sup>, Min Lee Kyung<sup>7</sup>, Michael Quinlan<sup>8</sup>, Coen van Gulijk<sup>6, 9, 10</sup>, Carin Håkansta<sup>2</sup>

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- <sup>3</sup> Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain
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- <sup>7</sup> School of Information, University of Texas at Austin, US
- <sup>8</sup> School of Management and Governance, University of New South Wales, Sydney
- <sup>9</sup> School of Applied Sciences, University of Huddersfield, Huddersfield HD1 3DH, UK
- <sup>10</sup> Faculty of Technology Policy and Management, Delft University of Technology, Delft, The Netherlands

#### **Abstract text:**

Algorithmic management (AM) is increasingly adopted across diverse workplaces, not limited to gig or platform-based contexts, raising concerns about its potential impact on job quality, worker health, safety, and well-being. The lack of a universally accepted and operational definition of AM has hindered efforts to measure its prevalence and evaluate its implications. To address this gap, we developed a definition applicable across standard and non-standard employment contexts with the purpose of supporting systematic data collection and enabling comparisons across sectors. Our method was a modified Delphi approach, engaging a multidisciplinary group of experts in an iterative process to identify and refine the key elements of AM. Building on prior work, this study contributes with a cross-disciplinary perspective to ongoing efforts to conceptualize and study AM. By clarifying its key elements, we aim to facilitate future research into AM's prevalence and its potential effects on occupational health and safety.

Sida: 114 (176)

### Policy, Resistance and Intervention 3

2025-05-08 16:00 - 17:00

Policy, Resistance and Intervention 3

Sida: 115 (176)

# Community change begins with shared perspectives: an online certificate with an eye to a better future of work

1. Health, Safety and Well-Being

#### Camie Schaefer<sup>1, 2</sup>

- <sup>1</sup>University of Utah
- <sup>2</sup> Utah Center for Promotion of Work Equity Research (U-POWER)

Abstract text: Background: Public health advocates interested in expanding their research and practice to the workplace are frequently frustrated by a status quo that favors employers. Collaborations with occupational health professionals may be stymied by differences in perspectives, knowledge, and priorities. Many are further disincentivized by a sense that the only possible changes are incremental ones achieved in concert with employer interests.

**Methods:** The Utah Center for Promotion of Work Equity Research (U-POWER) aims to facilitate and support a community of practice dedicated to changing the conditions of employment and work and the factors that influence both. Although interested participants are intuitively knowledgeable about work disparities, meaningful progress has been hindered by a lack of common vocabulary and knowledge. To lower this barrier, U-POWER conceived an online certificate primer that would also invite critical thinking on work and health. Topics of interest were identified by community health workers and developed by graduate students in collaboration with faculty mentors.

**Results:** A seven-module certificate course was developed as a resource for individuals interested in changing work. Modules contain key vocabulary and occupational health principles as well as short and engaging sections on U.S. occupational health history, cultural narratives about work, and questions for work in the future.

**Conclusion:** This certificate was developed with three aims: 1) provide information about the impact of work on health, 2) facilitate conversations and collaborations in support of improving individual worksites, and 3) invite learners to question legislation, history, and stories that support work in its current state.

Sida: 116 (176)

#### **Data Infrastructures to Turn Rights Into Access**

4. Policy, Resistance and Intervention

#### Samantha Dalal

Varun Rao<sup>2</sup>, Dana Calacci<sup>3</sup>, Andrés Monroy-Hernandez<sup>2</sup>

- <sup>1</sup> University of Colorado Boulder, Department of Information Science
- <sup>2</sup> Princeton University, Department of Computer Science
- <sup>3</sup> Penn State University, College of Information Sciences and Technology

Abstract text: Algorithmic management systems increasingly control platform-based work, yet their black-boxed nature hinders oversight. In recent years, regulations of algorithmic management systems have been passed in the US and Europe that guarantee workers the *right* to request data that these systems collect about them. However, the *right* to request data does not guarantee workers meaningful access; Companies can report data in inaccessible formats and provide insufficient documentation. Moreover, using data requires *data work*—the labor needed to aggregate and make sense of data for a specific purpose.

In our study, we ask: How can infrastructures be designed to support the data work needed to take action upon workers' rights to data access? To address this question, we examine a case study in which we built infrastructure on top of our data access tool, FairFare, to support the data work required to file lost wage claims. We surface the often invisible labor of data work (e.g., clerical processes, legal review, and data cleaning) and demonstrate how researchers can co-design infrastructures with community partners that support data work.

We hope that learnings from this project can inform the design of future transparency regulation by identifying the kinds of data that need to be made accessible and the kinds of work that must be funded to use data access.

Sida: 117 (176)

#### From Research Participants to Policy Advocates: Organizing Immigrant, Self-Employed Housecleaners in NYC Through Community Participatory Research

4. Policy, Resistance and Intervention

#### Deysi Flores<sup>1</sup>

Sherry Baron<sup>2</sup>, Isabel Cuervo<sup>2</sup>, Homero Harari<sup>3</sup>

- <sup>1</sup> Make the Road New York, Brooklyn, NY 11237, USA
- <sup>2</sup> Barry Commoner Center for Health and the Environment, Queens College, City University of New York, Queens, New York, NY 11367, USA
- <sup>3</sup> Department of Environmental Medicine and Climate Sciences, Icahn School of Medicine at Mount Sinai, New York, NY 10029, USA

Abstract text: Background: The Safe and Just Cleaners Project, a New York Citybased community-academic research partnership aims to document working conditions including chemical exposures among precarious immigrant Latinx household cleaners. The project's community partner, Make the Road NY (MRNY) is a community-led nongovernmental organization with expertise in policy advocacy for low-income immigrant New Yorkers. The 5-year study included the COVID-19 pandemic period which influenced project activities. This presentation will highlight how MRNY used research findings to organize cleaners and push for policy changes.

**Methods:** The project included a survey of 402 cleaners to capture data on employment and working conditions, exposure assessments conducted by cleaner citizen scientists, and the development of targeted outreach, education, and policy advocacy. Survey participants were invited to join *Las Super Cleaners*, a leadership-building group that provided training and organizing tools throughout the project.

Results: Early participant engagement was essential in identifying key issues. COVID-19 further highlighted problems and enhanced worker engagement, including a train-the-trainer program and worker-created educational videos on reducing disinfectant use and other COVID protections. It also emphasized policy gaps including workers' lack of health coverage and economic insecurity. Study's findings supported two key state policies: #FundExcludedWorkers legislation provided unemployment and pandemic assistance, and the #Coverage4All bill advocates expanding health coverage to all New Yorkers, regardless of immigration status, especially essential workers like cleaners. Housecleaners have since become active advocates on various policy campaigns.

**Discussion:** Using a community-engaged approach enriched the research process and strengthened the influence of research findings on policy interventions.

Sida: 118 (176)

# Between exit, contract and conflict: Freelance translators in Czechia organise to make their profession sustainable

1. Health, Safety and Well-Being

#### Petr Mezihorák<sup>1</sup>

<sup>1</sup> Palacký University, Olomouc, Czechia

Abstract text: Over the last twenty years, translation in Czechia has changed from a well-paid, stable source of income to an unstable, poorly paid profession. However, recently it has been possible to observe the revival of two traditional professional associations and the emergence of a new one, which began to organise translators. The notion of 'organising' here is not meant merely as an increase in membership, i.e., recruitment, but rather changes in the practices of professional associations toward more collective action. Based on ethnography of three translators' associations, this presentation explains how the transition to collective practices is taking place and to show the challenges the associations face also in the context of the Guidelines on collective bargaining of the solo self-employed. The findings are that translators consider themselves as workers doing 'personal work', i.e. not entrepreneurs, and in a power asymmetric position vis-à-vis large publishing houses. They find negotiating with them stressful and psychologically challenging. Although the majority of translators support the idea of collective bargaining, they fear that they are not strong enough to confront the publishers. The associations are therefore currently seeking a way forward between individual and collective bargaining in the form of a recommendation that translators should always be represented by lawyers in contract negotiations. But rather than framing this as weakness and result of a lack of solidarity, ethnographic data shows that it is more of a tactical retreat accompanied by an effort to strengthen the associations and finally force the publishers to negotiate with them.

Sida: 119 (176)

### The Job Quality, Health, and Wellbeing of Self-employed individuals

2025-05-08 16:00 - 17:00

The Job Quality, Health, and Wellbeing of Self-employed individuals

Sida: 120 (176)

# Precarious Work in Self-Employment: A Typology and Impact on Physical Health in Sweden.

1. Health, Safety and Well-Being

#### Jessie Gevaert<sup>1, 2</sup>

Melody Almroth<sup>3</sup>, Amanda Aronsson<sup>3</sup>, Devy L. Elling<sup>3</sup>, Erica Jonsson<sup>3</sup>, Signild Kvart<sup>3</sup>, Ruben Lind<sup>3</sup>, Filippa Lundh<sup>3</sup>, Lluís Mangot-Sala<sup>3</sup>, Patricia O'Campo<sup>4, 5</sup>, Emelie Thern<sup>3</sup>, Theo Bodin<sup>3</sup>

- <sup>1</sup> Brussels Institute for Social and Population Studies, Department of Sociology, Vrije Universiteit Brussel (Belgium)
- <sup>2</sup> Fonds Wetenschappelijk Onderzoek (FWO) Vlaanderen, Belgium
- <sup>3</sup> Unit of Occupational Medicine, Institute of Environmental Medicine, Karolinska Institutet, Stockholm (Sweden)
- <sup>4</sup> MAP, St. Michael's Hospital, Unity Health Toronto, Toronto, ON, Canada
- <sup>5</sup> Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada

Abstract text: <u>Background</u>: Research on health in self-employment shows mixed findings, likely due to limited focus on heterogeneity within self-employment, physical health outcomes and reliance on self-reported, cross-sectional data. To address these gaps, this study aims to identify different types of self-employment based on the 'precarious work framework' and see how this typology relates to later morbidity in Swedish register-based data.

Methods: Using the Swedish Work, Illness, and Labour Market Participation (SWIP) cohort, we studied individuals born between 1941–1989 and registered as living in Sweden in 2005. We developed a typology of precarious self-employment in 2008 (N=281.251), while health outcomes were assessed 11–12 years later in 2019/2020. Latent Class Analysis (LCA) was used to identify the typology of self-employment based on six indicators measuring precarity in self-employment: business type (sole proprietors/limited liability company owners), prior unemployment, combined employment, number of employees, income, and income volatility. Poisson regression analyses will be applied to relate the typology of precarious self-employment, with comparison to waged employment, to the Charlson Comorbidity Index – a validated multimorbidity measure which counts and weights chronic diseases based on diagnoses in in– and outpatient registers – in the follow-up, adjusting for relevant covariates.

<u>Results</u>: Analyses are ongoing, however, preliminary findings reveal distinct self-employment categories in Sweden based on precarious work indicators. Descriptive analyses suggest these categories align with unique socio-demographic profiles and varying Charlson Comorbidity Index levels.

<u>Conclusion</u>: Initial results suggest that precarious work offers an effective framework for categorizing self-employment in Sweden, potentially clarifying health disparities among self-employed individuals.

Sida: 122 (176)

# Self-employment and mental health among mid- and late-career workers in Sweden: A longitudinal, quasi-experimental study

1. Health, Safety and Well-Being

#### Melody Almroth<sup>1</sup>

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- <sup>3</sup> Brussels Institute for Social and Population Studies, Department of Sociology, Vrije Universite Brusselit
- <sup>4</sup> Brown School at Washington University in St. Louis, Missouri, USA
- <sup>5</sup> Center for Work, Health, & Well-Being at the Harvard T.H. Chan School of Public Health, Cambridge, Massachusetts, USA

Abstract text: This study aims to investigate differences in mental health, measured by psychotropic medication use, between the self-employed and wage and salary employed older adults. A further aim is to investigate whether potential differences vary between sole proprietorship and limited liability (LLC) types of self-employment.

Methods: This study is based on the SWIP cohort which includes the entire registered Swedish population in 2005 but was restricted to those born between 1959 and 1969. Inverse probability of treatment weights were created using entropy balancing methods in order to balance sociodemographic, labor market, and health factors prior to baseline among the self-employed and wage and salary employed. Cox proportional hazards models were then built to estimate the association between self-employment status in 2014 and any psychotropic medication prescriptions from 2015 to 2020, including separate analyses for sedatives and antidepressants.

**Results:** In crude models, the self-employed individuals appeared to have a reduced risk of any type of psychotropic medication use as well as sedatives and antidepressant separately, especially among LLC owners. After incorporating the entropy balancing weights in the models, there was almost no differences between the self-employed and the wage and salary employed except for a slightly reduced risk of antidepressant use among LLC owners (HR 0.89, 95% CI 0.83-0.96).

**Conclusions:** These results suggest that the initial reduced risk of psychotropic medication among the self-employed is largely due to pre-existing differences rather than a protective effect of self-employment. This indicates that self-employment does not necessarily lead to improved mental health.

Sida: 123 (176)

#### Uncertainty and health in self-employment: Comparison between solo selfemployed and gig workers

1. Health, Safety and Well-Being Claudia Bernhard-Oettel<sup>1</sup>

Constanze Eib<sup>2</sup>

- <sup>1</sup> Stockholm University
- <sup>2</sup> Stockholm School of Economics

Abstract text: Background. The self-employed are a heterogenous sample and one specific phenomenon on the labor market has increased in recent years – that of gig work. Self-employed workers who are sole proprietors have a registered business, whereas gig workers are employed contract-based workers who search for their own assignments and clients, which they can register at invoicing companies for administration of taxes and payment. Although legally different, both groups share many features in their daily work, particularly concerning uncertainty of income, workload and developmental opportunities for the future. Uncertainty is a work-related stressor that undermines individual health, but relatively few studies have thus far studied the uncertainty-health relationship of solo self-employed workers who either work in a registered business or – as employed gig workers – via an invoicing company. Therefore, this study aims at investigating how uncertainty perceptions relate to health and well-being in both groups of solo-self-employed workers.

Method: Survey data has been collected at two time points (T1: N = 509 self-employed; N = 265 gig workers; T2: N = 204 self-employed; N= 82 gig workers). Using path analysis (Mplus) we test how uncertainty regarding clients, income and career relate to self-rated health, depressive symptoms and well-being cross-sectionally vs longitudinally, and whether the uncertainty-health relationship is moderated by employment form (own business vs employed gig work).

Results and conclusion: Data analysis is ongoing, but preliminary descriptive results from T1 show the expected negative relationship between uncertainty and health in both employment groups.

Sida: 124 (176)

#### Navigating informal support systems when ill or injured: a gender-based analysis of the experiences of solo self-employed workers in Ontario, Canada

1. Health, Safety and Well-Being

#### Tauhid Hossain Khan<sup>1</sup>

Ellen MacEachen<sup>2</sup>

- <sup>1</sup> Associate Professor, Jagannath University, Bangladesh
- <sup>2</sup> Professor and Director, School of Public Health Sciences, University of Waterloo

#### **Abstract text: Background**

Today's labor market has changed over time, shifting from mostly full-time and standard employment relationships to entrepreneurial and precarious working arrangements. In this context, self-employment (SE), a prominent type of precarious work, has been growing rapidly due to globalization, automation, and the rise of the 'gig' economy, among other factors. Employment precarity profoundly impacts workers' health and well-being by undermining the comprehensiveness of social security systems. This study examined how men and women self-employed (SE'd) workers sought out support from informal support systems following illness, injury, and income reduction or loss.

#### **Methods**

Drawing on in-depth interviews with 24 solo SE'd people in Ontario (January – July 2021). A thematic analysis was conducted to elicit key topics and narratives, based on participants' narratives of experiences with available security systems following illness or injury.

#### **Findings**

Women in this study maintained strong larger social networks, including family, friends, and close relatives, and this shaped how they sought and relied on informal support. We found that the women utilized these social networks when they were ill, injured, or losing income. In relation to these social networks, women emphasized work schedule flexibility as the reason for engaging with self-employment. In contrast, men in this study focused more on higher income as a reason for choosing self-employment, and they emphasized their "saving" during their illness.

#### Conclusion

Self-employed workers faced significant barriers in accessing formal support systems, leading participants to rely heavily on informal networks. Women especially drew on large social networks when needing extra support.

Sida: 125 (176)

### Al and the digital transformation of the economy

2025-05-08 16:00 - 17:00

Al and the digital transformation of the economy

Sida: 126 (176)

#### 'Platformisation' of work: evidence from the AIM-WORK Survey

3. Digitalization and Platformization

#### Ignacio Gonzalez Vazquez<sup>1</sup>

Enrique Fernandez Macias<sup>1</sup>

<sup>1</sup> Joint Research Centre-European Commission

Abstract text: In recent years key elements of digital labour platforms, such as algorithmic management practices and digital monitoring, are seeping through to more conventional work settings (Urzi-Brancati et al. 2020; Woods 2021; Baiocco et al. 2022, Rani et. al. 2024). This is an evolving and complex phenomenon that can lead to opportunities in terms of streamlined work organisation, but also a deterioration of working conditions and intrusive forms of worker monitoring and surveillance. At the same time, recent developments in artificial intelligence (AI) are set to influence not only the tasks performed but also the organization of work, shifting underlying power dynamics and organizational hierarchies. These implications may well require changes in the current labour market institutions and regulations, but there is a lack of robust scientific evidence to underpin future policies.

To measure, better understand and characterise the transformation of both content and work processes as a result of the introduction of algorithmic management, digital monitoring and AI, this paper introduces original data from the AIMWork survey, conducted in all European Union countries in 2024. Empirical data from the survey is used to assess the prevalence and characteristics of digital monitoring, algorithmic management and platform work in the EU, as well as the implications of AI, particularly AI-tools, on the world of work, and particularly how these tools are being used to organise, coordinate and control platform workers and regular workers alike.

Sida: 127 (176)

# Assessing the Environmental Impact of Telework in the European Union: Implications for Sustainable Work Policies

3. Digitalization and Platformization

#### Alicia De Quinto<sup>1</sup>

Martina Bisello<sup>2</sup>, Enrique Fernández-Macías<sup>1</sup>, Ignacio González<sup>1</sup>

<sup>1</sup> European Commission, Joint Research Centre (JRC), Seville, Spain

**Abstract text: Background**: The expansion of telework presents potential environmental benefits by reducing commuting-related energy consumption and greenhouse gas emissions. However, the net impact can be ambiguous, when accounting for regional disparities. This study assesses the environmental effects of teleworking across the European Union at the NUTS 2 regional level.

**Methods**: We conducted an econometric analysis using data from Eurostat, the Emissions Database for Global Atmospheric Research (EDGAR), and the EU Labour Force Survey. Key variables at regional level include greenhouse gas emissions, electric vehicle penetration, energy consumption, housing characteristics, climate indicators, and telework prevalence rates. Transport emissions were adjusted for regional electric vehicle adoption and electricity generation mixes. Household energy consumption was modified based on regional needs. Actual telework rates were calculated, and teleworkability was estimated using ISCO-08 occupations.

Results: Teleworking led to net reductions in greenhouse gas emissions in several regions, primarily due to decreased commuting emissions. Regions with higher electric vehicle adoption and cleaner electricity generation experienced more significant environmental benefits. Conversely, increased residential energy consumption—especially in regions with extreme climates requiring substantial heating or cooling—offset some of these gains. The net impact varied across regions, influenced by telework adoption rates, climatic conditions, energy sources, and economic structures.

**Conclusion**: Regional heterogeneity significantly affects the environmental impact of telework. These disparities are relevant for policy design to maximize environmental benefits. Enhancing energy efficiency in residential and commercial sectors and promoting electric vehicle adoption is essential.

<sup>&</sup>lt;sup>2</sup> European Environment Agency, Copenhagen, Denmark

Sida: 128 (176)

# Algorithms are reshaping the art of managing workers: what are the implications for occupational safety and health?

3. Digitalization and Platformization

#### Maurizio Curtarelli<sup>1</sup>

Ioannis Anyfantis<sup>1</sup>, Emmanuelle Brun<sup>1</sup>

<sup>1</sup> European Agency for Safety and Health at Work (EU-OSHA)

Abstract text: Over the last few years workplaces have been introducing systems using AI or algorithms, to manage their workforce, allocate tasks and evaluate their workers' performance. Unlike earlier forms of management relying on human supervisors, digital technologies and Al allow for new, pervasive and lower-cost forms of worker management, using large amounts of real-time workers' data processed in unprecedented ways. These data may be collected in and outside the workplace, sometimes beyond what is necessary or legal, to inform management and make (semi-)automated decisions based on algorithms or more advanced forms of Al. This may allow employers to increase control over their workers, incorporate rating systems or other metrics into performance evaluation, rationalise the organisation of work, reduce the cost of surveillance, reward or penalise workers, influence their behaviours or improve HR management. These forms of managing workers may give rise to legal, regulatory and ethical questions, as well as concerns for occupational safety and health (OSH), in particular for workers' mental health, as they may lead to a loss of job control, increased micromanagement, performance pressure, social isolation, privacy invasion and job insecurity. Nevertheless, findings from a range of case studies carried out by EU-OSHA show that workers' involvement since the very initial phases of the introduction of these Al-based worker management technologies in the workplace, and transparency/information about the rationale behind the use of such technologies in the workplace, are protective factors which can prevent the OSH risks stemming from the use of the technologies.

Sida: 129 (176)

#### Job quality and generative Al: examining key trends and emerging inequities

3. Digitalization and Platformization

Arif Jetha<sup>1, 2</sup>

Qing Liao<sup>1</sup>, Faraz Vahid Shahidi<sup>1, 2</sup>

<sup>1</sup> Institute for Work & Health

**Abstract text:** *Background:* The Canadian labour market is undergoing an artificial intelligence (AI) revolution with implications for the quality of work. Al innovations such as the growing adoption of generative AI is expected to increase the number of occupations exposed to AI and impact the quality of work for a broader number of worker groups.

**Methods:** Estimates of generative AI exposure will be derived for every Canadian occupation using the Labour Force Survey (LFS). The LFS is a cross-sectional monthly survey of the working-age population (n=~100,000). A job exposure matrix capturing four dimensions of job quality was used estimate a exposure to precarious working conditions. Weighted estimates of the number of Canadians exposed to generative AI across varying levels of job quality will be produced. Multivariable models will be used unpack the relationship between differences in occupational AI exposure and job quality according to worker and occupational characteristics.

**Results:** Analysis is currently underway. Preliminary data indicate that all Canadian occupations consist of at least some job tasks that can be performed by generative Al. Exposure to generative Al and precarious work were patterned according to worker characteristics. Preliminary analysis shows that women workers (vs. men) and young workers (vs. older) may be most likely to exposed to generative Al and precarious work. The relationship between other worker and occupational characteristics will be unpacked.

**Conclusion:** Differences in the impact of generative AI on occupations have important implications for the quality of work and raise the potential for emerging labour market inequities.

<sup>&</sup>lt;sup>2</sup> Dalla Lana School of Public Health, University of Toronto

Sida: 130 (176)

# Innovating the Agenda - Next Steps in Job Quality and Health Research

2025-05-09 10:00 - 11:00

Innovating the Agenda - Next Steps in Job Quality and Health Research

Sida: 131 (176)

#### What would healthy job look like?

1. Health, Safety and Well-Being

#### Chris Warhurst<sup>1</sup>

<sup>1</sup> Chris Warhurst, Carla Toro, Jamelia Harris, Gill Dix University of Warwick, UK

**Abstract text:** This paper outlines what a health job might look like if jobs were to be redesigned to promote the good health of workers. We explore this need because, in the UK least, ill-health from jobs is being called a national crisis, with high costs to individuals, employers and the state.

Most current interventions are remedial, attempting to 'fix the worker' but, as Marmot asks, why treat sick people and return them to the conditions that made them sick? What is needed is prevention intended to reduce job-related ill-health occurring in the first place by identifying what aspects of jobs are associated with better and worse mental and physical health. It is the job that can then be fixed, rather than the worker. To undertake this task, Marmot et al. recommended the measures of job quality adopted by the UK's Office for National Statistics and recently championed for the European Union by IndustriAll. These measures have seven dimensions: pay and benefits; terms of employment; nature of work; social support; worker voice and representation; work-life balance; health, safety and psychosocial wellbeing. The inference is that good job quality provides good health and poor job quality poor health.

The paper reports a rapid evidence review of health research linked to the seven dimensions and is the first research to do so. The paper also indicates the gaps in the current evidence base across the seven dimensions. These findings suggest what job-related interventions are needed to support creating healthy jobs in the future.

Sida: 132 (176)

# Job Quality and Technological Change: What can we learn from Two Industrial Revolutions?

 Health, Safety and Well-Being Benjamin Schneider<sup>1</sup>
 Robin Philips<sup>2</sup>

<sup>1</sup>Oslo Metropolitan University, Norway

<sup>2</sup> UC Louvain, Belgium

**Abstract text:** *Background:* The quality of jobs is a growing area of interest in research and policymaking (Green 2006, Clark 2010, Findlay et al 2013), and there is concern about the impacts of future innovation. However, research on the relationship between technological change and job quality has almost exclusively focused on recent decades. We provide a long-term historical perspective on this question, complementing the survey of Berg et al (2023) on the effects of digital technologies.

Methods: We systematically collect, screen, and analyze secondary literature that examines the effects of two major technological changes: the introduction of the factory system in the First Industrial Revolution (c. 1750–1850), and the adoption of scientific management in the Second Industrial Revolution (c. 1880–1940). We extract and code evidence in sources that meet our screening criteria using the Eurofound Indicators of Job Quality (Green & Mostafa 2010, 2012) for improvement or decline job quality.

Results: The introduction of the factory system was associated with lower Working Time Quality, somewhat lower Skills & Discretion, and worsened Work Intensity, but improved Social Environment. Scientific management was associated with increased Earnings, but negative changes in Skills & Discretion and Work Intensity. Strong labor unions successfully resisted the adoption of scientific management in some industries.

Conclusion: Major technological changes in the past have been associated with higher effort demands and lower autonomy, and employers have attempted to offset these downsides with higher wages. Some technological adoption has been blocked by industrial action, but only in contexts with strong labor organization.

Sida: 133 (176)

#### Health and safety as integral and peripheral to worker center goals after Covid-19

1. Health, Safety and Well-Being

#### Emily Kaner<sup>1</sup>

<sup>1</sup> Department of Community Health Sciences, University of California, Los Angeles, USA

Abstract text: The recent Covid-19 pandemic highlighted the vulnerability embedded within precarious work, due to low-wages, job insecurity, and limited benefits. With increasing recognition of precarious work as a social determinant of health, as well as may public health scholars highlighting the importance of building power, especially among workers, to advance health equity, this project aims to understand how workers and worker organizers at a worker center in Los Angeles, come to understand the intersection of precarious work and health in the aftermath of the Covid-19 pandemic.

Five months of ethnographic research was conducted at a worker center located in Los Angeles with a mission to empower and organize workers who are precariously employed in service and retail industries. To supplement participant observation and fieldnotes taken while accompanying worker center staff as they engaged in a variety of service and organizing activities, follow-up interviews were conducted. Fieldnotes and interviews were transcribed, coded and analyzed to identify patterns and emergent themes.

Initial ethnographic research revealed that the moralizing discourse around health may be used to appeal to workers and the broader public, but that health may remain peripheral to the organization's larger economic goals. This siloed, yet strategic, use of health to recruit, provide services, access resources and build support, is worthy of future research endeavors, particularly in the aftermath of the Covid-19 pandemic.

Sida: 134 (176)

# The Working Conditions of Exploited Workers in Various industries – a knowledge compilation

1. Health, Safety and Well-Being

#### Monica Kaltenbrunner<sup>1</sup>

<sup>1</sup> Swedish Agency for Work Environment Expertise

**Abstract text: Background:** Exploitation of workers has become increasingly prevalent, often resulting in poor working conditions. This knowledge compilation aims to identify, appraise, and synthesize existing scientific studies and grey literature exploring the work environment of exploited workers.

**Methods:** This knowledge compilation is based on 39 publications, including 33 scientific studies and grey literature, from the EU, Norway, and Canada. The search was conducted in the databases PsycInfo, Scopus, and Sociological Abstracts & Social Service Abstracts, limited to include literature published between 2013–2024. The focus is on industries such as land-based industry, hotel and restaurant, health and welfare/domestic work, construction, vehicles and transport and cleaning.

**Results**: Exploited workers, regardless of gender or industry, often face language barriers and poor working conditions. They enter employment contracts without fully understanding their implications. Common issues include wage theft, working in high temperatures, safety hazards, lack of control and support, and experiencing discrimination, threats, and harassment. Different risks are present in male- and female-dominated industries.

**Conclusion:** This study highlights the urgent need to address the detrimental impact exploitation have on the work environment for the workers. By understanding the specific challenges as well as the general, faced by workers, policymakers and practitioners can develop effective strategies to combat exploitation and improve working conditions.

Sida: 135 (176)

#### Job Quality and General Health in Hospitality: Evidence from Australia

1. Health, Safety and Well-Being Angela Knox<sup>1</sup>

Sangwoo Lee<sup>2</sup>, Chris Warhurst<sup>2</sup>, Sally Wright<sup>3</sup>

- <sup>1</sup> The University of Sydney Business School
- <sup>2</sup> Institute for Employment Research, University of Warwick
- <sup>3</sup> Sheffield University Management School

Abstract text: Quality of Working Life is increasingly understood and measured through the broader framework of job quality, encompassing multiple dimensions including pay and other aspects of jobs. This study investigates the impact of various job quality dimensions on the general health of workers in the Australian hospitality industry. We constructed six dimensions of job quality: Terms of Employment, Pay and Benefits, Intrinsic Characteristics of Work, Health and Safety, Work-life Balance, and Representation and Voice. Each dimension is measured on a scale from 0 to 100, with higher values indicating better job quality for workers. Our regression analysis indicates that Terms of Employment, Voice and Representation and Pay and Benefits are positively associated with hospitality workers' general health. Among these, Terms of Employment exhibits the largest effect size (Beta=0.135), followed by Voice and Representation (Beta=0.132) and Pay and Benefits (Beta=0.093). Workers in good or excellent health demonstrate better Voice and Representation, Pay and Benefits, Terms of Employment, and Health and Safety, with the most substantial gap of 8.06 points (33% of standard deviation) observed in Voice and Representation when compared to those in poor health. The findings highlight the significant impact of various job quality dimensions, particularly Terms of Employment and Voice and Representation, on the overall health of hospitality workers. These results carry significant theoretical and policy implications, challenging the conventional focus on low wages or job insecurity as the primary determinants of well-being for hospitality workers.

Sida: 136 (176)

### Poster presentations

2025-05-07 15:15 - 16:00

Sida: 137 (176)

# Challenges and strengths of qualitative research on precarious work: Lessons learnt from two studies on live-in care workers and hospitality workers

#### 5. Theories and Method

#### Lisa Seubert<sup>1</sup>

Christian Seubert<sup>1</sup>, Johanna Daum<sup>1</sup>, Franziska Sprenger<sup>1</sup>, Severin Hornung<sup>1</sup>, Jürgen Glaser<sup>1</sup> <sup>1</sup> Department of Psychology, University of Innsbruck, Austria

Abstract text: Background: Studying vulnerable workers and a sensitive topic like experiences of precariousness comes along with challenges (e.g., sample recruitment, context-sensitive approach, multidimensional concepts of precarious work/employment, balancing objective aspects and subjective experiences). We demonstrate strengths and challenges of qualitative research by reflecting on two of our own studies.

Methods: We conducted two semi-structured interview studies, one with seven migrant live-in care workers in 2020 in Austria and another with nine hospitality workers in Tyrol in 2022. Both interview studies were theoretically based on a context-sensitive framework, comprising both objective (e.g., contract, wage-level, working time) and subjective aspects (experiences of precariousness). For both studies we applied thematic analysis.

Results: We found precarious employment aspects (e.g., overlong working hours, low wage-level) to be associated with impaired health, despite participants' satisfaction with (working) life (e.g., job satisfaction, meaningfulness) in both studies. These apparently paradoxical findings are discussed critically relating the findings to contextual factors and intersectional aspects, and discussing them through the lens of the normalization of precarity in neoliberalism.

Conclusion: We demonstrate strengths of qualitative research by showing how context and intersectional aspects are important for the examination of subjective experiences of precariousness to reveal underlying ideologies (neoliberalism) and processes (normalization of precarity, different forms of job satisfaction) that can explain why people engage in precarious employment and endure hardship. Furthermore, we demonstrate the complexity of studying precarious work/employment, highlighting, in particular, access barriers and challenges to sample recruitment and researching precarious employment and the need for strategies to reach vulnerable workers.

Sida: 138 (176)

# Community Health Work as Precarious Employment: Strengthening the theoretical case through empirical evidence

1. Health, Safety and Well-Being

#### Roosa Sofia Tikkanen<sup>1</sup>

Bernadette Kumar<sup>2</sup>, Terje Andreas Eikemo<sup>1</sup>

<sup>1</sup> Center for Global Health Inequalities Research (CHAIN), Norwegian University of Science and Technology, Trondheim, Norway

Abstract text: Community health workers (CHWs) often work in hazardous working conditions coupled with informal health system integration. Thus, their work has often been characterized as Precarious Employment (PE). Yet, this claim has not been systematically examined, and claims of precarity are often not rooted in theoretical constructs. Such research is warranted given that PE is a key social determinant of health. Here, we examine whether this class of workers meets PE criteria, and whether the health and socioeconomic consequences of precarious work among CHWs have been researched. Using validated PE constructs, we constructed a PE framework comprising: contractual instability, low wages, rights/protections, lack of control over work hours, limited training/career development opportunities, lack of collective representation, imbalanced interpersonal power relations, home-based work, multiple jobs, supervision gaps), and downstream consequences of PE (hazardous working conditions, physical & psychological health, socioeconomic outcomes). We applied this framework to 37 systematic reviews on CHW working conditions from the last decade, identified using PubMed. We extracted results from individual studies across these 14 categories, followed by thematic analysis. We demonstrate that CHWs as an occupational group fulfil several tenets of PE that distinguishes them for other health workers. Second, we find a scarcity of research on the downstream consequences of PE on CHWs, particularly physical health, and call for more research to elucidate the extent to which CHW working conditions are causally linked to outcomes. This analysis aims to equip policymakers to ensure CHW programs align with the Sustainable Development Goal decent work (8.5).

<sup>&</sup>lt;sup>2</sup> Norwegian Institute of Public Health, Oslo, Norway

Sida: 139 (176)

# Business Framework for Health: A System Change Approach to Improve Health & Economic Prosperity in the UK

#### 5. Theories and Method

#### Elizabeth Bachrad<sup>1</sup>

Tina Woods<sup>1</sup>, P. John Clarkson<sup>2</sup>, Valeria Pannunzio<sup>2</sup>, Timos Kipouros<sup>2</sup>

- <sup>1</sup> Business for Health, United Kingdom
- <sup>2</sup> University of Cambridge, United Kingdom

#### Abstract text: Background

Business for Health (B4H) facilitates improvements in workforce health and productivity through business investment and engagement. B4H published their measurement Framework, and engaged with Cambridge Public Health to understand how their 'Improving Improvement Toolkit' could be used together to advance system-level change in improving health outcomes. The scoping work identified three key needs: (1) businesses and government want evidence-based guidance on investing in workforce health (2) a whole-systems approach is required to bolster this evidence base (3) there are no validated whole-systems methods.

#### Methods

B4H in partnership with Cambridge Public Health, undertook a co-designed mixed methods approach to develop measures and methods to meet the needs identified. This included a series of workshops to: (1) co-adapt methods taken from a whole-systems engineering framework (2) co-refine B4H's measurement framework (3) develop and test the utility of an improvement practice for aligning public health initiatives and business objectives through research and evaluation.

#### Results

Companies are increasingly interested in defining their social impact and productivity measures, but need standardised tools to measure their contribution. The health–relevant data that exists within businesses can be leveraged and aligned to support the objectives of Healthcare Systems in contributing to social and economic value, while supporting businesses with their initiatives on social responsibility that impact on the wider determinants of health.

#### Conclusion

The Office for National Statistics has now engaged to support further research, enhancing the national Health Index with businesses as core users, furnishing critical data that demonstrates impact on population health and economic prosperity.

Sida: 140 (176)

# Artificial Intelligence, Automation and Precarious Work: Bridging the Gap Between Promise and Peril

3. Digitalization and Platformization loannis Anyfantis<sup>1</sup>

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Abstract text: Digital technologies are reshaping the world of work in terms of workplaces, work relations and tasks performed. Artificial intelligence (AI)-based systems and robots are used today to automate a range of physical and cognitive tasks, presenting substantial opportunities in terms of performance, efficiency and work conditions. Our research investigates the effects of such systems on the world of work and occupational safety and health (OSH), identifying three main dimensions, i.e. physical, psychosocial and organisational. Ideally, as AI can automate the most dangerous, dirty and dull tasks, the most creative part of the job can be left for workers. Yet, in the realm of reality, the situation may be quite different as automations are replacing blue- and white-collar workers in performing lower and middle-skilled tasks, creating the need for upskilling but also causing deskilling. To that end, some workers will succeed in upskilling and will enjoy the benefits of technology, while others may face precariousness in their working life as they will be left to perform fragmented elementary tasks and consequently be exposed to further OSH risks. Especially older workers with less flexibility in re-skilling or younger workers lacking the experience and willing to take risks, could be stuck in a vicious circle of precariousness. Our research has identified those factors that could play a key role in minimising the negative effects of automation, such as task allocation, communication, worker's engagement, training, but also change management, social dialogue as well as policies and strategies for a human-centred approach and sustainable work.

Sida: 141 (176)

#### How did governments protect migrant workers in the meat industry during COVID-19? Comparing the USA, the Netherlands, and Germany

1. Health, Safety and Well-Being

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**Abstract text:** Background: During the COVID-19 pandemic, outbreaks among precariously employed migrant workers in the meat industry highlighted social and health protection gaps. We examine these protection gaps in the USA, Netherlands, Germany, and analyze divergent policy responses to understand facilitators and barriers to systemic improvements of precarious worker conditions.

Methods: We conducted harmonized policy analyses of occupational safety and health policies and pandemic measures in the meat industry in the said country contexts. The policy analysis was complemented by 15 key informant interviews, and the Framework Method applied to compare the data.

Results: Intersecting migration- and employment-related precarity generated social and health protection gaps and deficiencies in the realization of theoretically held rights across contexts. Policy responses to outbreaks varied, showcasing fundamentally different approaches to state responsibility for worker wellbeing. The US government sacrificed worker and public health for corporate interests. The Dutch government remained passive as industry actors forestalled change through appeasement. In Germany, the government leveraged the pandemic to ban subcontracting, shifting industrial relations and addressing a root cause of worker precarity.

Conclusions: Equitable social and health protection of all workers is not only a moral imperative, but also part of food systems transformation for sustainability. Improving the social and health protection of precarious migrant workers requires tackling systemic problems like unequal power relations, corporate social irresponsibility, and cronyism. Governments have an important role to play by enacting binding legal frameworks, which empower workers to assert their rights and clearly establish the corresponding employer duties.

Sida: 142 (176)

# Beyond the Worker: Exploring the Family Impacts of Precarious Employment in Spain

1. Health, Safety and Well-Being

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#### Abstract text:

Precarious and non-standard employment (NSE) has significant effects on workers' health and well-being, and its consequences extend to their family members. However, research focusing on the impact of NSE on the health and well-being of workers' families is limited, especially in Spain, where NSE is prevalent. The aim of this study is to explore the workers' perspectives on the impact of NSE on their families' health and well-being.

This qualitative study, part of the larger cross-country project 'Precarious Work Research (PWR)', explores the perceptions of 41 Spanish workers in NSE about the effects of their employment conditions on their families. In-depth, semi-structured interviews were conducted between March and June 2021, focusing on the workers' experiences with financial insecurity, work-life balance, and family well-being. The findings reveal that NSE impacts families in three key areas: financial strains, availability, and insecurity. Financial instability contributes to material deprivation, limiting access to adequate housing and education for children. Irregular work hours and unpredictable schedules lead to diminished parental availability, straining family relationships and child well-being. Employment uncertainty also generates psychological stress, causing tension within families. However, given the diversity of employment conditions within NSE, some participants reported positive aspects, such as part-time work allowing more time for parenting, particularly for families with health-compromised children.

NSE significantly impacts not only workers but also their families, primarily through financial strain, reduced availability, and psychological stress. Policy interventions should address these challenges to improve the health and well-being of workers and their families.

Sida: 143 (176)

# Data Probes as Boundary Objects for Technology Policy Design: Demystifying Technology for Policymakers & Aligning Stakeholder Objectives in Gig Work

4. Policy, Resistance and Intervention

#### Angie Zhang<sup>1</sup>

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#### **Abstract text:**

Despite the evidence of harm that technology can inflict, commensurate policymaking to hold tech platforms accountable still lags. This is pertinent to app-based gig workers, where unregulated algorithms continue to dictate their work, often with little human recourse. While past HCI literature has investigated workers' experiences under algorithmic management and how to design interventions, rarely are the perspectives of stakeholders who inform or craft policy sought. To bridge this, we propose using data probes—interactive visualizations of workers' data that show the impact of technology practices on people—exploring them in 12 semi-structured interviews with policy informers, (driver-)organizers, litigators, and a lawmaker in the rideshare space. We show how data probes act as boundary objects to assist stakeholder interactions, demystify technology for policymakers, and support worker collective action. We discuss the potential for data probes as training tools for policymakers, and considerations around data access and worker risks when using data probes.

Sida: 144 (176)

#### Diverging Regional Destinies? Local occupational changes in Sweden 1970-2020

2. Society and Inequality

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Abstract text: Occupational structures, while generally stable, are not static and are influenced by factors such as technological advancement, which can lead to the "hollowing out" of middle-ranking jobs. Known as labor market polarization, this trend suggests that job opportunities are increasingly concentrated in high- and low-ranking occupations. However, until recently, most studies analyzed this trend at the national level, with few exploring regional variations. This gap has fueled debate on whether polarization is widespread or if occupational structures are experiencing upgrading, with varying intensities across regions. Recent studies in Europe (France, Italy, Spain, UK) suggest occupational upgrading at the regional level, especially in large metropolitan areas.

The question of whether regions have followed similar or divergent trajectories has important implications for the life chances of individuals living in these regions. Amid renewed interest in geographical inequalities in life chances, we investigate how the occupational structure changed across Swedish labour market regions over the period 1970–2020. We use the job quality method developed by Wright and Dwyer (2003) to analyse census and register data covering the period 1970–2020, defining job quality on the basis of the new Occupational Earnings Potential (OEP) scale. Using this approach, we track the relative growth of low and high quality employment across labour market regions over a fifty year period.

Our analysis uses national census (1970/1975/1980/1985/1990), as well as annual administrative registers from 2001-2021. Through this longitudinal perspective, we aim to document and analyze trends in occupational upgrading and polarization across local labor markets in Sweden.

Sida: 145 (176)

# Effect of a job threat on job satisfaction and life satisfaction: testing the violation hypothesis among older employees in Germany

#### 5. Theories and Method

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Abstract text: Background According to psychological contract theory, job insecurity affects psychological outcomes of permanently employed individuals more strongly than those of temporary employed, given that permanently employed individuals expect reciprocity in terms of employment continuity. A disappointment of this expectation may affect employees' job and life satisfaction (violation hypothesis). This study investigates the causal effect heterogeneity of a job threat on job satisfaction and life satisfaction among permanently and temporary employed older workers in Germany using propensity score matching (PSM).

**Methods** Data from the 4<sup>th</sup> wave (2022) of the German lidA study was used. The sample included subjects born in 1959, 1965, or 1971, either full-time, part-time, or marginally employed with complete information on all analysis-variables (N=5,633). A PSM with k-nearest neighbor matching was used to estimate average treatment effects on the treated (ATT).

**Results** 6.6% of the sample reported a job threat, 150 persons (2.7%) reported to be temporary employed. Among permanently employed individuals, exposure to a job threat increased the probability of reporting low job satisfaction by 10.25 percentage points (ATT; 95% confidence interval (CI) 2.10–18.39) and the probability of reporting low life satisfaction by 10.56 percentage points (ATT; 95% CI 2.49–18.63). Among temporary employed, exposure increased the probability of low job satisfaction and low life satisfaction by 4.00 percentage points (ATT not significant; 95% CI -25.23–33.23 and -23.86–31.86 respectively).

**Conclusion** In support of the violation hypothesis, a job threat increased the probability to report low job satisfaction and low life satisfaction only among permanently employed.

Sida: 146 (176)

#### Extent of Precarious Employment in California's Behavioral Health Workforce

2. Society and Inequality

#### Alicia Lafrance

Edward Yelin<sup>1</sup>

**Abstract text: Background**. Prior studies have observed an inadequate supply and difficulty in attracting and retaining a behavioral health workforce (BHW). The present study provides estimates of the magnitude of the BHW in California and extent to which the BHW meets criteria for precarity in employment.

**Methods**. Data derive from the 2013 California Work and Health Survey (CWHS) from random sample of 4014 residents; results weighted to represent California's population. The magnitude of BHW estimated using existing definitions of occupations within this field, cross-classified by *precarity at employment* measured by alternative employment arrangements, contingent jobs, and adverse working conditions and *precarity from work* in terms of economic outcomes.

Results. 574,296 persons were in BHW (3.0% of all State's workers); of these, 486,971 (2.6%) in their main job. *Precarity at employment of BHW*: 33.0% were in alternative employment, 5.9% contingent jobs, 49.5% worked less than full-time/full-year, 52.2% had irregular shifts, 47.4% reported bullying on job, 17.0% high demands/low levels of latitude, and 28.7% wage theft. *Precarity from work*: 32.9% earned <\$20,000/year, 13.6% were in households in poverty despite their work, 53.1% reported difficulty living on their income, 24.1% that they could not sustain an emergency expense of \$400, and 15.4% that they expected hardships in food, housing, or medical care in next two months, 15.7% were without health insurance in prior year and 37.1% had no pension coverage.

**Conclusions**. High proportions of BHW meet criteria for precarity at or from work, partially explaining the difficulty in attracting or retaining workers

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# Informal Economy Workers in the West Bank: Struggle and Resilience amidst the Ongoing Aggression

7. Other

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Abstract text: A long history of military violence in Palestine has devastated the health, lives, and livelihoods of all demographic groups, including the workforce. Since the October 7, 2023, war and aggressive events in the West Bank and Gaza Strip, Palestinian workers faced more challenges. The precarity of informal sector jobs, which comprise a substantial amount of Palestinian households' income, makes them more vulnerable to economic disasters. Unemployment has increased, and employment has become increasingly informal.

This study examines how the violence in the West Bank, particularly after the recent war, affects informal sector labor. It will prioritize these workers' financial security, health, and access to essentials and reveal how they survive, adapt, and use limited resources. 21 qualitative interviews conducted with informal workers in various sectors across the West Bank.

The results show that the war has damaged these workers' living situations. Economic hardship, low income, high expense of living, and occupation infractions have deteriorated. To cope with harsh conditions and instability, workers changed their work routines, tried to boost productivity, limited spending to essential needs, used personal savings, liquidated assets, or sought alternative income sources. External support was scarce and mostly from family. Participants stressed the necessity of supporting small–scale projects and community solidarity for economic stability and security. The study emphasizes the need for a national policy to support this sector, help them face crises, and improve their living conditions and resilience. Recommendations are improving cross–sector collaboration, rebuilding infrastructure, encouraging small–scale projects, and achieving Palestinian economic stability and autonomy.

Sida: 148 (176)

### Anti-fragile futures? Possibilities and challenges for sustainable career ecosystems in arts and culture

1. Health, Safety and Well-Being

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**Abstract text:** Freelancers in the arts and culture sector tend to have precarious and multiple jobs during their careers. Despite insecurity, they usually experience their work as highly meaningful for themselves.

Our research studies sustainability in the career ecosystems of freelancers, solo self-employed persons and grant recipients in the arts and culture industries in Finland. The research is based on qualitative interview data (N=39). The interviews were conducted as part of coaching and peer group activities for the aforementioned groups. The data were analyzed by means of qualitative content analysis.

The arts and culture sector is a context of fragile career ecosystem for professionals who engage in non-standard and changing work arrangements. The interviewees constructed sustainability and anti-fragility for their careers by enhancing their networks and actively shaping their set of tasks and jobs towards a more productive, more satisfactory and less stressful compilation. Their reasons for attending the coaching and peer group were needs for networking and support from others who share the same burdens. The interviewees also strived for a more sustainable career ecosystem for arts and culture sector as a whole.

As a practical output, we created a model for coaching and peer groups for freelancers in the arts and culture sector which aims at creating a platform for dialogue and peer support.

This research is conducted as a part of the Mental Health Toolkit (2023-2027) project. The project is a part of Finland's Sustainable Growth Programme and funded the EU Recovery and Resilience Facility (Next Generation EU).

Sida: 149 (176)

# Leaving Workers Behind: Precarious Work and Policy Gaps in Canada's Pilot Programs for Migrant Care Workers

2. Society and Inequality

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Abstract text: For the first time since 1992, Canada is witnessing a gap in migrant care worker programs – a labour and immigration program heavily relied upon by Canadian families to fill care gaps for in-home childcare, elderly, and disability support. For over 50 years, migrant care workers - predominantly racialized women from the Global South - have fought hard to gain and maintain direct pathways to permanent residency in Canada. Through access to information requests from the federal government and qualitative interviews and focus groups with migrant care workers, our research examines how this promise of permanence has become more precarious, leaving care workers increasingly vulnerable to exploitative work conditions amid their employer-dependent and temporary status. The latest iteration of the caregiver program closed in June 2024 and for the first time in over 30 years, Canada presently has no program at all and no pathway for care workers in Canada – those who came under the premise that they could apply for permanent residence after completing their work requirements - to have that promise realized. While Canada awaits the rollout of the newly proposed Enhanced Caregiver Pilot Program, many care workers live in legal limbo uncertain if their work permits will be renewed, unable to reunite with their family members, and unclear about what the future holds. Our research makes evident the precariousness that they live, work, and embody and sets forth recommendations for more sustainable migrant care worker programs in Canada.

Sida: 150 (176)

### Increased Mortality Among Those Disabled Due to Work-Related Conditions

1. Health, Safety and Well-Being

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Abstract text: Background: The risk and duration of work-related disability has been found to increase with the level of unemployment. Further, mortality among those who leave work as a result of a disability has been reported to be elevated. Two explanations for this finding have been proposed: The increased mortality is a direct consequence of the disabling condition itself or it arises from the marginalized status of disability.

Methods: We performed two retrospective cohort studies among individuals with an accepted workers' compensation claim in West Virginia in 1998 or 1999. The first involved 14 219 workers with claims accepted for a low back injury with vital status ascertained through 2015 while the second study included 2077 workers with upper extremity neuropathy followed through 2020. Mortality among each cohort compared with the West Virginia general population was assessed using standard life table techniques. Associations of mortality and disability-related factors within each cohort were evaluated using Cox proportional hazards regression.

**Results**: Overall mortality and mortality from cancer was associated with lost time in both cohorts. All-cause mortality and mortality from drug overdoses involving opioids were also significantly associated with amount of lost time, permanent partial disability, and percent permanent disability among back injury claimants. An increase in mortality from accidental poisoning among all claimants compared to the general population was also observed among both cohorts.

**Conclusions**: These results add to mounting evidence that the status of work-related disability itself impacts mortality risks broadly, representing an underappreciated health burden arising from precarious employment conditions.

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# The risk of precarious employment and the role of ACE and socioeconomic conditions throughout the early life course.

### 2. Society and Inequality

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#### **Abstract text:**

### Background:

Exploring possible effects of early life course adverse conditions on the risk of precarious employment later in life.

An increasingly number of research addresses the effect of early life course adverse conditions on outcome later in life.

Low parental socioeconomic status (SES) during childhood and exposure to adverse childhood experiences (ACE) is known to negatively affect a wide range of outcomes such as subjective wellbeing, NEET and own SES later in life.

Despite the increased focus on the effects of early life course adverse conditions only a few studies address the impact on the child's later labour market participation and even fewer the quality of the participation.

#### Method:

Based on a random sample of 2,800 Danish employed workers aged 18–45 years combined with longitudinal register data the level of precarious employment (PE, outcome) is measured as a formative index consisting of five dimensions covering working conditions between employers and employees ranging from 0 (no PE)–100 (most PE). Exposure is parents' employment history, family equivalented income (FEI) at age 15 and additional ACEs, all register-based information.

Results: Based on preliminary linear regression FEI below 60 % of the median increases the PE score by 2 compared to higher FEI. It should be noted that the analysis is based on a highly selected population as poor SES in childhood increases the risk of weaker or no labour market participation.

Conclusion: SES in early life course does not only affect the labour market participation but also the quality of the employment itself.

Sida: 152 (176)

# Strengthening the financial security of Minibus-Taxi Drivers and Owners by supporting saving behaviour

2. Society and Inequality
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Abstract text: In South Africa, minibus-taxis are the most common form of transport. Since the 1970s, the industry has evolved in the absence of a reliable public transport system. As one of the largest sectors of informal employment, it provides a unique context to explore precarious employment, inequalities, and marginalised groups. While for some it has provided a springboard out of poverty, despite potentially high earnings, many drivers struggle to obtain financial security. A contributing reason might be insufficient financial skills. Using the Theory of Planned Behavior as a theoretical framework, this survey study investigated the saving habits of taxi drivers and owners (N = 119). It measured attitudes towards saving, subjective norms, perceived behavioural control (PBC), and intention to save. PBC comprised three components, which linked differently to saving behaviour: greater perceived knowledge and ability to manage money related to greater intentions to save and saving behaviour, while perceived challenges in managing money related to saving behaviour but not to saving intention. Greater subjective norms and positive attitudes towards saving tended to be associated with greater saving intentions. Intention to save emerged as the strongest predictor of saving behaviour. When considering all predictor variables together, only perceived ability to manage money explained unique variance in saving intentions. The findings suggest that strengthening financial skills, especially perceived behavioural control could effectively promote saving behaviour. By introducing policies that address challenges in money management and improving financial literacy, it may be possible to empower individuals in this industry to improve their financial security.

Sida: 153 (176)

# Precarity in the U. S. higher education workforce: Understanding the full employment, financial, and family context of contingent faculty members

1. Health, Safety and Well-Being

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Abstract text: Background: Multiple job holding is a non-standard work arrangement (NWA) defined as holding two or more jobs that often have other NWA characteristics such as precarious, temporary, or part-time. Little research exists on the mental health effects of multiple job holding and findings are mixed on NWA in general. Some studies link NWA precarity to poor well-being, while others show NWA autonomy and flexibility benefits workers. This non-consensus has been attributed to poor measures and a failure to assess contextual factors that alleviate or exacerbate the well-being risks posed by NWA.

**Methods:** We conducted a qualitative exploratory study to assess factors affecting multiple job holders' mental health. We recruited adjunct faculty from U.S. higher education with part-time, temporary, unbenefited positions. Participants attended 90-minute virtual focus groups. A constant-comparison method was utilized to review transcripts and develop an open-coding system to summarize relevant points. We organized codes into themes to serve as conceptual domains for developing future study measures.

**Results**: After analyzing qualitative data from seven focus groups (n=23), we identified eight themes related to worker experiences of multiple job holding: cumulative workload, exposure to precarity, time demands, psychosocial work environment, conditions of employment, need fulfillment, family life, and career goals.

**Conclusion**: Findings suggest a broad range of employment, psychosocial, financial, and family contextual factors are key to understanding effects of NWA. Further research is needed to develop survey measures to assess these factors and quantitatively examine their mental health impact. Findings will be used to inform development of contextually-relevant interventions.

Sida: 154 (176)

# The increased risk of hypertension with aging is accentuated by work-family conflict among women (ELSA-Brasil study)

1. Health, Safety and Well-Being Leidjaira Lopes Juvanhol<sup>1, 2</sup>

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Abstract text: Background: Work-family conflict (WFC) is a psychological stress source linked to cardiovascular lifestyle risk factors, but there is still a lack of prospective evidence on its association with hypertension (HTN). Thus, we investigated the association of WFC with changes in blood pressure (BP) and HTN incidence by gender over 4 years of follow-up of Brazilian Longitudinal Study of Adult Health (ELSA-Brasil), exploring the role of age on this relationship. Methods: 3,208 men and 3,917 women who attended the baseline (2008-2010) and the first follow-up (2012-2014) of ELSA-Brasil were included. Four indicators of CTF were analyzed: time- and strainbased work-to-family conflict, family-to-work conflict, and the lack of time for selfcare and leisure. The analyzes were performed by Cox models stratified by gender. Results: WFC was more frequent among women, except family-to-work conflict, which was similar by gender. In men and women, no overall association was found between WFC and HTN risk. However, in women, strain-based work-to-family conflict and lack of time for self-care and leisure interacted synergistically with age (p for interaction = 0.015 and 0.026, respectively): the increase in HTN risk that occurs with age is significantly greater among women with a higher frequency of WFC in these indicators (HR= 1.09 and 95%CI= 1.05-1.13; HR= 1.09 and 95%CI= 1.06-1.11, respectively) compared to those with a lower frequency (HR= 1.04 and 95%CI= 1.03-1.06 for both). Conclusion: Work-family conflict interacts synergistically with age to increase HTN risk among women. Thus, the work-life balance might contribute to reduce cardiovascular risk among older women.

Sida: 155 (176)

### Supply chain Health INitiative Evaluation (The SHINE study)

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#### **Abstract text:**

The majority of employees in UK small and medium-sized enterprises (SMEs) lack access to dedicated health and wellbeing services (HWS). Efforts to encourage SMEs to adopt these services have been largely ineffective. Since three-quarters of SMEs operate within supply chains supporting larger organisations, this study explored the feasibility of large organisations providing services to SMEs in their supply chain. A scoping review of the literature examined existing models for SMEs in the UK and focus groups gathered insights on the obstacles and facilitators of such provision. Perspectives of occupational health leaders in a large manufacturing company, and with leaders/owners and employee representatives within three SMEs in their supply chain.

The scoping review revealed information on effective interventions in the SME context is scarce. Only six studies; all with varying service offerings and methodologies was identified. Despite this, there were positive benefits for health and productivity when SMEs accessed these services.

SME leaders expressed a desire to provide HWS services to their employees, but didn't know how best to initiate these noting that a supply-chain-based approach built on trust and industry relevance would be beneficial. Employees showed interest in engaging with supply-chain provisions of HWS highlighting feasible delivery methods and ways to implement research effectively within SME contexts.

Providing sector-specific services through trusted supply chains could improve SME access and engagement with HWS. Research funding has been secured to assess the effectiveness, the obstacles and facilitators of this approach.

Sida: 156 (176)

# The role of prenatal care providers in helping patients navigate precarious work and pregnancy

1. Health, Safety and Well-Being

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Abstract text: The purpose of this talk is to discuss the important role that prenatal care providers play in helping patients navigate work and pregnancy, and to provide recommendations for ensuring patients' needs are met. In qualitative interviews with 20 adults who had been employed in low-wage or precarious jobs during their recent pregnancies, respondents described four primary roles that health care providers played during their pregnancies: 1) completing paperwork needed to apply for benefits or receive work modification; 2) providing information about how to mitigate employment-related risks; 3) providing referrals to social or medical services; and 4) advocating for patients to ensure receipt of accommodations, resources, and information. At the same time, published research about providers' perspectives indicates that, while providers want to understand patients' work-related needs, they do not always have the tools to ask about or respond to these concerns in a meaningful and efficient manner. In this talk, I will share data collected from a range of prenatal care providers - obstetricians, midwives, and family practice physicians - to understand how they see their role in supporting employed pregnant patients, the extent to which they speak with pregnant patients about their employment, and what barriers prevent them from engaging in these conversations with patients. I will share recommendations for how health systems and healthcare providers can provide meaningful support to their employed pregnant patients in ways that consider their already overburdened workload.

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### The Politics of Care and Holistic Healing Practices for a Socially Justice and Sustainable Future of Work

Health, Safety and Well-Being
 Zonke Zungu¹
 University of Cape Town

**Abstract text:** The emergence of technology and Al-driven practices in the workplace has changed organisational relations tremendously. Research posits that these new technological systems have eroded social inclusion, negatively impacting employee health and well-being.

Consequently, this presentation argues that caring organisational cultures are essential for healing, health and well-being in future work practices. Drawing from Donald Winnicott's politics of care, this presentation will present a model that will demonstrate the relevance of care and the holding environment in the future world of work. It will present the keycomponents of a caring and compassionate organisation and demonstrate how these components could be applied to the organisational setting to promote healing, social justice and transformation.

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# Social programs addressing social vulnerability in informal employment: An analysis of Social Security in Chile and Mexico

Society and Inequality
 Arturo Aguirre Gamero¹
 Alejandra Vives Vergara¹

<sup>1</sup> Pontifica Universidad Católica de Chile

Abstract text: Informal employment is a Social Determinant of Health and increases social vulnerability by limiting workers' access to Social Security. This study examines Chile and Mexico, two Latin American countries with high income inequality and neoliberal policy influences, yet differing informal employment rates: 27% in Chile vs. 56% in Mexico. We compare social protection programs beyond social security that provide coverage to informal workers across the pillars of Social Security: pensions, occupational health, healthcare, and unemployment.

Using a mixed-method case analysis, we (1) describe the socio-occupational characteristics of informal workers using national employment surveys to identify the main vulnerabilities; (2) analyze social protection programs that include informal workers and offer benefits comparable to social security, describing benefits (services or monetary transfers), vulnerabilities addressed, and GDP allocation (%).

In total, 41 programs and 39 vulnerabilities were identified, yet only 14 were addressed. Both countries prioritize formalization over protection, leaving critical gaps in unemployment benefits and occupational health. Chile's programs that include informal workers (n=28) mainly focus on pensions, low-income support, and training for women, while Mexico (n=13) prioritizes rural and agricultural workers through monetary transfers and universal health coverage.

Given the persistence of informal employment in Latin America and the right to decent work, this study highlights the inadequacy of current social protection in the dimensions of Social Security. Policies must expand coverage, particularly in occupational risks, work and life control, and material–social deprivation for underprotected sectors (e.g., gig work, long shifts) to achieve meaningful health equity for informal workers.

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# Self-Employment and Income in Later Life: New Details on This Complex Relationship

1. Health, Safety and Well-Being

Daniel Falkstedt<sup>1</sup>

Cal Halvorsen<sup>1, 2</sup>, Alicia Nevriana<sup>1</sup>, Kuan-Yu Pan<sup>1</sup>, Jessie Gevaert<sup>1, 3</sup>, **Melody Almroth**<sup>1</sup>

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- <sup>2</sup> Brown School, Washington University in St. Louis, United States
- <sup>3</sup> Brussels Institute for Social and Population Studies, Belgium

Abstract text: Background: Findings on self-employment's influence on income are mixed, possibly due to selection bias. In response, we aimed to (a) estimate the population treatment effects of self-employment on three types of income—income from work, adjusted household income, and receipt of social benefits—while (b) controlling for selection into self-employment, (c) specifying self-employment types, and (d) identifying treatment effects by gender.

Methods: We used data from the Swedish Work, Illness, and Labor Market Participation cohort (born 1959–1969; ~1.2 million individuals). We first generated entropy balancing weights to balance the self-employed and wage/salary employment groups in 2014 on sociodemographic, work, and health factors from years prior. We then included these weights in a series of regression models to predict various forms of income in 2019 while controlling for multiple job holding in 2014.

Results: Compared to wage/salary employment and controlling for multiple job holding, we estimate that self-employment in 2014 led to lower annual work income (-213,777 SEK, p<.001) and adjusted household income (-55,831 SEK, p<.001) in 2019. On these metrics, sole proprietors and women were the most financially vulnerable. Although self-employment in 2014 was negatively related to receipt of social benefit income in 2019 (OR=.729, p=.002), this effect was lost once accounting for multiple job holding.

Conclusion: Self-employment's influence on income is multifaceted. Future research should investigate the motivations for pursuing self-employment past midlife and their interactions with gender, given that it may be a useful form of work for people needing flexibility (e.g., caregivers).

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# Prevalence of Algorithmic Management and Mental Health Associations in Spanish Workforce: AM-MENTAL Project

3. Digitalization and Platformization

#### Nuria Matilla-Santander<sup>1, 2, 3</sup>

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- <sup>4</sup> Head of Occupational Health, The Workers' Commissions (CCOO) Catalonia, Spain
- <sup>5</sup> Head of Analysis and Digital Transformation, The Workers' Commissions (CCOO) Catalonia, Spain

Abstract text: Background. Current evidence on occupational safety and health risks related to algorithmic management is limited, often based on small, convenience samples or in-depth interviews with workers. Moreover, from the few studies, most focus on digital platform workers, such as delivery drivers or taxi drivers, with fewer studies on workers in other economic sectors. This study will have a dual aim: (i) to assess the prevalence of algorithmic management use across economic sectors in Spain in 2025, and (ii) to examine the associations between algorithmic management and mental health.

**Methods.** Cross-sectional study based on a representative sample of the whole Spanish working population (n=3000), with oversampling in three specific economic sectors: logistic, healthcare and administrative (n=200 workers in each). A polling company will distribute the online survey to their panel in February 2025. The survey is being co-created with the Spanish labour union CCOO, the Catalan labour department, and the research team.

**Expected results.** We will show the prevalence of algorithmic management (overall and by typologies of algorithmic management) by economic sector, occupation, sociodemographic and employment quality characteristics. We will show the crude and adjusted prevalence ratios of psychological distress, burn-out and sleep problems by levels of exposure to algorithmic management.

**Expected conclusions.** We expect to find a widespread use of algorithmic management in all economic sectors in Spain. Further, we expect to find doseresponse associations of exposure to algorithmic management with psychological distress, burn-out and sleep problems.

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### Riding it out or moving along – pathways through platform labour

3. Digitalization and Platformization

#### Meike Brodersen<sup>1</sup>

Anastasia Joukovsky<sup>1</sup>

<sup>1</sup> Université Libre de Bruxelles

Abstract text: Platform work (PW) is conflated into a single category of precarious employment and, consequently, policies and regulations focus on its most visible aspects (i.e. male dominated delivery services). Moreover, while high turnover rates in PW are common knowledge, it is insufficiently understood what shapes individual trajectories and experiences, varying depending on socio-demographic characteristics, socio-professional biographies, motivations, and levels of dependency towards PW.

Based on three waves of interviews with platform online and offline workers in Belgium (120 total, 2018–2025), we propose a typology of pathways into PW including 1) PW as a supplementary income; 2) PW as a stepping stone towards self-employment; 3) PW as a default, providing low-threshold job niches for racialized and undocumented workers experiencing discrimination (Graham & al., 2017) and barriers to regular employment (van Doorn, 2017; Mateescu & Ticona, 2020; Bernard, 2023b). PW is also perceived as a 4) transitional solution in moments of biographical upheaval; 5) and used to complete a portfolio of revenue sources for people already working outside standard salaried employment (Brodersen et al., 2024a).

Based on these initial profiles, we show how attitudes and strategies towards platform labour change over time, as platforms fail or succeed to meet initial expectations. These profiles also challenge the conceptions of PW as voluntary and flexible, or contributing to the formalisation of informal labour; and highlight how its expansion needs to be re-examined within the broader scope of labour market conditions, social and migration policies.

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# Work Life Balance of platform workers working remotely or on-site - a cross-sectional study in selected European countries.

1. Health, Safety and Well-Being

### Olga Zwardoń-Kuchciak<sup>1</sup>

Dorota Merecz-Kot<sup>1</sup>, Agnieszka Lipińska-Grobelny<sup>1</sup>, Anna Paszkowska-Rogacz<sup>1</sup>, Mireia Julia Perez<sup>2, 3</sup>, Edgar Vincente Castellvi<sup>2</sup>, Hanna Nurmi<sup>4</sup>, Lauri Kokkinen<sup>5</sup>, Jamelia Harris<sup>6</sup>, Sangwoo Lee<sup>6</sup>, Chris Warhurst<sup>6</sup>, Trine Pernille Larsen<sup>6, 7</sup>, Anna Ilsoe<sup>7</sup>, Silvia Girardi<sup>7</sup>, Jessie Gevaert<sup>8</sup>, Lluís Mangot-Sal<sup>9</sup>, Theo Bodin<sup>9, 10</sup>, Filippa Lundh<sup>9</sup>, Nuria Matilla-Santander<sup>9, 11, 12</sup> <sup>1</sup> University of Lodz, Poland

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- <sup>11</sup> Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain.
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Abstract text: The rise of platform-based work has transformed traditional employment models, offering new flexibility and autonomy but also creating challenges for work-life balance (WLB). Characterized by gig-based and freelance employment, platform work involves diverse work patterns, often allowing workers to operate remotely or on-site, blurring traditional boundaries between work and personal life. A cross-sectional study was conducted among digital platform employees in Sweden, Belgium, Denmark, Finland, Poland, Spain, and the UK (N=3949) between September 2023 and May 2024. Data from 3,436 workers revealed that WLB is generally perceived positively across all countries, with no significant differences between them. However, a notable trend emerged: online work consistently received higher WLB ratings than on-site work, while dual-mode work typically fell between the two.

Belgium, the UK, and Finland had the highest WLB scores, reflecting a highly positive perception of work-life balance in these countries. Poland and Spain also performed

well, though slightly lower. Denmark, however, reported the lowest scores across all

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work modes, indicating a potential area for improvement.

Despite the generally positive results, research highlights WLB as a significant stressor for platform workers, especially those working nearly full-time, both onsite and online. Previous studies, including the ILO report, show that poor WLB is often linked to long hours, unsocial shifts, and demanding tasks. Therefore, the percentage of workers reporting good WLB should be interpreted cautiously, and other factors such as working hours, income, control, gender, and age should be considered in future analyses.

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# Universal Credit trajectories among individuals who access secondary mental health services: a sequence analysis of linked data

2. Society and Inequality

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**Sarah Ledden**<sup>1</sup>, Thomas Lorentzen<sup>3</sup>, Ioannis Bakolis<sup>1</sup>, Ira Madan<sup>4</sup>, Matthew Hotopf<sup>1</sup>, Nicola

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T. Fear<sup>2</sup>

**Abstract text:** Background: Universal Credit (UC) is a means-tested social security payment introduced in the UK in 2013. It replaced six previous benefits, including jobseeker's allowance, income support, and housing benefit. We aimed to examine Universal Credit (UC) trajectories, and transitions between UC conditionality regimes, among secondary mental health service users between 2016-2020.

Methods: We used a linked dataset established by combining electronic secondary mental health records and UK national benefits administrative data. 4,876 individuals who received UC for the first time in 2016 were followed up for approximately 4.5 years. Sequence analysis was used, followed by cluster analysis to identify typical UC trajectories. Socio-demographic and diagnostic characteristics associated with UC trajectory membership were explored using multinominal logistic regression; results were presented as average marginal effects.

Results: Six distinct UC trajectory clusters were found. These clusters indicated: short-term UC searching for work, medium-term UC searching for work, long-term UC searching for work, no work requirements, UC working cluster, and no work searching and caring responsibilities cluster. Women were overrepresented in the medium-term UC searching for work cluster and a cluster indicating more low-paid or part-time work. Those with diagnosis of severe mental illness were over-represented in the no work requirements group.

Conclusions: Using a novel analysis method, we identified six distinct UC trajectories among users of secondary mental health services and identified characteristics of patients represented within these groups. Findings can be used to inform and tailor support to groups vulnerable to conditionality or longer-term UC receipt.

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# Individualized Supported Employment to transform precarious work into inclusive economic participation for people who use drugs

4. Policy, Resistance and Intervention

#### Anita Minh1

Allison Laing<sup>1, 2</sup>, Deb McCormack<sup>2</sup>, Lindsey Richardson<sup>1, 2</sup>

<sup>1</sup> University of British Columbia, Department of Sociology, Vancouver, Canada

Abstract text: Background: Employment is a vital determinant of health, yet people with multiple barriers (PMB) to employment—including psychiatric symptoms, comorbid health conditions, long-term disability, and substance use—are commonly excluded from decent work. Given high prevalence of substance use among North American working populations and alarming increases in overdose mortality due to toxic unregulated drugs, employment-based interventions to address the socioeconomic drivers of substance-related harms are urgently needed. However, knowledge gaps in how labour market policy and workplace practices can effectively support PMB constrain employment-based responses to the toxic drug crisis. Drawing on workers' lived experience, this study proposes a framework for providing Individualized Supported Employment (ISE) to inform policy and practice that improves health, social, and economic well-being of PMB.

**Methods**: Longitudinal in-depth interviews with 44 PMB living in inner-city Vancouver, Canada, were conducted between February 2021 and January 2024 to examine experiences with work and employment supports. Using a realist evaluation approach, we identified mechanisms that explain how and why ISE supports decent work and well-being for PMB.

**Results**: Results suggest several key mechanisms for ISE: (1) flexibility in hours, schedule, payment structure, and work activity; (2) accommodations for workers' health, disability, substance use and treatment; (3) opportunities for professional development; and (4) relational practices that enhance workplace engagement for PMB.

**Discussion:** Centering workers' lived experiences, our framework presents a worker-centred model of supportive economic engagement, providing critical guidance for policy makers, workers' organizations, and employers in supporting meaningful and secure employment for PMB.

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# Title: Employment histories and health: Understanding the impacts of the changing nature of working life.

1. Health, Safety and Well-Being

### Theocharis Kromydas<sup>1</sup>

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Abstract text: Background: The working environment is rapidly changing with flexible working conditions and extended working lives often resulting in 'non-traditional' career trajectories. Yet, our knowledge on how such trajectories affects people's health is limited. Therefore, our aim is to explore common employment history patterns among UK individuals and assess possible associations with health.

**Methods:** We used UK Biobank data to construct employment histories and identify working-life patterns across 66 calendar years (1951-2017). Using Sequence Analysis, we produced Sequence Index Plots by gender and age to derive these patterns. Then, we classified respondents based on their employment history using optimal matching and cluster analysis. Generated clusters were used as exposures in logistic regression models to test their association with self-rated health.

Results. Continuously employed women aged 40–49 had better health than women in the Employed/in education/caring pattern [OR=0.80; CI: 0.69, 0.93], or those off sick at some point in the past [0.68, CI: 0.59, 0.79]. Men aged 40–49 reported worse health if employed and retired early [0.64; 0.53, 0.78] or were off sick in the past [0.42; 0.31, 0.57]. Retirement for women aged 50–69 improves their health, irrespective of multiple gaps or caring responsibilities and short-term employment. However, continuously employed, or continuously employed and then retired men had better health than those in non-continuous employment.

**Conclusions** Continuous employment was associated with better health in men, but not always for women. The modern working environment is rapidly changing, increasingly giving rise to 'non-traditional' career trajectories which might result in future adverse health impacts.

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# New health research agenda for climate change, sustainable work practices, and green jobs: the INTERCAMBIO project

1. Health, Safety and Well-Being

### Mary Njoroge<sup>1</sup>

Michelle Turner<sup>2</sup>, Sara Svensson<sup>3</sup>, Sara Stanulovic<sup>2</sup>, Alex Burdof<sup>4</sup>, Maria Albin<sup>5</sup>, Manolis Kogevinas<sup>2</sup>, Neil Pearce<sup>1</sup>

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- <sup>4</sup> Erasmus University Medical Center
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#### **Abstract text:**

The transition to sustainable work practices and green jobs is reshaping European work environments, with crucial health implications. INTERCAMBIO examines workers' mental and physical well-being in industries relevant to green transition. We aim to build a stakeholder network that bridges science and policy to shape future health-focused sustainable work and coordinate input to a new health research agenda. We have conducted stakeholder mapping across Europe leveraging existing networks such as, OMEGA-NET, SPHERA, HERA, INTERCAMBIO work packages (WPs), and LinkedIn. This will be followed by a survey to identify occupational health challenges and focus areas on climate change and sustainable work practices. Survey responses will inform structured workshops using the Delphi method to develop consensus on key research priorities around the impact of climate change, sustainable practices, and green job expansion on worker health, including precarious workers. We have identified over 500 stakeholders from labour unions, employers, policymakers, researchers, and non-governmental organisations spanning 19 international organisations, 28 European bodies, and institutions across Western (90), Southern (74), Eastern (119), and Northern Europe (63), creating a comprehensive framework for understanding work challenges and knowledge gaps in occupational health during green transitions.

We are establishing a collaborative stakeholder community to support evidence-based policies for sustainable work environments. Survey findings will provide knowledge gaps for balancing environmental sustainability with worker well-being and form the basis for in-depth public consultation and workshops. Results will inform a new European health research agenda through coordinated stakeholder engagement and integration of findings from other WPs.

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### Leadership Skills for Supporting the Health, Safety, and Well-Being of Healthcare Workers

1. Health, Safety and Well-Being

### Debora Goldberg, PhD1

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<sup>1</sup> George Mason University, Fairfax, Virginia, United States

Abstract text: Background: During the COVID-19 pandemic, many healthcare workers were stretched to a point of crisis and experienced adverse psychological effects. Numerous studies on the effects of the pandemic on the mental health and well-being of healthcare workers found high levels of stress, exhaustion and burnout across healthcare occupations and job roles. Unfortunately, there has not been an adequate response to address the physical, safety and mental health concerns among healthcare workers. The wide-spanning nature of these issues demonstrate the need for an integrated approach for building supportive work environments.

Purpose: The purpose of this presentation is to outline leadership competencies necessary to support the health, safety and well-being of healthcare workers and describe how to incorporate these concepts into management education and training programs.

Form: This presentation will describe a framework for leadership competencies needed to support the health, safety and well-being of healthcare workers. These competencies include individual skills in health and well-being; knowledge of organizational development approaches such as building a supportive organizational culture and designing (or redesigning) jobs that support employee health, safety and well-being; knowledge of how to promote physical and psychological safety in the workplace; open communication; participative leadership skills and shared decision making; approaches in human capital management including employee benefits, opportunities for growth, reward and recognition; and skills in quality improvement, measurement and evaluation, and implementation science. The presentation will also include a discussion of resources for education and training programs including articles, reports, case studies, videos and podcasts.

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# Impacts of risk perceptions of second-hand exposure to drugs on intent to leave among transit operators

1. Health, Safety and Well-Being

#### Pranav Srikanth<sup>1</sup>

Isaac Rhew<sup>2</sup>, Edmund Seto<sup>1</sup>, Christopher Zuidema<sup>1</sup>, Marissa Baker<sup>1</sup>

<sup>1</sup> Department of Environmental and Occupational Health Sciences, University of Washington School of Public Health

Abstract text: Background: Drug misuse has increased in the United States, often occurring in spaces such as public transit, creating the potential for second-hand exposure for transit operators; this could result in physical or mental health impacts. Health impacts, in particular mental health impacts, can be influenced by individually held risk perceptions, which can also impact protective behaviors, and willingness to stay at a job that has unacceptable perceived risks. Here, we propose that observing or responding to emergency situations involving drug use at work could impact stress and job satisfaction, which could mediate the relationship between individually held perceived risks and intent to leave.

Methods: We surveyed 273 transit operators in the Pacific Northwest (USA) to assess their perceived risk of drug exposures, intent to leave, stress, and job satisfaction. We conducted a mediation analysis using an ordinal logistic regression model with intent to leave as the outcome to explore the relationship between perceived risk, intent to leave, stress, and job satisfaction.

Results: Higher perceived risk scores were significantly positively associated with intent to leave (OR: 1.08; 95% Cl: 1.02, 1.14); mediation analysis showed that stress (p=0.040) and job satisfaction (p=0.037) fully mediated this relationship, suggesting a pathway where perceived risks influence intent to leave via increased stress and decreased job satisfaction (total indirect effects p=0.001).

Conclusions: Based on these results, operator turnover can potentially be reduced by increasing supports that target risk perceptions of drugs. Such supports can further benefit operators by reducing stress and improving job satisfaction.

<sup>&</sup>lt;sup>2</sup> Psychiatry and Behavioral Sciences, University of Washington

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# Internalized Inequality: Psychological Functions of Neoliberal Ideology in Precarious Unemployment

2. Society and Inequality

### Severin Hornung<sup>1</sup>

Christine Unterrainer<sup>1</sup>, Thomas Höge<sup>1</sup>

<sup>1</sup> University of Innsbruck, Department of Psychology

Abstract text: Why marginalized groups internalize political and economic ideologies that run counter to their collective socio-economic interests is a classic conundrum of social and political psychology. System justification theory explains this paradoxical "false consciousness" through a palliative function of ideology, serving to maintain a coherent worldview and defend the status quo by appeasing unfulfilled epistemic, existential, and relational motives. Building on theorizing and quantitative research on system justification, this study examines psychological functions of adopting neoliberal ideologies among the socio-economically disadvantaged, based on rich qualitative data. Semi-structured interviews with nine individuals in precarious life situations and (long-term) unemployment were subjected to content analysis and hermeneutic interpretation. Respondents explicitly or implicitly endorsed neoliberal ideologies by offering individualistic explanations for poverty and success, rejecting redistribution of wealth, internalizing inferiority, and endorsing economic utility as a measure for human worth. Associated meritocratic ideological beliefs were instrumental for reducing cognitive dissonance, rationalizing experienced injustice, and appealing to epistemic needs for simplicity, unambiguity, structure, order, and predictability of the social environment. An emerging theme was the interconnection of neoliberal ideology with group-based enmity and xenophobic stereotypes. Perceived existential threats of perpetual socio-economic crisis are projected onto immigrants, scapegoated for not taking responsibility, illegitimately appropriating resources, and insufficiently contributing to society. Results show how neoliberal ideology reproduces justifications for societal inequalities and social tensions in the belief systems of those deprived by the system. The amalgamation of free market ideology with crypto-fascist themes provides an explanation for the widespread rise of right-wing populism in advanced neoliberal societies.

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### Algorithmic Management and Health & Safety Outcomes: A Scoping Review on Relationships and Measurement Method

3. Digitalization and Platformization

#### Hua Wei<sup>1</sup>

Ioannis Basinas<sup>1</sup>, Martie van Tongeren<sup>1</sup>
<sup>1</sup> University of Manchester

**Abstract text:** IntroductionThis review addresses two questions: How has Algorithmic management (AM) been measured in existing studies and what is the relationship between AM and workers' health and safety outcomes.

Methods The scoping review included a review of reviews (RoR) and a review of primary studies (RoPS), following the PRISMA approach, with database searches conducted in October 2024 across MEDLINE, Embase, APA PsycINFO, EBM Reviews, Health Management Information Consortium, Web of Science and Google Scholar.

Results The RoR identified seven systematic reviews that included 1152 papers. All reviews were qualitative syntheses. Negative effects of AM identified included low pay, social isolation, irregular working hours, overwork, sleep deprivation, exhaustion, and psychological and behavioural outcomes.

The RoPS included 34 papers published between 2019 and 2023, with varying methodological rigor. The study populations mainly consisted of food delivery couriers and app-based rideshare drivers, followed by platform-based freelancers, e.g. MTurk workers. Most studies did not measure direct exposure to AM, instead using "platform dependency" as a proxy or limiting the population to platform-based workers. Only six studies measured functions of AM or Algorithmic Control, using subjective scales on workers' perceptions of automation, control, or specific techniques, e.g., gamification. Most studies found a negative association between AM and health and safety outcomes, including stress, technostress, well-being, burnout, anxiety, injuries, and accidents. Work-related outcomes such as job satisfaction, engagement and performance were also major focuses.

Conclusion The definition and measurements of AM remain underdeveloped, as current research either avoided defining AM or relied on workers' self-reported perceptions.

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# Analysis of risks and ways to protect against risks in a group of on-location platform workers in Sweden and Poland from GIG-OSH study

1. Health, Safety and Well-Being

Dorota Merecz-Kot<sup>1</sup>

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**Abstract text:** GIG economy creates new employment opportunities through the reduction of barriers to entry into the labor market. Platform work can be for some a welcome alternative to traditional forms of employment. However, it can also jeopardize the health and safety of workers, mainly due to the fact that in many countries there is no adequate regulation of employment status and responsibility for safe and healthy working conditions of GIG workers.

In this study we present the results of a comparison of risk factors in platform work performed on-site in Poland and Sweden and protective measures taken by GIG workers. Poland and Sweden differ from each other in terms of work culture and legal regulations concerning platform work. In light of these considerations, we have sought to ascertain whether these discrepancies give rise to occupational safety and health (OSH) risks for workers and the measures they employ to safeguard themselves against them.

The results of 584 respondents working on-location were analyzed (44.3% of Swedes, 55.7% of Poles). The findings of our analysis suggest that the majority of Poles are exposed to occupational safety and health (OSH) risk factors to a greater extent than their Swedish counterparts. Poles experience more both physical (e.g. noise, pollution) and psychosocial risks (facing emotionally difficult situations, aggression, physical violence). They also suffer more from job stress in comparison to Swedes. Furthermore, disparities in the utilisation of personal protective equipment (PPE) were discerned, which are consistent with the levels of exposure to risk factors across these countries.

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# A framework for analyzing subjective outcomes of precarious employment: Insights from longitudinal German labor market data

5. Theories and Method

#### Christian Seubert<sup>1</sup>

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#### **Abstract text:**

Labor markets have increasingly shifted toward conditional, temporary, and atypical work arrangements, replacing full-time, stable employment. Various scientific disciplines have raised concerns over the impact of uncertainty and insecurity in employment. Precarious employment is multifaceted, comprising objective conditions like employment insecurity, income inadequacy, and lack of worker rights and protection, and subjective experiences of marginalization, spanning five dimensions: reproductive–material, social–communicative, legal–institutional, status and recognition, and meaningful–subject-related aspects.

A conceptual framework integrating these aspects was examined using data from the 2015 and 2017 BAuA Working Time Survey of German employees, focusing on a cross-sectional sample (N = 20,030) and a smaller longitudinal sample (N = 6,539). Health outcomes, including work ability, psychological complaints, and psychosomatic issues, were assessed. Statistical methods included confirmatory factor analysis and structural equation modeling.

The study identified eight indicators of precarious conditions across the three objective dimensions, including job cuts, involuntary underemployment, low income, and unscheduled overtime. Nine items represented subjective experiences, including material hardship, lack of community, diminished opportunities for participation, and decreased satisfaction with work. Analyses showed that objective indicators significantly related to negative health outcomes, mediated by subjective experiences of precariousness.

This study underscores the need for a multidimensional understanding of precarious employment and its health impacts. Strengths (e.g., representativeness) and weaknesses (e.g., proxy variables) of longitudinal panel data are discussed in the context of creating robust evidence for adverse effects of precarious employment conditions that can reliably inform policy and interventions.

Sida: 174 (176)

### A Cross-Sectional Analysis of Burnout, Job Satisfaction and Workplace Environment Among Healthcare Workers in the United States

1. Health, Safety and Well-Being

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Abstract text: Background: Burnout has been a consistent issue for well over 20 years among physicians, nurses, and other healthcare workers in the United States. The consequences of burnout negatively affect the personal well-being of healthcare workers and has a cascading effect on patient outcomes. The aim of this study was to explore the correlation between burnout and job satisfaction, peer and supervisor support, and reward and recognition among healthcare workers participating in George Mason University's Health and Public Safety Workforce Resiliency Training Programs.

Methods: This is a cross-sectional study of 385 healthcare workers in the United States who completed the Health Professional Occupational Safety and Health Survey between 2022 and 2024. Analysis, conducted in STATA 18.0, included descriptive statistics, correlational analysis, and logistic regression.

Results: The majority of participants were white (54%), female (85%), and work full time in a healthcare setting (81%). Among participants 29% reported burnout. Of those reporting burnout, 27% were not satisfied with their job, 24% felt their contributions were not valued at work, 29% felt unsupported by supervisors, 22% did not have peer support, and 38% indicated they were not provided the resources required to do well at work. Burnout was negatively correlated (statistically significant) with job satisfaction, recognition, peer and supervisor support, and resources.

Conclusion: Study findings indicate important relationships between burnout, job satisfaction, and workplace characteristics among healthcare workers. This highlights the need to build comprehensive support systems and workplace environments that include leadership support, job resources, open communication, social connections, and employee recognition.

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# What could be learned from a review of interventions addressing algorithmic management?

3. Digitalization and Platformization

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Abstract text: Background: Algorithmic management can be defined as the use of digital technologies to enhance or automate managerial decision-making regarding the organisation of work and optimization of worker performance. Although the study of this phenomenon is relatively new, evidence about a range of negative implications for worker health and well-being is quickly accumulating, pointing to the need for corrective or, at a minimum, mitigating interventions.

**Methods:** While conducting a scoping review of interventions addressing algorithmic management, along with learning about interventions currently adapted, planned, or imagined, we are also unpacking layers of complexity impacting the study of algorithmic management.

Results: This presentation will be structured around several considerations. First, the use of a wide range of algorithmic management conceptualizations and definitions makes the identification of studies focused on it difficult since the concept is often discussed implicitly, using different terminologies that vary depending on researchers' disciplines and the economic sector studied. Second, the range of interventions at individual, community, and societal level with potential to address algorithmic management is very broad, which is unsurprising given its complex manifestations. Third, it is becoming obvious that, despite a range of negative implications, algorithmic management carries significant potential to enhance the occupational health and safety of workers, especially in sectors such as mining.

**Conclusion:** Our search for interventions addressing algorithmic management facilitates a better understanding of other facets related to this concept, including its varied and dynamic definitions and manifestations closely derived from its dependence on rapidly evolving digital technologies.

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### Social and supportive dynamics of precarious work

2. Society and Inequality

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#### **Abstract text:**

Precarious jobs – characterized by insecurity or unsafe conditions, are precarious in terms of the continuity and quantity of work, limited opportunities for advancement, and pose significant challenges to workers' well-being. Precarity can manifest in work (i.e., related to the continuity and stability of work), at work (i.e., unsafe or exploitative conditions), or from work (i.e., jobs failing to meet basic financial or personal needs).

While the impact of precarious work is often examined at the workplace, its effects extend beyond, influencing individuals as they move across multiple aspects of daily life. To explore these dynamics, we conducted a working-along study with individuals in Rotterdam holding precarious jobs (n=12). We recorded all interactions, focusing on the origins and nature of their work, job content, decision-making processes, job continuity, and perceived support. We thematically coded all references of precarity in, at, and from work, analyzed participants' considerations regarding (future) trade-offs and job sustainability, and synthesized our findings to conceptualize precarity as a social phenomenon.

Our preliminary findings suggest that precarity on the job not always translates into broader life, especially for older workers. However, when individuals experience precarity from work (i.e., financial strain, (unpaid) overtime, or irregular hours) social support from colleagues and friends becomes crucial. These networks were often essential for survival rather than for fostering personal growth and well-being. This underscores the dual role of social connections in precarious work: they serve as a safety net but may also limit opportunities for long-term stability and advancement.