# Precarious Employment: An Overlooked Determinant of Workers' Health and Well-Being?

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#### 1 Introduction

In the past four decades, high-income countries have seen a thorough socioeconomic restructuring with important implications for the jobs of many workers. There has been an increasing polarization of "good" versus "bad" jobs (Kalleberg, 2011). "Bad jobs" are overproportionally taken by the least advantaged socioeconomic strata of the working population (Kalleberg, 2016). But what exactly constitutes a "bad" or a "good" job? This question brings us to the concept of "job quality." Many definitions of job quality exist, but there is a certain consensus that a basic conceptual distinction should be made between "work characteristics" (i.e., job features related to the "work task" itself) on one hand and the "terms and conditions of employment" on the other hand (Parker & Ohly, 2008; Warhurst et al., 2017). Both dimensions are related to each other, but it needs to be clear that similar tasks – say, those of a shop assistant (e.g., lifting goods, controlling stock, informing clients,

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etc.) – can be performed under different terms and conditions of employment (e.g., type of contract, work schedule, package of pay and benefits). This chapter is concerned with those terms and conditions of employment. We propose a multidimensional concept of "precarious employment" to be used in empirical research among workers. Answers to the question on what defines "good" and "bad" jobs also depend on the considered outcome. Good or bad for what? In this chapter we will consider the broad domain of workers' health and well-being. In research on occupational health and safety (OHS), "employment-related" risk factors are, however, often forgotten. Historically, research on health and well-being at work has been very much oriented towards the consequences of work tasks and far less with the consequences of employment conditions (Benach et al., 2010). Due to the shift towards a service economy, it was assumed that the "old" harsh and dangerous "industrial working conditions" would gradually disappear and make work healthier (Toch et al., 2014). Since the last quarter of the twentieth century, however, it became clear – for example, in the landmark studies based on the Whitehall cohort (Bosma et al., 1997) – that new threats to the health and well-being of workers were gaining importance. These were the so-called "new," psychosocial risks: factors related to the design, intensity, and social context of work tasks. To date, convincing evidence shows that the most "strainful" and "disequilibrated" psychosocial work situations exert an important impact on various mental and physical health conditions (Marmot et al., 1999).

A third set of risk factors is related to the "quality of employment conditions and relations" (e.g., the stability and controllability of contracts, level and stability of wages, working hours flexibility, access to social rights, (collective) voice, vulnerability, and interindividual relations with members of the hierarchy). A job combining several adverse employment conditions and relations can be labelled as a "precarious job." The potentially negative consequences for workers' health of precarious employment situations are often overseen – certainly in policy terms (Benach et al., 2014). Empirical evidence on the adverse health effects of precarious employment is emerging. It is important to underscore that both precarious employment and its consequences for health and well-being are unevenly distributed across social groups (e.g., gender, age groups, occupations). As a consequence, precarious employment is an important social determinant of health in the twenty-first-century world of work (Benach et al., 2014).

In this chapter, we will first describe the political-economic roots of precarious employment. Then we will outline its conceptual underpinnings and different approaches towards empirically investigating precarious employment. Subsequently, an overview of empirical evidence on the unequal distribution of precarious employment among the working population, between countries, and on the relationship with health and well-being is given. In the conclusion we present a future research agenda and make a plea for a policy program aimed at reducing precarious employment and its harmful consequences.

#### 2 The Political-Economic Roots of Precarious Employment

The way employment is organized has been heavily affected by specific macroeconomic and policy changes. Almost all European countries have taken policy measures aimed at increasing employment rates, prolonging working careers, and cheapening the cost of labor (Kuttner, 2018). Related to that, there has been an increasing polarization of "good" versus "bad" jobs, involving the clustering of working conditions, contractual stability, flexibility, wage levels, and other features of a job (Kalleberg, 2011). This, in turn, has led to an increase of precarious employment at the "lower end" of the labor market. It is worth taking a closer look at these trends.

### 2.1 The Post-Second World War "Standard Employment Relationship"

In most of the literature on precarious, non-standard, or flexible employment, there is an explicit or implicit reference to a supposed "standard employment model". This so-called standard employment relationship (SER) took shape in the decades immediately after the Second World War. In that epoch, the SER emerged as a kind of "golden standard" of good employment, involving full-time, permanent employment, a family wage, social benefits, strong regulatory protection, regular working hours, and possibilities for career progression (Mückenberger, 1989). According to Standing (2011), the key term characterizing the SER-model was "security" – one could also say: "predictability." The SER-model did not remain hegemonial for a long time, was quite heterogeneous over countries and industries, and also excluded many workers (e.g., the female labor force) (Vidal, 2016). Nevertheless, it remained a strong normative model of how a "standard" job should look like.

The SER-model is tightly related to the Fordist production model and the historical compromise between labor and capital characterizing the post-war period. Kuttner (2018) called this short period of more equal distribution of power between labor and capital a "vulnerable miracle." It was indeed an extraordinary combination of factors – techno-organizational, macro-economic, (geo-)political, demographic, and ideological – that shaped the employment relations in this particular period. Many excellent analyses on this epoch have been published (e.g., Jessop, 2001), so it is not our intent to reproduce these detailed accounts. However, it might be useful to briefly highlight the most relevant issues.

First of all, there is the techno-organizational aspect. The early and mid-twentieth century was the time when the modern enterprise came to full maturity, including the separation of ownership and control and the growth of a professional managerial class (Weil, 2014). This trend led to the emergence of large corporations in the USA and later in Europe, as pursuing economies of scale was key to increase profitability (Chandler, 1990). This was facilitated – certainly in industry – by technologies of

mass production, leaning on a certain extent of standardization and thus increasing the predictability of the production process (Vidal, 2016). This organizational format compelled the need to rely on formal management procedures, also in the domain of human resources. Formalization in human resources was realized through the creation of internal labor markets, where employment relations were dominated by rules and procedures (Doeringer & Piore, 1971) and trade unions became formally integrated in the system of industrial relations (Streeck, 2005). An important precondition for this model was the "disciplining of capital" during the post-war period. The Great Recession of the 1930s and the Second World War paved the way for Keynesian macro-economic policies (Jessop, 1994). Part of this Keynesian program consisted of imposing restrictions on (speculative) capital, including strict limits upon the banking industry, negative real interest rates for rentier capital, and limitations to currency speculation and international movement of capital (the socalled Bretton Woods system) (Kuttner, 2018). This favored stable, long-term investments in the real economy. Moreover, also organized labor – for very specific reasons – gained a uniquely strong position of power in the history of capitalism. This power position is convincingly reflected by the historically high unionization rates and electoral support for left political parties in the interbellum and the 1945–1980 period (Korpi, 1983). At the same time, employers saw the advantages of building a stable employment regime backed by a strong welfare state (Swenson, 2004). Finally, also ideological factors played a role in the economic model of "embedded liberalism": the devastation of the Great Recession and the Second World War had profoundly discredited the basic premises of the laissez-faire liberal economic thought (Clift, 2014) at a moment when the capitalist model was seriously challenged by the Soviet Bloc (Offe, 1983).

#### 2.2 The New Employment Model of Neoliberal Capitalism

As the above-discussed cocktail of factors was crucial for the emergence of the SER-model of employment, it was their unravelling that put the SER as an employment standard under pressure. The decline of this post-war constellation considerably weakened the bargaining position of labor and in particular those groups of workers who had to rely on their collective bargaining power (Korpi, 2006). Both the crisis of Fordism and its implications for employment conditions have been described with vigor by many authors (e.g., Vallas, 1999). Again, it is worthwhile to briefly address the most important issues.

First of all, the business model of the large bureaucratically organized corporation lost ground to a new form of corporation, that Weil (2014) labelled as the "fissured enterprise." Instead of organizing as much activities as possible in-house, this new type of "flexible firm" rather acts as "a star" in a small solar system with peripheral companies and a loosely bound workforce circling around it. As a consequence, corporations are driven towards dismantling their internal labor markets (Grimshaw et al., 2001). According to Weil, the main drivers behind the new

organizational model are the renewed power of capital that got rid of the constraints imposed by Keynesianism and new technological possibilities (Weil, 2014). Capital, in this case, can be considered a "push factor": the abandonment of the Bretton Woods Agreement and the throwing down of the barriers between investment banking and commercial banking unleashed massive amounts of cross-border investment capital (Kuttner, 2018). Private equity firms managing this capital increasingly pushed corporations in the "real economy" to optimize short-term profitability by cutting costs through shedding their less profitable activities (Weil, 2014). The resulting "fissured" corporate structure would not be possible without new technologies figuring as a "pull factor": mainly falling coordination costs through the widespread application of ICT and related inventions in logistics and retail (Blair & Lafontaine, 2005). Moreover, spurred by the neoliberal economic doctrine, governments - although to various extents - started to reform their labor markets in the pursuit of more employment flexibility, less stringent collective bargaining regulations, and cheaper wage costs for certain categories of the work force (Harvey, 2005). Along these lines a new employment model evolved, with important implications for many workers.

### 3 Conceptualizing Employment Quality and Precarious Employment

Job quality researchers have tried to impose structure to the sheer endless list of work-related risks and benefits of contemporary jobs. When considering the basic distinction between "intrinsic work-task characteristics (working conditions)" and the "conditions and relations of employment" (Warhurst et al., 2017), it can be noted that the first category received far more scholarly attention. Occupational stress models have emerged as strong "middle-range concepts" helping to make sense of the relation between (psychosocial) working conditions and workers' well-being (Siegrist & Theorell, 2006). Similar conceptual work concerning the conditions and relations of employment is less developed (Julià et al., 2017). In this paragraph, the employment quality model for studying precarious employment is proposed as a conceptual framework.

### 3.1 Traditional Research on the Quality of Employment Arrangements

Before delving into the conceptual dimensions of the model we propose, it is worthwhile considering the traditional approaches towards the consequences of employment arrangements. There have been two dominant approaches so far.

The first one is a "pragmatic risk factor approach", mostly oriented towards the study of various forms of non-standard or temporary employment contracts (e.g., temporary agency employment, short-term contracts, zero-hour contracts, bogus and dependent self-employment), of which evidence generally points towards harmful effects for workers' well-being (Kreshpaj et al., 2020). Other employment conditions and relations have also been studied as individual risk factors for workers' well-being: long (Bannai & Tamakoshi, 2014) and irregular or unpredictable working (Arlinghaus et al., 2019) hours, involuntary part-time work (De Moortel et al., 2018), a lack of participation and empowerment (Spreitzer, 2008), unjust or authoritarian treatment by management (Harms et al., 2017), and inadequate personal income (Cummins, 2000). Although these "single-indicator studies" have revealed important insights, they do not consider the common causes behind these specific unfavorable employment characteristics. This can be considered a limitation, because the clear patterning and clustering of employment conditions suggests there is a common underlying cause. The multidimensional approach of employment quality, in contrast, adopts a holistic approach towards workers' employment situation (Hofmans et al., 2020), highlighting the underlying condition of precariousness.

The second approach is based on the notion of "perceived job insecurity." This body of research has demonstrated consistent associations with various health outcomes, especially poor mental health (Harvey et al., 2017). The perceived job quality approach has furthermore been broadened up towards the fear of loss of other valued job features, i.e., so-called qualitative job insecurity (Hellgren et al., 1999). Again, this "subjective approach" has proven to be highly important for the field, as most insights on the harmful effects of sub-standard employment quality come from these studies. A focus on the perceptions of employment instability or loss of valued features, however, does not necessarily provide information on the underlying causes of these perceptions (Benach et al., 2014). Put differently: two workers under similar circumstances can evaluate their situation differently, and so – although this differential evaluation might be an important mechanism in explaining harmful effects of precarious employment – the underlying causes of this situation are not considered when assessing perceptions alone. This creates the risk that analyses of precarity get stuck in discussions around variation in individual preferences and personality characteristics – and with that an overly hedonic approach towards the reality of employment and wider living circumstances (Warhurst et al., 2017).

#### 3.2 The Multidimensional Employment Quality Approach

The employment quality approach attaches to the "objectivist" or sociological strand in job quality research (Warhurst et al., 2017) and presents a theory-based, multidimensional, and holistic approach towards employment arrangements. This model has been proposed in previous contributions of which the most important are Benach et al. (2014) and Julià et al. (2017). Employment quality can be defined as:

"... a multi-dimensional construct, grasping into different features of the employment conditions and relations, including the stability and controllability of contracts, level and stability of wages, working hours (amount, timing, discretion), access to social rights, future employability, collective bargaining, and interindividual relations (with management)." Precarious employment should consequently be seen as a specific case of employment quality, where: "there is an accumulation of unfavorable 'employment quality characteristics' that is essentially due to the weak bargaining power of a worker."

In defining the dimensions of employment to be included in the employment quality model, the "old" Fordist SER serves as an explicit point of reference, a "golden standard" from which specific employment arrangements can deviate. In doing so, however, we do not necessarily mean to idealize the SER and each of its features. We do acknowledge that current labor markets have become far more diverse – in terms of activities and worker profiles – when compared to the post-war situation. In some situations, the SER-norm might prove unsatisfactory for all parties involved in an employment relationship. The point we want to make is that the SER-model is still deeply rooted in Western workers' minds as a "standard situation" and that, even in the early twenty-first century, issues like employment and income security, bearable working hours, or access to social protection and workers' rights are still top-of-the-bill priorities for many workers.

The concept of employment quality presented here refers to seven dimensions of employment that might or might not deviate from the SER-model. Phrased in a "negative way," these are the following: (1) temporariness (i.e., the duration of the formal contract), (2) disempowerment (i.e., representation and participation), (3) vulnerability (i.e., adverse interpersonal relations and administrative issues), (4) workplace rights (i.e., lack of access and lack of power to exercise rights), (5) economic unsustainability (i.e., low or unstable income), (6) undesirable working times (i.e., long, irregular, unpredictable, or at "unsocial" moments), and (7) low employability opportunities (i.e., training and internal labor market careers). These dimensions are further outlined in Table 1, and they have been justified in more detail in other publications (e.g., Julià et al., 2017).

It is important to note that there is some variation in the specification of employment quality/precarious employment concepts. Most of the approaches refer to one specific paper presented by Rodgers at a seminar organized by the *Université Libre de Bruxelles* in 1989 (Rodgers, 1989). Rodgers (1989) defined four dimensions of precariousness – "uncertainty of continuous employment," "lack of protection," "low control over working conditions," and "low income." Subsequent attempts to operationalize multidimensional accounts of precarious employment have varied within a certain range: some are broader, others are more restrictive. We will not present an overview of specific approaches in this chapter, but merely point the way to some excellent recent reviews, i.e., by Van Aerden (2018) and Kreshpaj et al. (2020). The scheme presented in Table 1 largely aligns with the employment quality approach, which is closely related to the Employment Precariousness Scale (EPRES), a measuring instrument for precarious employment that was constructed by a collective of researchers related to the Pompeu Fabra University in Barcelona

 Table 1
 Overview of the employment quality approach towards measuring precarious employment

Dimension Subdimens  1. Temporariness Type of encontract  Temporarines permanent employme  2. Disempowerment Worker representation workplace	nployment ness in	Description  Departures from "open-ended contracts" are considered as "more precarious"; a gradation can be made among "temporary contracts," with very short, agency, or informal agreements being considered the most precarious  Contractual temporariness might be combined by other indicators, such as short tenure or restructuring/downsizing <sup>a</sup>
Temporari permanent employme  2. Disempowerment Worker rep	ness in	considered as "more precarious"; a gradation can be made among "temporary contracts," with very short, agency, or informal agreements being considered the most precarious Contractual temporariness might be combined by other indicators, such as short tenure or
permanent employme  2. Disempowerment Worker rep  Participation	nt	by other indicators, such as short tenure or
Participation	oresentation <sup>b</sup>	1000 acturing downstants
		Access to an employee representative, being able to resolve issues through formal worker representation, regular meetings in which employees can express their views
		The extent of involvement in decisions on work schedules, involvement in work planning, setting of objectives, decisions on compensation schemes
3. Vulnerability <sup>c</sup> Authoritar	ian treatment	Generally problematic relations with employer/ management, including unfair, intimidating, or aggressive treatment, being treated as redundant or disposable
Abusive tro	eatment	Being subjected to psychological, verbal, or physical abuse
Being chea	nted	Being subjected to (frequent) "cutting corners" by the employer or employment agency (e.g., errors in the disadvantage of the worker in paychecks, excess working hours, paid holidays)
Being unin	formed	Lacking information on important workplace issues (e.g., formal procedures, health and safety, etc.)
4. Workplace rights <sup>c</sup> Lack of ac workplace		Lacking access to established workplace rights (e.g., paid holidays, paid sick leave, pensions, taking time off for important reasons, etc.)
Lack of po exercise w rights		Not being able to exercise the rights one is entitled to because of fear for problems with management
5. Economic Low incomunsustainability	ne	Low hourly and monthly wages and/or covering basic needs
Lack of no benefits <sup>b</sup>	n-wage	Being excluded from benefits typical in the country, sector, or profession one is employed in (e.g., company pension, compensation for lunch
Underemp		or commuting, company car, etc.)

(continued)

Dimension	Subdimension	Description
6. Undesirable working times <sup>d</sup>	Long working hours	Excessively long working hours (mostly defined at 48 h/week or more)
	Working times irregularity	Regular changes in the work schedule, high variation in the timing of work schedules, shift work
	Unpredictable working times	Changes in the work schedule at short notice, requirement for being "standby"
	Work at socially undesirable times	Having to work at times when most workers do not have to work (e.g., evening and night work, weekend work)
7. Low employability opportunities <sup>b</sup>	Lack of training opportunities	Being excluded from on-the-job training or formal training sessions during working hours and/or paid by the employer
	Lack of career opportunities	Death-end jobs, no possibilities for progress, departing from the notion of the "internal labor market career"

Table 1 (continued)

(Julià et al., 2017). This approach assumes that specific jobs can resemble the dimensions of the SER-model to various extents. Moreover, patterns of employment features are not coincidental, but coincide with the types of employment that can be expected on theoretical grounds in different niches of the segmented labor market (Vanroelen, 2019).

The employment quality model has been operationalized in several empirical studies, mostly investigating its relationship with workers' health and well-being. Largely two approaches have been followed in doing so. In a number of studies (e.g., Padrosa et al., 2020), proxy indicators have been identified in order to use existing large-scale surveys for empirically demonstrating the hypotheses of the model. A second approach has been to use a purposefully constructed survey instrument, the Employment Precariousness Scale (EPRES), in order to investigate the consequences of (low) employment quality for the health and well-being of workers (e.g., Vives et al., 2010). This EPRES-model was originally developed in Spain, but is currently extended to a number of other countries, including Chile (Vives-Vergara et al., 2017), Sweden (Jonsson et al., 2019), and Belgium (Vandevenne, 2020). Moreover, there have been some attempts to expand the employment quality model to non-wage earning worker groups, like the informally employed (Vives-Vergara et al., 2017) and self-employed (Gevaert et al., 2020). A review of the evidence emerging from these studies is made in the next paragraph. At this point, it is important to mention that the diversity of research efforts has also generated some

<sup>&</sup>lt;sup>a</sup>Tenure is only included in the EPRES for Spain, Chile, and Sweden

<sup>&</sup>lt;sup>b</sup>These subdimensions are included in several analyses using the EWCS 2005, 2010, and 2015 or US General Social Survey as sources of proxy-indicators. Employability is also included in the EPRES Belgium

<sup>&</sup>lt;sup>e</sup>Dimensions included in studies using the EPRES, abusive treatment and lack of information, are also included in proxy-approaches based on the EWCS surveys

<sup>&</sup>lt;sup>d</sup>This dimension is not included in the approaches using the EPRES, except for EPRES Belgium

inconsistencies in the number of dimensions of the employment quality model and its exact content (see Table 1 and its legend).

#### 3.3 Continuous Versus Typological Approaches

A final aspect that needs to be outlined concerns two types of operationalization of the employment quality model - i.e., as a continuous summed score or rather as a typology.

While the importance of non-standard employment is growing, the more or less "standard" job remains dominant in most high-income countries. This creates segmented labor markets. A cleavage of primary importance is assumed to exist between the "established core" of the labor market, consisting of "insiders" who keep resembling to the SER-model, and a "secondary segment" of peripheral jobs that have been increasingly subjected to contractual flexibility, outsourcing, and other forms of de-standardization (Doeringer & Piore, 1971). This cleavage shapes the central underlying assumption of the "continuous approach" – i.e., that the accumulation of unfavorable employment characteristics from a certain threshold onwards, and independent of specific types of employment forms or contracts, creates a "precarious labor market segment." The validity of this approach has been demonstrated both with proxy-indicators derived from the EWCS surveys (Padrosa et al., 2020), as with purposefully collected data from the EPRES questionnaire (Vives et al., 2011).

The typological approach – in line with more complex accounts of segmented labor markets (Davidsson & Naczyk, 2009) - assumes that a continuous account of employment precariousness might hide some complexity. De-standardization of the SER-norm can take a "low road" or a "high road" (Bosch, 2004). The "high road" is reserved for higher-skilled workers in strategically important functions and implies increased versatility, place- and time-independent work, and overtime work but at the same time leaves opportunities for worker-induced flexibility, enhanced career prospects, and strong bargaining power on the basis of desired skill sets. The "high road" suggests an emerging group of "portfolio workers" with a "boundaryless" professional life, moving from one opportunity to another in an independent and flexible way (Van Aerden et al., 2014). The "low road" towards flexibility is reserved for lower-skilled and generally less strategically important workers and corresponds to the secondary labor market segment. The shift in the balance of power (away from organized labor) is felt hardest in this segment of the labor market, as these workers were unable to substitute collective bargaining power with individual bargaining power (Wilkinson, 2013). For these workers, "non-standard" equals contractual and temporal flexibility, including temporary work, (involuntary) part-time work, or socially undesirable and unpredictable working times. Of course, countries and sectors have combined different "low road solutions," blending contractual and temporal flexibility (Eichhorst & Marx, 2015). Combinations of types of "low road flexibility" are assumed to lead to different types of employment in the lower segment of the labor market. More specifically, one type is predominantly characterized by part-time work, multiple job holdings, and even "working hours underemployment." This type of employment can be described as "unsustainable precarious employment," because it implies a high dependence on other income sources (e.g., the wage of a full-time employed partner). Another type is mainly characterized by a high level of exploitation that becomes apparent from very flexible and irregular working hours, sub-standard rights and social protection, contractual instability, and relatively low income and other rewards. This type can be described as an "intensive" form of precarious employment (Van Aerden et al., 2014). The latter group closely corresponds with the highest scores of the continuous precariousness scale, while the other de-standardized groups might remain unnoticed using the continuous approach (Van Aerden, 2018).

The typological perspective thus identifies "types of employment," of which some may be more precarious than others. Typologies know a long tradition in the social sciences. They provide a heuristic device that aims to summarize a social phenomenon's most essential features (Ritzer, 2007). Typologies offer a strong mental model helping to make sense of the reality of employment arrangements in a more holistic manner (Howard & Hoffman, 2018). The typological approach towards employment arrangements can be put into practice using "person-centered methods," like latent class cluster analysis (LCCA) (Hofmans et al., 2020). In our case, employees are rearranged into a limited number of categories in a probabilistic manner, based on their degree of similarity regarding indicators of employment quality. Van Aerden et al. (2014) showed that, applied to the entire EU-labor market, typically a five-category typology of employment arrangements emerges: "SERlike jobs," an "instrumental job type" (i.e., a lower-quality variant of the SER, involving limited rewards, lack of training opportunities, and poorer employment relations), "precarious unsustainable jobs," "precarious intensive jobs," and a "portfolio job type." As argued above, this constellation reveals "labor market segments" that can be assumed on a theoretical basis. Moreover, similar approaches, using different (sub-)datasets from a more restricted number of countries (Boot et al., 2019; Lukac et al., 2019; Van Aerden et al., 2017), incorporating the self-employed (Gevaert et al., 2020) or investigating the US labor market (Peckham et al., 2019), have come to fairly similar results, adding to the validity of the typological approach. Recently, the typological approach has also been used to determine a limited number of "typical employment" trajectories (Eisenberg-Guyot et al., 2020), also reflecting the above-discussed labor market setup.

#### 4 Empirical Evidence from Multidimensional Approaches

Empirical research using multidimensional indicators of precarious employment shows a highly consistent picture in terms of demographic and socioeconomic characteristics and country distribution. Also, a consistent picture in terms of relations with occupational health risks and outcomes of workers' health and well-being

emerges. In this paragraph, we will outline the current state of empirical knowledge derived from multidimensional approaches towards employment quality and precarious employment.

### 4.1 Who Are the Precarious Workers and Where Do We Find Them?

Most multidimensional indicators point out that women are more exposed to precarious employment than men. This is certainly the case for the "scale indicators" (Bosmans, Van Aerden, & Vanroelen, 2016; Julià et al., 2017; Vives et al., 2011). The typological approaches, however, put some nuance to this picture, showing that small, part-time jobs (precarious unsustainable jobs) are overrepresented among women, but that precarious intensive jobs are more frequently seen in men (Van Aerden et al., 2014). Moreover, all studies that looked into the age distribution of precarious employment found it to be more prevalent among younger workers (e.g., Benach et al., 2015; Gevaert et al., 2020; Lukac et al., 2019). Also, all studies stratifying precariousness by immigrant status have found higher mean scores (Benach et al., 2015; Vives et al., 2011) or prevalence of high precariousness (Julià et al., 2017; Kretsos & Livanos, 2016) among immigrants and people with immigrant background – at least in Europe and North America (Eisenberg-Guyot et al., 2020). Finally, clear patterns of intersectionality emerge, with young immigrant, female workers (of manual occupational class) being the most exposed to precarious employment (Vives et al., 2011).

Precarious employment is higher among the lower educated (e.g., Bosmans, Van Aerden, & Vanroelen, 2016; Gevaert et al., 2020; Kretsos & Livanos, 2016). These differences can be huge: up to double the prevalence of precarious employment specified as a dichotomy when primary educated are compared to university educated (Sabillón Casco et al., 2018). Moreover, Eisenberg-Guyot et al. (2020) have shown that this lower educated status is also a characteristic of precarious employment careers. Gevaert et al. (2020) showed, in their typological analysis, that also the most precarious groups of self-employed (i.e., "insecure self-employed") are clearly lower educated compared to other groups of self-employed. Other studies have considered occupational class and found lower-skilled manual workers to be highly exposed to precarious work (Benach et al., 2015; Julià et al., 2017). Van Aerden et al. (2014) show that "precarious unsustainable jobs" are more common among low-skilled blue- and white-collar workers, while "precarious intensive jobs" are concentrated among low-skilled blue-collar workers. When applying the ISCO categorization, mostly elementary occupations, operators, service workers, construction workers, and workers in agriculture have high precariousness scores (Eurofound, 2013; Kretsos & Livanos, 2016).

Also at the level of the employing organizations, a clear patterning can be seen. First of all, alongside the lines of establishment size, micro- and small

organizations have the highest frequency of employees in precarious employment (Julià et al., 2017; Van Aerden et al., 2014). In a study among nurses and nursing assistants in the Spanish region of Catalunya, Fité-Serra et al. (2019) found that workers in private institutions were worse off in terms of employment precariousness, compared to their counterparts in public institutions. Van Aerden et al. (2014) find an over-representation of SER-like and portfolio jobs among public sector workers. Olsthoorn (2014) could not find differences alongside the public-private sector distinction in the Netherlands. Overall, sectors with typically high levels of precarious employment are the primary sector, construction, and specific segments of industry (e.g., assembly) and services (e.g., hospitality and retail) (Bosmans, Van Aerden, & Vanroelen, 2016; Eurofound, 2013).

From a country perspective, overall, there is a pattern of higher employment precariousness levels in Eastern and Southern European countries, compared to the Nordic and some Continental (e.g., Belgium, Luxembourg, Austria) European countries (Bosmans, Van Aerden, & Vanroelen, 2016; Eurofound, 2013). Again, the typological approach adds some nuance to this general story: countries tend to vary in their type of "bottom of the labor market flexibility": some countries (e.g., the Netherlands, the UK, or Norway) tend to have a relatively high number of precarious unsustainable jobs, while others (e.g., Turkey or Albania) have a lot of precarious intensive jobs and hardly any precarious unsustainable jobs (Van Aerden et al., 2014). A few studies have been able to assess evolutions over time. Van Aerden (2018) concluded that during the period 2005–2015 mainly the precarious unsustainable job type has been on the rise in the EU (and the instrumental job type declining). Two studies on Spain and Italy showed that - while on average employment precariousness (measured as a scale) remained more or less stable in the 2006–2015 period – there were important increases in precariousness among fixed term (Arranz et al., 2018) and "newly created jobs" (García-Pérez et al., 2020).

### 4.2 The Relationship Between Precarious Employment and Other Work-Related Risks

Clear relations between precarious employment and work characteristics have also been found.

First of all, precarious jobs are found to be "less rich" in terms of the variability and intellectual complexity of work tasks and – related – possibilities for personal development (Bosmans, Van Aerden, & Vanroelen, 2016; Van Aerden et al., 2014; Vives et al., 2010). Moreover, precarious workers have lower autonomy in executing their work (Eurofound, 2013) and find less opportunities to have influence at their work (Vives et al., 2010). Besides, also some clear relations with job demands are seen. More elevated demands for precarious workers are of both physical, e.g., ergonomic demands and harmful exposures (Bosmans, Van Aerden, & Vanroelen,

2016; Eurofound, 2013), and psychological, e.g., work speed, high job strain, and general quantitative demands (Eurofound, 2013; Vives et al., 2010).

Regarding their social relations at work, workers in precarious employment report less support from co-workers and superiors (Eurofound, 2013; Vives et al., 2010). In contrast, they tend to be exposed more often to "unwanted" social interactions, such as violence, harassment, or unwanted sexual attention (Eurofound, 2013; Van Aerden et al., 2014). Precarious workers also report generally less frequent contact with other people at the work floor (Bosmans, Van Aerden, & Vanroelen, 2016).

Finally, a number of self-perceived work-related outcomes tend to be less positive. First and foremost it concerns issues of job insecurity and perceived employability (Julià et al., 2017; Van Aerden et al., 2015; Vives et al., 2010). Job satisfaction is negatively related to precarious employment (Van Aerden et al., 2015; Vives et al., 2010). Also subjective income deprivation (e.g., difficulties to make ends meet) and work-private conflict are found to be higher among workers with high employment precariousness scores (Vandevenne, 2020).

### 4.3 Health and Well-Being Correlates of Precarious Employment

Most of the empirical studies discussed in this paragraph were designed to investigate the relationship between precarious employment and health. Mental health outcomes are the most frequently studied. The majority of current research designs is cross-sectional, although – certainly for mental health – some longitudinal studies have been published recently.

There is convincing cross-sectional evidence for a strong negative association between precarious employment and mental health (Peckham et al., 2019; Van Aerden et al., 2016; Vives et al., 2011). The same holds for "precarious self-employment" (Gevaert et al., 2020). Different indicators of mental well-being have been included – e.g., SF-36, WHO5, GHQ12, and CES-D – all showing similar patterns. Julia et al. (2017) moreover showed that the multidimensional EPRES-scale for precarious employment was more strongly associated with adverse mental health than indicators of temporary employment. For mental health also some first longitudinal studies have been published, showing precarious employment causing a deterioration in the mental health status of respondents (Canivet et al., 2016).

The second most investigated indicator is self-rated health. Here too, quite consistent associations between high scores of precarious employment or membership of a "precarious employment type" and adverse health have been found (Van Aerden et al., 2016; Vives et al., 2010). This finding can also be extended to "precarious self-employed" workers (Gevaert et al., 2020). However, in one study – exclusively among Belgian workers – a nonsignificant association was reported (Bosmans, Van Aerden, & Vanroelen, 2016). Also for an aggregated list of physical complaints, a

positive association with precarious employment has been documented (Eurofound, 2013). Peckham et al. (2019) reported a higher frequency of workplace injuries in precarious types of employment among workers in the USA. Van Aerden et al. (2015) have reported a similar association with "bad safety climate" in a cross-European sample of wage earners.

## 4.4 What Are the Mechanisms Explaining the Link Between Precarious Employment and Workers' Health and Well-Being?

It is still not completely clear what the underlying mechanisms are linking precarious employment to these outcomes. We nevertheless assume – in part based on insights from qualitative research – that precarious employment relates to health and well-being largely via three main pathways: (1) through direct psychological effects such as uncertainty and feelings of unfairness and powerlessness associated with instable and sub-optimal employment conditions; (2) through the higher exposure to detrimental physical and psychosocial working conditions, weaker occupational health and safety measures, and low-quality social relations at the shop floor; and finally, (3) low income and under-protection from social risks such as unemployment, disability, and, later in life, retirement may create another leap towards material deprivation and its associated health consequences (Julià et al., 2017) (Fig. 1).

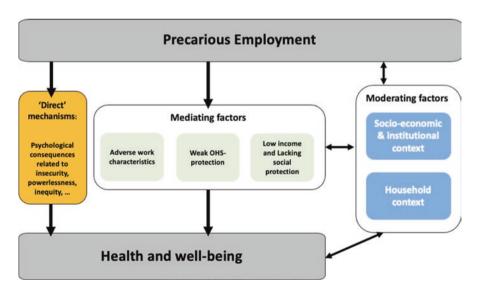


Fig. 1 Assumed mechanisms explaining the relation between precarious employment and workers' health and well-being

A first, direct, pathway concerns the psychosocial experiences related to the inherent characteristics of precarious employment. Precarious employment conditions (e.g., a temporary contract, an irregular income, an irregular working schedule) can make people feel uncertain concerning further employment, about the income they may expect next month, or regarding their working times in the days and weeks to come (Bosmans, Hardonk, et al., 2016). Also issues such as a lack of rights and benefits, limited employability opportunities, or unfavorable social relations on the shop floor (e.g., discrimination, harassment, stigmatization) can evoke psychosocial reactions with a negative impact on mental well-being (Bosmans et al., 2015). Nevertheless, our findings show that next to experiences of strain, some particular employment situations (e.g., short temporary assignments) that would commonly be qualified as "precarious" can also lead to positive experiences for some groups of workers (Bosmans et al., 2017). Some workers like temporary contracts because they enjoy the flexibility and variation in their work. Such experiences of "activation" are more often present in workers who deliberately choose for their employment situation, because they prefer an adventurous lifestyle, for example (Bosmans et al., 2017). In most cases these workers experience a high level of control over their careers and lives.

The two other pathways are of a more indirect nature. The second pathway concerns the exposure of precarious workers to low-quality working conditions and a poor job content. Job insecurity, competition for work, price competition, and underbidding of contracts (in case of subcontracting) can contribute to a range of hazardous practices including work intensification, working when ill or injured and accepting hazardous tasks (Julià et al., 2017). Another physical health risk for precarious workers concerns poor occupational health and safety prevention, including less qualitative protective gear, lack of training about occupational health and safety risks, unfamiliarity with the hazards of a work site, and a lack of precautions to decrease risks (Underhill & Quinlan, 2011). Moreover, precarious workers are often aware of the fact that it is their "precarious employment situation" that is exposing them and making them more vulnerable to harmful or less interesting work characteristics (Bosmans, Hardonk, et al., 2016).

The third pathway is situated outside the labor process and refers to the fact that precarious employment also affects social and material living conditions, such as household composition, the financial situation, or the employment situation of other household members. Not only do precarious workers have a higher chance of being confronted with social and material deprivation (Kretsos & Livanos, 2016), this situation often coincides with or even emerges from the precarious employment of one or more family members (Grotti & Scherer, 2014). For example, an insufficient or uncertain income can in turn lead to poverty, inadequate access to social protection, poor living conditions, and adverse lifestyles such as poor nutrition. This involves a number of potentially harmful effects for the health of precarious workers. Of course, social and material deprivation can also evoke psychosocial reactions, such as frustration, uncertainty, and feelings of powerlessness, impacting on mental well-being. For instance, doing temporary jobs can hamper the life planning of workers in the long run, since they have the feeling that they are not able to make

important steps in their life (Bosmans, Hardonk, et al., 2016). Furthermore, being criticized because of not finding a stable job or not being able to participate in social activities due to financial uncertainty can bring precarious workers in a stigmatized, isolated social position (Bosmans, Hardonk, et al., 2016).

#### 5 Conclusion

In this chapter, the theoretical and conceptual underpinnings of a multidimensional concept of precarious employment conceived for health and well-being research are discussed. The empirical results so far underline the usefulness of this approach in studies involving the mental and physical health of workers as well as their wider well-being. Most studies using multidimensional concepts of precarious employment to date are only of a cross-sectional nature. However, also the first evidence for causality is emerging, showing that it is precarious employment that affects (mental) health, downplaying the sometimes-assumed selection effects (i.e., mental health affecting the labor market situation of workers). Specific attention is paid to the possible causal pathways linking precarious employment to health and well-being. All in all, the studies commented in this chapter show that precarious employment needs to be considered an important social determinant of health. There surely is a need for further in-depth research. However, with the current knowledge already a policy agenda aimed at improving employment quality and reducing precarious employment at the "bottom" of the labor market seems more than justified.

### 5.1 Research Agenda on the Health and Well-Being Consequences of Precarious Employment

Further investigation into the nature of causality and the mechanisms explaining the relation between employment quality and adverse health is needed. First of all, consensus should be reached about the crucial dimensions and cutoffs for considering employment precariousness among different worker populations. More consensus on a clear multidimensional definition of precarious employment might be a first important step (Bodin et al., 2019). Subsequently, measuring instruments can be further refined and standardized. While current research efforts have been concentrated mostly on salaried workers, measuring instruments should also be adapted to the emerging "gray zones" of employment: the informal sectors of our economy, bogus self-employment, or the emerging platform economy. Furthermore, a future research agenda should aim for better measurement of employment quality/precarious employment in large-scale survey projects like the European Working Conditions Survey or the Labour Force Survey. There is also a need for more and better longitudinal data. Panel studies aimed at further probing into explanatory mechanisms

need to be set in place but also the potential of exploring register data in an interesting pathway for further research (Bodin et al., 2019).

Also more explanatory research incorporating the wider context of precariousness is needed. This refers in the first place to national or regional policy and social contexts, which may be key modifying (or moderating) factors that influence the nature of precarious employment, as well as the precarious employment-health relationship (Bodin et al., 2019). Well-designed and detailed cross-national institutional analyses seem to be the way forward here. Second, context also refers to the interrelationship between precarious employment situations and household or wider socioeconomic living situations. Certainly for these issues, more qualitative research shedding a light on the complex mental processes associated with employment experiences and wider social precarity is needed.

Apart from the improvement of conceptual and empirical accounts in fundamental academic research, precarious employment should also be better incorporated in work floor OHS screenings. Precarious employment remains an "overlooked occupational risk factor" mainly because it is difficult to grasp in the day-to-day professional practice of OHS specialists. Therefore, a short and easy-to-use assessment instrument should be developed and tested. More routine risk screening can also inform better Europe-wide monitoring data of employment quality/precariousness (Benach et al., 2016).

## 5.2 A Policy Agenda Aimed at Reducing the Exposure to Precarious Employment and Attenuating Its Negative Consequences

For the time being, our conclusions are strong enough to warrant policymakers for the potentially harmful effects on workers' health and well-being of precarious employment and uncontrolled labor market flexibility. National and European policymakers with the ambition of realizing "inclusive growth" should make efforts to establish secure, properly rewarding, and equitable employment conditions for all workers.

The COVID-19 pandemic and the measures of confinement taken by our governments have put the negative consequences of precarious employment situations sharper than ever. Occupational sides have been main sources for spreading the coronavirus (RIVM, 2020) – and research and media reports in the weeks and months after the outbreak have clearly demonstrated occupational inequalities in the risk of infection. A recent review of the literature makes it clear that factors like human contact, physical proximity to infected spaces, access to protective gear, and hygiene measures are only one part of the story; the other part of the story directly relates to the conditions and relations of employment (Purkayastha et al., 2021). To put it differently: precarious employment clearly played a reinforcing role in spreading COVID-19 in occupational settings. Major factors in explaining this link are the

lack of access to social protection and job insecurity (Heymann et al., 2020), which made precarious workers come to work even when feeling ill and which caused poverty and worsening living conditions for those unable to work (Adams-Prassl, 2020). Another factor is the lack of bargaining power of precarious workers: out of fear of job loss, these workers were reluctant to ask for safer working conditions during the epidemic (Counil & Khlat, 2020). Ironically, many of the so-called "frontline" or "key" occupations (e.g., cashiers, delivery people, domestic and sanitation workers) during the months of lockdown were overproportionally populated with workers in a precarious employment status.

This situation gave rise to many white papers in journals and newspapers around the world during the COVID-19 crisis. Suddenly the negative consequences of adverse employment conditions were widely recognized. Researchers in the field of precarious employment have been pointing to them already for many years (Quinlan et al., 2001) and have also highlighted that increasing work de-standardization, flexibility, and precariousness are not natural phenomena, but the result of deliberate policy choices. This involves that the solutions also lay with policies aiding to counter tendencies towards uncontrolled labor market flexibilization and deregulation. As research shows it is predominantly – although not exclusively – the contingent sector (e.g., temporary work agencies, solo self-employment regimes, short- and very-short-term contracts, small part-time, and zero-hour employment, platform work, etc.) where the highest levels of employment precariousness are seen (Arranz et al., 2018). Therefore, there is an urgent need for "(re-)regulating" these labor market sectors: including and enforcing "equal pay for equal work clauses" (Gevaert et al., 2018), adapting OHS regulations and surveillance to non-standard forms of employment (Koranyi et al., 2018), generalizing basic social protection (including replacement incomes when out of work - possibly but not necessarily related to ideas of basic income) (International Labour Office, 2015), and tightening allowable criteria for permitting contractual and temporal flexibility (McKay et al., 2012). As a general rule, the "wage cost" argument should cease being a valid reason for accepting deviations from the standard norm of employment. Regulation should be set in place to make sure that non-standard employment remains limited to those circumstances where it is needed because of the nature of the activity (e.g., care settings, hospitality, opening hours of shops and services) and is being properly compensated.

Of course, even in the case agreement is reached on these general principles, in practice these are arbitrary and politically charged decisions. Therefore it is of utmost importance that workers' bargaining power becomes strengthened. We know from earlier research that collective voice in the form of trade union presence (or alternative forms of worker representation) is the best guarantee for protecting the basic rights and employment conditions of workers (European Commission, 2016). This was demonstrated again during the COVID-19 crisis, where it was shown that unionized workplaces were able to create safer conditions compared to non-unionized sites (Block et al., 2020). Therefore, we believe that the EU should actively stimulate the development of trade union activities in countries and sectors where trade unions have a weak power position (Gevaert et al., 2018). Also

providing "high-quality alternatives" for workers at the bottom of the labor market might be a valid strategy for strengthening workers' bargaining position. In that regard, investments in alternative economic models including the social economy, worker cooperatives, or more sustainable business models (e.g., the economy of the common good<sup>1</sup>) might be a way forward (Borzaga et al., 2019). Finally, also the individual labor market position of workers who are more "susceptible" to precarious employment can be strengthened by better-designed policies. For instance, more efforts can be done in terms of training facilities and making employers provide training for their "peripheral workforce," as it is known that the least skilled and most vulnerable worker groups receive the least training facilities (Eurofound, 2016). The same holds for development and career opportunities: labor market entry in peripheral jobs should result into a stepping-stone towards more stable employment, instead of being a trap (Mousaid et al., 2017).

In sum, we believe that the time is right to conclude a new social contract for the reconstruction of post-COVID-19 society. In such a social contract, more secure, socially protected employment for every worker, leading to a sustainable income, seems to be an indispensable ingredient.

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<sup>&</sup>lt;sup>1</sup> For more information on the economy of the common good: https://www.ecogood.org

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