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Poster Abstract Book

The work environment of algorithmically managed workers in the logistics sector: Preliminary results from the AMOSH project

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INTRODUCTION: The on-going digital revolution is by many considered the greatest disruptive event to the world of work since the industrial revolution. Algorithmic management (AM) uses Artificial Intelligence and data collection to remotely track and manage the workforce. Potential harmful effects of AM on the workers and their work environment has garnered growing attention in recent years. However, most research focuses on digital platform workers and phenomena such as deskilling and dehumanization of the workplace. Few studies address the topic presented here: the tangible effects of AM on the work environment in the logistics – one of the sectors outside of platform work where AM has grown most in recent years.

OBJECTIVES: The aim of the presented study is two-fold. First, to gain a greater understanding of how workers, managers and safety representatives perceive the effects of AM on workers' physical and psychosocial work environment in the logistics industry. Second, to identify workplace factors that can mitigate potential harmful effects, through workers experiences and perceptions of AM.

METHODS: The presented qualitative study is a two-stage, multi-case analysis comparing two very different company settings using AM in warehouse and transportation activities. The first stage is a comparative analysis of the application of AM in a relatively young e-trade company and a relatively old food production company, drawing on information gathered from conversations and observations on-site. The second stage draws on semi-structured interviews from 2022 with 34 workers and managers at the two companies about how AM affects different aspects of the organization of work and the psychosocial and physical work environment.

EXPECTED RESULTS: In our preliminary findings we identify inter-case similarities in how AM is used to manage the workers, parallel to inter-case differences in their safety and health (OSH) management that lead to different effects of AM on the perceived health and wellbeing of the employees. We also detect phenomena resulting from AM that have been discussed in earlier research on platform workers, including surveillance, the 'black box' phenomenon, standardization, and deskilling. Although a reduced sense of coherence and lower levels of control seem to manifest in an overall feeling of stress and anxiety, we also identify potentially mitigating factors, including a positive workplace culture and well-functioning systematic OSH management. Our results indicate a wish for improved understanding of systems and access to data, which would strengthen workers' involvement in the technology's implementation and development. This could potentially lead to more transparent, person-centered applications of AM that not only generate trust and prevent OSH risks, but also possibilities to use data gathered via AM to improve the work environment.

CONCLUSION: The findings suggest that AM has disruptive potential for job quality and can have negative implications for the work environment in the logistics sector. To mitigate these negative effects, we suggest that well-functioning OSH management, better understanding of the AM systems and transparency, could increase the sense of coherence and trust in the organization and reduce the power imbalance between workers and managers.

Diversity dimensions in research on trust at work

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Trust has been a core topic of sociological research in recent decades, as well as in economics and psychology (Buskens, Corten, and Snijders 2020; Schilke, Reimann, and Cook 2021). Most of the existing research focuses on the theoretical framing or on quantifying trust on a societal level

(Buskens et al. 2020; Schilke et al. 2021). Recent research on trust shows that homophily, also called affinity bias, is highly linked to trust-building and trustworthiness (McEvily, Weber, and Bicchieri 2006; Schilke et al. 2021; Snijders 2020). People who belong to the same structural categories tend to trust each other more and be trusted by others of the same category more (Growiec, Growiec, and Kamiński 2022). Those categories include dimensions of gender, race, class, age, sexuality, religion, culture, ethnicity, disability and attractiveness (Ch'ng 2021; Werkmeister 2016). In addition, it has been shown that categories which are used to establish one's identity are more relevant than those that do not (Werth, Peetz, and Broadbent 2018). Age and gender are examples of categories which have found attention in sociological research (Bonowski and Minnameier 2022; Gillanders, Lyons, and van der Werff 2021; Ilmarinen 2016; Scheuer and Loughlin 2019), whereas others like race or sexual orientation received little to no attention.

However, most of the existing literature on trust and diversity refers to diverse social settings other than work, such as the educational sector (Schröder et al. 2022), neighborhoods (Dinesen, Schaeffer, and Sønderskov 2020; Smith 2010) or public spaces (Powell 2011). Very few researchers have investigated the role of trust in modern work concerning workspaces and diversity. I intend to fill this gap by mapping out the existing research on the specific intersection where diversity and trust in workplaces intersect, and suggest possible starting points for future research.

To map those links, I use the reference manager Obsidian as a tool to graphically display the connections between diversity categories in the sociological research landscape on trust and work. Whenever one of these categories is either mentioned or referred to in the existing literature, it is flagged within the used program to then build a map that illustrates the number of references by size. In a further step, the intensity of the reference is to be evaluated. Is one or more dimension of diversity only mentioned, it is to be flagged a weak tie. If the dimension of diversity is thoroughly investigated, it is considered to be a strong tie.

The purpose of this systematical literature review is to highlight topics of interest like age or gender and expose possible blind spots in recent research, i.e. ethnicity or disability, and adapt those findings for future research designs.

Navigating freelance work in the digital age: A photovoice study of job characteristics and well-being among digital platform workers in Stockholm - The GIG-HEALTH project

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Background. Flexibility, autonomy, and job opportunities are some of the positive aspects described in the literature related to freelance work performed through digital labour platforms. However, this mode of work could also entail exposure to risks such as technostress, cyberbullying and income insecurity. Although these aspects may have an impact on well-being, evidence is scarce on the health effects of high-skilled online platform workers. Therefore, this study aims to provide evidence on how freelance platform workers perceive that their work is related to health and well-being, and describe their recommendations for improvement.

Methods. This study was conducted as part of the GIG-HEALTH project (<http://gighealthproject.com>). A group of 6 freelancers working through digital platforms were recruited through social media. The inclusion criteria were: (i) being older than 17 years, (ii) having worked for more than 3 months as a platform worker, (iii) speaking English, Swedish or Spanish, and (iv) working in Stockholm. The study design was based on photo-voice methodology, a participatory action research method that allows participants to use photography and group discussions to document their working experiences related to their health and well-being and foster change. By fostering change, we mean empowering individuals to document and reflect on resources and challenges, invite critical dialogue and reach relevant stakeholders. The photo-voice study was conducted in October – November 2022. Participants met for 1,5 hours in a series of 5 sessions. During the first sessions, participants discussed the photos and coded the issues and topics that arose (why they took that picture, what they wanted to show with it, what was the story behind the photo, and how this story was linked to health, etc). In the final session, following a problem-tree analysis, participants provided recommendations to improve their working conditions and well-being. Participants chose the final themes and photos.

Results: Participants took a total of 29 photos, and identified 84 sub-themes based on the positive and negative aspects discussed for each photo. These sub-themes were organized into four themes: (i) Terms & conditions, (ii) Time and place, (iii) Work for gigs, and (iv) Freelancer lifestyle. The participants described several job characteristics as both positive and negative, such as flexible working schedules entailing certain freedom but also stress, poor mental well-being, sleep deprivation and musculoskeletal pain. The participants provided several recommendations including better information about the implications of freelance work in schools, implementing checkpoints with the platforms when working in longer projects to ensure financial security, and improving access to social protection.

Conclusions. Freelancers working through digital platforms describe similar positive experiences (e.g., flexibility) and challenges (e.g. difficulties accessing social protection) as “traditional” freelancers. However, they face additional stressors specifically associated with working on digital platforms with implications for health and well-being, including challenges in negotiating terms and conditions with the platforms and increased competition for “gigs” which drives down wages. Participants recommend that policies should be implemented to improve social protection and financial security, in order to increase resistance against work related stressors.

Exploring the correlates of overtime and 996 phenomenon in China: Evidence from CGSS and CHFS data

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The “996” phenomenon, an unofficial working schedule requiring employees to work from 9am to 9pm, six days a week (In fact, the work schedule more than 60 hours per week is unofficially defined as “996” by “996 campaign” (2022)), has sparked widespread online protests in China due to its unreasonable demands on employees. Although initial protests were largely led by programmers, office workers from various industries have since joined in. In order to gain a better understanding of whether only office workers are likely to experience the 996 phenomenon, it is necessary to study the employee characteristics that are most closely associated with overtime in China.

Drawing on theories of occupational class, labor market segmentation, work arrangements, and the ideal worker model, the study examines how overtime varies across demographic factors, occupational classes, work arrangements, and industries/sectors. Specifically, the research question is: “Which characteristics of employees are more likely to be correlated with overtime and the 996 phenomenon, and how do they vary across these factors?”

The research is currently in the data cleaning stage. Regression models are being employed to analyze the relationship between overtime incidence and employment relations using data from the China General Social Survey (CGSS 2003-2017) and the China Household Finance Survey (CHFS 2017 and 2019). The normal working hours reported by respondents with reported overtime hours are used to identify those working on a 996 schedule (i.e. more than 60 hours per week). Statistics from the dataset indicate that around 50% of employees work overtime, with 13% of them on a 996 schedule. Additionally, preliminary results suggest that different employees have distinctive working overtime incentives. For example, there is a positive correlation between unpaid overtime hours and future career benefits (e.g., wage growth) for white-collar and full-time workers (ideal workers), suggesting that potential long-term benefits incentivize unpaid overtime rather than pure managerial exploitation (i.e. wage theft) for this type of employee.

This study will make a contribution by providing a comprehensive quantitative analysis of the correlates of overtime in China for employees with different demographic characteristics, occupational classes, and work arrangements across various industries and sectors. The research sheds light on previously understudied white-collar and highly skilled workers in China, and offers evidence-based recommendations for policies and practices to promote a healthier and more sustainable work-life balance for employees in China.

Reference:

“996. Campaign”. (2022). 996. Campaign. https://996.icu/#/en_US

Complex mental health at work: A phenomenology of racialisation and disclosure

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Despite 16% of the working age population having a recognised form of disability; unemployment, underemployment, broken work trajectories and subtle forms of exclusion are synonymous with the lived experience of disabled people (Williams and Mavin, 2012), particularly for those with mental health conditions (Spirito and Bellini, 2008). The incidence of mental health episodes between those aged 16-65 is rapidly increasing (WHO, 2022), disproportionately affecting minority ethnic communities who are more likely to face mental health problems, but are heavily under-researched (Thornton, 2020: p.368), making it vital to provide empirical and theoretical pathways to better understanding, challenging and supporting mental health disability provision in the workplace. Yet while organisational practices surrounding ED&I are abound, recent critique has questioned their efficacy and ability to challenge more complex and embedded forms of inequality (Carrillo Arciniega, 2020).

To explore this further, this project focuses on the experience of organisational disclosure for minority ethnic individuals with complex mental health (CMH) biographies (experiences or conditions that are significant, and often have multiple forms of presentation (Davies et al., 2005) that may elude formal medical diagnoses). Given they are often highly stigmatised, cultural and organisational intersections with ethnicity and disability are particularly complex in terms of how such individuals are included – or excluded— from work. Despite this, there is very limited literature or conceptualisation surrounding CMH at work. To counter this, the study will draw on organisational disclosure as an analytical moment for understanding how employees, managers and organisations negotiate the complex ontological and epistemological terrain in which ethnic and CMH identities in workplaces sit. Going beyond current outcome-based works on disclosure (e.g. Pennington, 2010), it considers the uneven links between disclosure, agency and resistance in organisational contexts where dynamic processes make disclosure manifest (or be resisted) in particular ways (McDonald et al., 2007). Furthermore, bearing in mind the stark cultural variabilities in how CMH is experienced, conceptualised and described, this project challenges dominant Western-centric ways of understanding, dealing with, or even resisting mental health practices at work that often do not represent Global South contexts and individuals (Jorge, 2003).

The project adopts a critical phenomenological approach, which “combines insights regarding embodied lived experience with analyses of socio-political structures and power relations that frame, inform, and shape that experience” (Stanier et al., 2022: p. 4), and centres disclosure as not only an empirical focus, but also a theoretical imperative and methodological tool. Conducting semi-structured interviews with 15 UK-based minority-ethnic employees living with complex mental health conditions [Phase 1], and vignette-based (based on participant accounts from Stage 1) semi-structured interviews with 15 UK-based employers who deal with disclosure [Phase 2], this project explores: (i) How do organisational stakeholders negotiate the organisational disclosure of complex mental health conditions (CMH)?; (ii) What is the relationship between organisational CMH discourses and normative organisational epistemes? (iii) How do those with lived experience of CMH agentially engage with/resist workplace disclosure practices and norms? (iv) In what ways is complex mental health (CMH) differentially experienced by Global North and Global South workplace contexts?

Increased risk of COPD amongst precarious workers in Sweden: A register-based study on health risks in precarious places

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Chronic Obstructive Pulmonary Disease (COPD) is a respiratory condition characterized by airflow limitation resulting in difficulty in breathing. COPD in Sweden was estimated to 7% (men 8.3%; women 5.8%) in 2012. COPD is the fourth leading cause of death worldwide and mortality from COPD is expected to rise. After tobacco smoking, occupational exposure to dust and fumes is the most important risk factor for developing COPD.

Precarious employment (PE) has been associated with higher risk of mental health issues, cardiovascular diseases and stroke. Previous research suggests that workers in PE are more

exposed to some of the risks associated with COPD. To enable preventative measures among precariously employed workers and gather the information needed to resist harmful workplace exposures. More knowledge is needed on which specific occupational exposures are related to COPD. This study aims to investigate if workers in precarious employment are at higher risks for developing COPD in Sweden.

Two possible pathways through which precariousness could affect the risk of COPD are considered, first, PE workers being exposed to higher levels of chemicals and particles, possibly in combination with lack of personal protective equipment (PPE) and safety training, second, the possibility of an association between smoking habits and PE. Lower socioeconomic status is related to higher smoking rates, and important socioeconomic factors create a confounding effect that influences both the risk of being in PE and the risk of a harmful lifestyle, including smoking.

PE will be measured following the Swedish Register Operationalization of Precarious Employment (SWE-ROPE). The variable combines five items of PE, contractual employment insecurity, contractual temporariness, multiple jobholding, income level and coverage of collective bargaining agreements, and scores them, resulting in a final score between -9 and +2. The score was then used to create the following exposure groups at baseline (2003): standard employment (SE) (score 0-2), the in between group (score -1 to -3), and precarious employment (PE) (score <-3). Cases will be identified as having COPD diagnosis between 2004 -2017.

For measuring occupational exposure to chemicals and dusts, a quantitative job exposure matrix (JEM) will be used. The JEM is based on data from FINJEM with adaptations to Swedish conditions. The JEM contains information on the exposure levels to several airborne particles for the period of 2000-2003 for all occupations registered in the Swedish labour market coded accordingly to the Swedish version of International Standard of Classifications of Occupations (ISCO).

For measuring the confounding variable of smoking the data obtained from the Swedish medical birth register (SMBR) for the years between 1983-2003 will be used for women and data from the Swedish military conscript register (SMCR) for the year 1969 were used for men. The data will be combined into one variable consisting of non-smokers and smokers, where smokers include individuals who smokes 1 or more cigarette/day.

This study will move the state-of-art on the health impact of precarious employment by exploring respiratory effects for the first time. This is very relevant for achieving the 8th sustainable development goal on decent work.

Wellbeing in the post-pandemic employment relationship

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Work makes us ill. HSE (2022) data shows 1.8 million workers in Britain experience work-related ill-health, and 914,000 cases of work-related stress, depression and anxiety equate to 1.5 times the population of Glasgow. While Covid19 profoundly changed the work environment and brought the protection of individual health and wellbeing to the fore, the percentage of senior teams for whom employee wellbeing is a priority already appears to be declining (CIPD, 2022).

This apparent neglect of wellbeing (Calvard & Sang, 2017; Guest, 2017) has been attributed to a dominant HR orthodoxy promoting organisational flexibility (Butterick & Charwood, 2021), focusing on shareholder returns (Collings, McMackin, et al., 2021). These models have contributed to increased workplace inequalities, themselves exacerbated by the pandemic (Blundell et al., 2020; Collings, Nyberg, et al., 2021).

A key area where these inequalities and their effect on wellbeing are evident relates to work/life balance and the difficulty for workers in constructing a holistic sense of wellbeing where work is expected to take precedence within inflexible working arrangements. However, the pandemic has the potential to create the conditions for a renewed focus on employee-centred organisational practice that resist a return to the status quo (Collings, Nyberg, et al., 2021; Guest et al., 2022; Warhurst & Knox, 2022). For example, levels of worker flexibility such as hybrid and remote work remain significant (ONS, 2023). Consequently, there is a need for research considering whether the pandemic has been a catalyst for permanent change in the employment relationship - especially in

terms of workers' capability to construct a more individually appropriate sense of wellbeing in a context that better balances individual and organisational needs.

Therefore, this research will use Sen's capability approach (Sen, 1993, 2001 [1999]) to determine how workers in the Scottish further education sector are constructing wellbeing through the achievement of an individually chosen set of functionings or activities, and the ways in which this is supported and challenged by organisational and sectoral practices. Enhancing the research process, **Sen's framework has been integrated into a unique conceptual model reflecting the contribution made** by dignity, and decent, fair and meaningful work to development of wellbeing capability.

Scotland's further education colleges are important contributors to the economy, but the sector remains under-researched. Colleges were also significantly affected by the pandemic due to their focus on in-person delivery of skills-based and vocational learning. Therefore, they offer a clear potential for consideration of pre- and post-pandemic approaches.

The methodology is qualitative, based on principles of critical realism, recognising that social phenomena are influenced by the reality in which they occur (Stutchbury, 2022). Using a multiple case study approach, data will be collected through semi-structured interviews, supplemented by other techniques such as observation and documentary reviews.

Data collection will commence in September 2023. If selected for the conference, the presentation will focus on articulating the problem, how this is addressed by the research, and a discussion of the contribution that this will bring to the field of wellbeing research.

Full citations can be provided if required.

The role of transience in understanding disparities within organisations: Gender in the Saudi context

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This paper attempts to provide a different approach to how gender (in)equality can be manifested and understood within the unprecedentedly changing socio-institutional context of Saudi Arabia. This timely study investigates how new patterns of (in)equalities develop through the concept of transience, within three major sectors: multinational enterprises, semi-government organisations and state-owned companies. Transience as a concept has received little attention in organisations studies literature (Lyon, 2005; Reid-Musson, 2014), where it has been used in limited contexts (e.g., transient workers in Singapore: Hamza, 2009), having often interchangeably referred to as 'precarious work'. Precarity here is believed to be centred around how vulnerabilities create/sustain inequalities, and is essentially associated with vulnerable groups (Vosko, 2011; Kalleberg and Hewison, 2013). Nevertheless, transience as a concept, which has been utilised in this paper, goes beyond the limitation of precarity/transient work, attempting to provide a holistic lens of how inequalities are (re)produced within both vulnerable and privileged groups. We define transience in this particular context as 'the situation where female employees' experience, directly or indirectly, reinforces the sense of temporariness/unsustainability of their social networks that provide them with socio-institutional protection'. This is manifested through (1) the temporariness of the protective role of the state towards Saudi women, and (2) the lack of institutional/organisational protection which in turn helps create unsustainable personal protection networks as an alternative. This could be triggered via (a) the emergence of temporary opportunity/advantage which is strengthened by temporary social networks, and/or (b) when an employee feels a temporary or continuous threat such as the sense of temporary employment (or the predicted removal from the country in the case of non-Saudi women) which affects their socio-institutional advantages/benefits. This conceptual approach sets a challenge to assumptions prevailing in literature (e.g., AlAhmadi, 2011; Khalaf et al., 2015) in which Saudi labour market dynamics are perceived static through (1) providing relatively secure jobs to Saudis, driven by the rentier-welfare approach, and (2) that the nature of increasing female labour participation is an efficient approach to tackle the ever-lasting gender inequality in the labour market. We argue here that not only the concept of transience can be useful to comprehend (in)equalities on the organisational level, but it can also prove beneficial on analysing the overall gendered structure of the

labour market. A unique aspect of this study was the emphasis on intersectionality that captured the hitherto under-considered dimensions of tribe alongside nationality and class. In line with previous literature (Mobarak and Söderfeldt, 2010; Alhejji et al., 2018; Syed et al., 2018; Tschirhart, 2014; Sian et al., 2020), the analysis highlights that societal traditions and misinterpretation of religious texts can emerge as barriers for gender equality. Moreover, this study underlines how transience as a concept provides an explanation of how organisational disparities can be created/consolidated, triggered by the sense of gendered uncertainty vis-à-vis socio-institutional protection (perceived as normal) within organisations and the overall labour market. Broadly, this concept is suitable to examine distortions within the labour market dynamics alongside socioeconomic precarity in times of change within rentier economies. This study comes to fill the gap in literature of socio-institutional inequality by incorporating themes of precarity, gender equality and the Saudi labour market, where the examination of GCC contexts, particularly the Saudi context, lack consideration of the unique socio-economic characteristics (Salem & Yount, 2019; Hanieh, 2011).

Women without a paid job and social benefits: A cluster analysis using Dutch population register data

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Women's economic independence, or their ability to sustain themselves without support from others, is crucial in achieving gender equality. Economic independence is endangered if there is no engagement in paid work, which is more likely for women than men in OECD countries where average labor force participation rates are 52.4% and 68.6%, respectively. Women without paid work who also do not get social benefits might be particularly economically vulnerable because of their dependency on their personal environment (e.g., partner). Still, they may be employable, and given the current labor shortages, societies should aim to utilize all potential workforce.

Despite their economic vulnerability and their unused work potential, research on the group of women without a paid job and social benefits is limited. Prior literature instead focused mainly on the reduction of working hours, specifically on mothers' or married women's labor force participation, and the middle class. There are indications that the group of women without a paid job and social benefits may actually be diverse in terms of various characteristics (e.g., age, migration background). A comprehensive picture of this potentially heterogeneous group is not only useful for a better understanding of what drives women (not) to participate on the labour market, but also for targeted and therefore more effective labor market participation interventions.

Following the scientific call to address heterogeneity when it comes to the understanding of work-family relations, we take into account the connectedness of the various characteristics that are likely used for self-categorization into social groups. According to the intersectionality theory, the combination of these social group memberships creates distinctive social positions for the women without a paid job and social benefits, which influence their perceptions of the world, experiences and outcomes and group them into new meaningful clusters. Therefore, we seek to answer: "Which types of women without a paid job and social benefits can be identified in terms of their economic, sociodemographic and contextual characteristics?"

A cluster analysis is a suitable way to answer this question, as can be seen in recent studies, which have taken the intersectionality perspective on similar topics as ours, such as work-family reconciliation, the work course (of women) in later adulthood and employment behavior of mothers. These studies obtain clusters such as "work-oriented mothers", "housewives with sideline employment", or "early labor market exits". However, women without a job are either not part of the analyzed population, or they form a single cluster.

We contribute to the literature by using Dutch population register data that allow us to identify detailed clusters within the group of women without a paid job and social benefits. We analyze data from 2019 to give an up-to-date picture that is not influenced by the Covid-19 pandemic. The data contain information on employment, income, and the receipt of social benefits, as well as various individual, partner, household, and contextual characteristics. The cluster analysis partitions the group of women without a paid job and social benefits and allows a description of patterns of similarities and differences regarding these characteristics.