

## Globalization, workers' power and the psychosocial work environment—is the demand–control–support model still useful in a neoliberal era?

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The demand–control–support model emerged in the 1970s after a period of labor unrest throughout Europe and North America. Workers' control and workplace democratization became the focus of social movements among labor union activists and scientists. The concepts of workers' control, workers' collectivity, and the "limits of adaptation" formed the deep underpinnings of the model. Work changed dramatically with the advent of globalization and flexibilization. Neoliberal globalization has resulted in growing social inequality and an increasing imbalance of political power between economic elites and the working class. Earlier efforts to democratize worklife have been rolled back along with many of the social protections of the Keynesian era. At the same time, new transnational social movements have arisen. Does the demand–control–support model continue to have relevance today? The paper argues that core elements, namely, the intensification of effort, power, and collectivity, continue to provide important ways of viewing the human impact of neoliberal globalization.

**Key terms** flexibilization; globalization; job strain; occupational stress; psychological demands; social class; social movements; social support; work control; work organization.

The demand–control–support model emerged during a particular historical period, the 1970s, when trade union and occupational health activists, rank and file workers, and worklife scientists worked collaboratively to transform and democratize the workplace (1). The late 1960s and early 1970s was a period of widespread labor unrest, massive protests, and wildcat strikes that shook much of the industrial world (2, 3). Working class movements throughout Europe and the United States placed workers' power and direct democracy at the workplace on the political agenda (2–4). Several of these workers' movements, in Italy, France, Sweden, the United Kingdom, and the United States, developed cross-class alliances with health professionals and scientists (4, 5). Health social movements emerged that targeted specific diseases within particular industries, such as the Black Lung Movement in the coal mining industry in the United States (6, 7). Health social movements like the Black Lung Movement were bottom-up, democratic organizations that successfully contested for power with the dominant elements within their union, the state, and federal authorities, as well as business-oriented health

professionals (7). In the United States the local and regional victories of health social movements led to wider victories at the national level, such as the passage of the Mine Safety and Health Act, and eventually contributed to the passage of occupational and safety legislation at the national level in the early 1970s. In Sweden, even more far-reaching legislation, the Work Environment Act and the Codetermination Act, was passed later in the decade and provided the legal context for workers to influence the work environment directly.

The demand–control–support model was developed in this historical context, and its core concepts reflect the concerns of the period. Several distinct intellectual trends were also emerging in Europe and in the United States at this time that focused specifically on workers' power and control in the workplace (8). Intellectuals associated with workers' movements such as *Il Manifesto* and *Operaismo* (workerism) in Italy emphasized that workers had the knowledge and ability to control the work process through organs of direct democracy such as workers' councils (3). This intellectual concern with workers' control and power in the workplace was reinforced by

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Braverman's labor process theory (published in 1974), which suggested that, built into capitalism itself, was an inherent drive to intensify the work process in order to simultaneously "cheapen" the cost of labor and increase the productivity of workers (9). Braverman and other labor-process theory researchers (10, 11) suggested that Taylorism represented a radical form of managerialism that was directed at eliminating collective and individual workers' power and control over the content and process of work (9, 11). The criticism of Taylorism and the concept of worker control had particular salience in Sweden, where Dahlstrom and Gardell, two social scientists, worked closely with striking rank and file workers to document the impact of methods-time-measurement on the mental health of miners in northern Sweden (12, 13). Gardell, through his ongoing collaborative research with unions, became one of the most influential and articulate spokesman for the science and politics of workplace democratization (14, 15). He put forward a multilevel strategy that emphasized the importance of developing partnerships between workers, labor unions, scientists, and progressive political partners in order to place work environment issues on the national agenda and ensure the passage of protective and enabling legislation that would give workers more legal power and authority at the workplace (1, 14–16). In practice, these work reform efforts were often directed at highly fragmented, regimented, and de-skilled workplaces, and democratization efforts involved reconstructing the work to give people more freedom, autonomy, and control over their tasks and socially reassembling work into autonomous work groups in which decision making was shared collectively (14). The social dimension of the demand-control-support model comes partly from the sociotechnical design emphasis on participatory group processes, as well as on Lysgaard's concept of "workers' collectivity" (17, 18). Lysgaard, a Norwegian sociologist, had suggested that workers develop collective systems for survival in the workplace that represent their own specific needs and interests as workers in order to protect themselves from the actions of management (17). The "collective control" that groups of workers are able to exert over their work environment emerges from their ongoing local struggle for power and is significantly influenced by the larger political mobilization of the working class at a given time and place (1, 19, 20).

The psychological job demand concept of the demand-control-support model was drawn from psychobiological stress theory, which was rapidly evolving during the 1970s (21), stimulated in part by field research in which objective measures of neurohormonal arousal were being examined in relation to varying levels of demands and control (22). Frankenhauser, one of the pioneers in this field, suggested that the industrial work environment could place such intense

demands on the human organism that human beings could be pushed beyond their "biological construction" (23, p 491). According to this view, the failure to adapt to inhuman conditions could actually be understood as a "healthy maladjustment" (23, p 507). In other words, stress could be a warning sign of pathological environments that violated fundamental human needs (22, 23).

Although these theories were part of the intellectual environment in Sweden and throughout Europe and North America in the late 1970s, it was Karasek's particular insights that led him to combine these elements and to formulate the demand-control model in such an intuitively powerful way. According to him, "Psychological strain results not from a single aspect of work environment but from the joint effects of the demands of a work situation and the range of decision making freedom available to the worker facing those demands [p 287]" (24). Theorell was able to demonstrate how the model could actually be used in epidemiologic research on cardiovascular disease outcomes, and he provided the pathophysiological explanation for the adverse health impact of job strain (25, 26).

The demand-control-support model has been successful in translating what had begun as a fundamental criticism of the nature of work and the labor process under advanced monopoly capitalism into a language that was more understandable within the context of organizational and biomedical sciences. However, over the past 30 years the demand-control-support model has become increasingly separated from the critical, political, and conceptual insights of the earlier democratization period and has gradually evolved into primarily a micro-level psychosocial exposure model (27, 28). While the demand-control-support model was achieving a kind of paradigmatic status within the occupational stress field, the larger social and political world—both inside and outside the workplace—was undergoing a fundamental transformation. The political and economic climate that had seemed so favorable for the increased power and control of workers within the work setting was already changing in the late 1970s (2). These changes were the consequence of a strategic response on the part of what David Harvey (29) suggests was a ruling class made up of an elite whose interests involved "liberating corporate and business power and re-establishing market freedoms [p 13]". The recent work of Harvey (29, 30), Silver (2, 31), Arrighi (32), Bourdieu (33, 34), Navarro (35), and others (36–41) suggests that, in the most fundamental sense, these changes were the consequence of what can be described as a successful "counter-revolution", which took ideological, political, and economic forms. Ideologically, neoliberalism (eg, market fundamentalism based on neoclassical economic theory) replaced the earlier Keynesian consensus of the postwar era (29,

34, 35). Politically, worker-oriented social movements were marginalized or actively repressed in most of the advanced industrial societies, and labor-oriented parties largely abandoned an earlier commitment to workplace democratization (2). These changes have all been driven by both the idea and the reality of economic globalization (29).

Globalization is a highly contested term. In its most utopian form, it is the belief that global capitalism is a creative form of destruction capable of breaking down boundaries between peoples, nations, even social classes while, at the same time, providing a powerful and flexible engine of economic opportunity that will eventually raise the living standards, the quality of life, and the health of all nations (42). It has been described by its ideologically oriented proponents as a kind of postmodern, market-oriented utopia in which old-fashioned state bureaucracies would gradually fade away, to be replaced by a new spontaneous global division of labor in which every nation would find its most efficient and productive economic niche (34). There has also been a threat implied in the discourse on globalization; individuals, communities, and even nations resist to their peril (42). Economic globalization is characterized by some of its advocates as creative, powerful, and flexible, but also as relentless, inevitable, and heartless—beyond the power of human beings to control—where “resistance is futile” (42). Yet resistance to this new form of integrated global capitalism has grown in ways that were completely unanticipated even a few years ago (43). This resistance has taken the form of both an increasingly sophisticated body of critical theory and research and a growing global social justice movement that has challenged the premises of the economic theories underlying globalization, as well as the legitimacy of global financial institutions, such as the World Bank, the International Monetary Fund, and the World Trade Organization (2, 38, 39, 44–46). Some central themes have been identified by these critics. They include (i) the increases in income and wealth inequality that have grown within and between countries since the 1970s (47–52), (ii) the globalization of health inequalities with certain regions showing absolute declines in population health (53, 54), (iii) the human costs of structural adjustment programs implemented by international financial institutions in transitional economies and in the global south (55–59), (iv) the diminished quality of and access to education, health care, and other human services and public utilities that have occurred in some regions of the world as a consequence of the commercialization and privatization of social services (60), (v) the stressful and hazardous work conditions that have arisen in export producing zones (EPZ) around the world as part of the “race to the bottom” (61–64), and (vi) the crises in global governance resulting from the retraction of the regulatory and

protective role of the nation state and the rise in power of transnational corporations (30, 37).

The claims of advocates and critics of globalization have come under increasing scrutiny as the empirical literature on the impact of economic globalization has grown over the last decade (65, 66). For example, in one major review, Guillen (65) noted that “one of the persistent problems afflicting the study of globalization is that it is far from a uniform, irreversible, and inexorable trend. Rather, globalization is a fragmented, incomplete, discontinuous, contingent, and in many ways contradictory and puzzling process [p 238]”. Recent research, for example, has challenged the widely held view that the power of the state is in inevitable decline (67). A more nuanced position has demonstrated that the degree to which working-class movements and parties within countries have mobilized politically to defend the protective and redistributive policies of the welfare state is an important factor that influences the extent and scope of welfare state retrenchment (67, 68). There continues to be a considerable debate among social scientists about how to even define the term globalization, some authors defining it rather narrowly as the increase in cross-border trade between countries (66) and others emphasizing its ideological, cultural, and institutional character (37). This later perspective is widely held by authors from a critical political economy perspective, who have argued that *neoliberalism*, as both an ideology and a political economic policy regime, is central to an understanding of globalization because it has established a new set of rules for the global economy that has benefited transnational corporations and the economic elite (29, 30, 33, 35, 37). Indeed, economic neoliberalization, according to Harvey, “. . . was from the very beginning a project to achieve the restoration of class power [p 16]” (29). Robinson (37) argued that the globalization of production is bringing about the “transnationalization of classes [p 34]”. According to him, “new social hierarchies, cleavages, and forms of inequality have emerged as people all around the world have become swept up into transnational class relations [p 34]”. Historically, this has also meant an attack on workers’ power in the workplace and a dismantling of worker protections and rights both within many of the advanced industrial countries and in the countries of the global south (2, 31, 38, 39, 69). Coburn (70) emphasized the political nature of this transition to global capitalism as follows: “Economic globalization, as a real force, and as ideology, brought the re-emergence of business on national and international levels to a dominant class position from the previous phase of nationally focused monopoly capitalism in which capital and labor had arrived at various forms of accommodation. Contemporary business dominance, and its accompanying neo-liberal ideology and policies led to attacks on working class

rights in the market (e.g., by undermining unions) and to citizenship rights . . . [p 44].”

As the regulatory and redistributive policies of the Keynesian state have come under attack, labor markets and the labor process itself have become increasingly flexibilized with functional flexibilization inside the workplace (lean production) and numeric flexibility in the labor market (precarious employment) (39). According to Robinson (37), a global architecture of production is emerging that is beginning to unify the world into a single mode of production with globally dispersed but functionally integrated production chains accompanied by “the centralization of command and control of the global economy in transnational capital [p 15]”. Other authors have challenged this perspective and point out that trade continues to take place primarily within and between the advanced industrial societies of the global north (66). Even so, there is little question that the direct and indirect impact of trade has been to intensify competitiveness between firms which, according to Green (71), “puts businesses and their managers under continual pressure to defend existing markets and find new ones through aggressive cost-minimization and innovative expansion policies [p 7]”. This situation has led many firms, particularly in the United States, to accept the view that they have no choice but to restructure in response to what is perceived, accurately or not, as a threatening and increasingly neo-Darwinian global economy (72). Both the reality and the perception of these competitive challenges gave rise in the 1990s to what Kunda & Ailon-Souday (72) have termed the managerial ideology of “market rationalism”, according to which the market itself becomes the model for the form the firm should take: “Organizations should so thoroughly internalize the new dictates of the market, so completely tune into its demands, so smoothly flow along its currents, that they should literally assume its form [p 202]”. Corporations should “reengineer” and “marketize” by (in the words of a popular business writer) “*blasting the violent winds of the market place into every nook and cranny in the firm* [p 14, original emphasis]” (73). The ideology and practice of market rationalism has led to corporate restructuring and downsizing, with increasing work intensity and employment insecurity for those who remain (72). A “softer” form of managerial ideology and practices, imported originally from Japan in the form of quality circles or total quality management (TQM) (74), emphasizes policies for human resource management that are designed to engender workers’ commitment through increases in workers’ involvement in decision making, as well increases in their social engagement in group or team processes (71). However, Green (71) and others (72) suggest that these softer managerial practices have become increasingly displaced by the “leaner and meaner” forms of market rationalism, which free firms

from any long-term commitment to the workforce and preserve the maximum flexibility for management to continue to downsize and restructure.

These changes have led an increasing number of researchers to call for a move to “break out of the box” imposed by the demand–control–support model, which they see as now serving more to constrain than to advance the field of psychosocial research on the work environment (27, 28, 75). The demand–control–support model, according to its critics, is still too focused on the traditional employment relationship, which has become a thing of the past in an era of increasing job uncertainty and labor market flexibility (75). For example, Scott (75) has noted that “three full decades of economic restructuring in the age of globalization, coupled with the rise of the ‘New Economy’, have resulted in a complementary and fundamental shift in employment relations [p 144]”. She argued that careers no longer unfold in a predictably linear progression and that job insecurity has become the new norm and a permanent feature of the labor process, even for those with relatively stable jobs. In a major review of over 90 studies world wide, Quinlan et al (76) demonstrated that, globally, there has been “a decline in permanent full-time employment and median job tenure (for males) and a growth in shiftwork/nightwork, self-employment, telecommuting, home-based work, part-time jobs, multiple job holding, and casual/temporary employment (including agencies leasing workers) [p 336]”. These authors suggest that the condition of precarious employment is itself now one of the most important forms of high demands and limited decision latitude (76).

These authors and others (28) raise important criticisms of the demand–control–support model. The need for an expansion of the theoretical framework we use in the psychosocial work organization field to include the most salient aspects of globalization and flexibilization is critically important. It is particularly important to understand how globalization is altering the class relationships between workers and employers and how these changes may differ across different countries and regions. We also need to examine the impact of political mobilization and social movements that have arisen in response to globalization. In other words: “How do asymmetrical power relationships within the society and within work organizations influence the nature of the psychosocial work environment and the lived experience of work?” For example, we need to ask, “Are the conditions of work less stressful in societies in which the trade union movement or newer global social justice movements have managed to maintain or expand their influence than in societies in which union and social movement strength has been in decline?” Another important question that needs to be addressed concerns how workers have responded to “hard” versus “soft”

managerial practices: “Is there any indication that management practices that increase worker involvement are experienced as less stressful or even health promoting?”

Is the demand–control–support model still useful? It is tempting to conclude that what may have once been a model of elegant simplicity has now become one that is just too simplistic. After all, the demand–control–support model originated in a “preglobalized” era characterized by stabler jobs, greater union density, and the more socially protective policies of the Keynesian welfare state. So much has changed in the content of the psychosocial work environment and in the basic employment relationship that, at the very least, the operationalization and measurement of the three core dimensions of the model need to be fundamentally modified and updated. As noted by other authors in this publication, we also need to explicitly incorporate organizational and societal level concerns with flexibilization, managerial systems of control, and class mobilization into our understanding of the effects of the labor process on health. However, it could be argued that the demand–control–support model embodies the humanistic insights and values of an earlier era that we should be less willing to discard. As has already been noted, these three concepts were derived from a set of political and philosophical understandings concerning basic human needs and the types of environments that are necessary to meet those needs. According to this view, worklife should provide workers with (i) the power to have meaningful influence and control over their own lives, (ii) the opportunity to participate in an ongoing human community that provides both social support and collective efficacy, and (iii) an environment in which the intensity of what the job demands does not push workers beyond their “limits of adaptation”.

The globalization of the economy and the flexibilization of work have had a powerful impact on all of these dimensions of worklife. Many workers have experienced an intensification of job demands over the past two decades (71, 77). Many people are now working longer and harder and some even for less compensation (51, 78–81). Many workers have lost power over their daily lives (72, 82, 83), and some researchers suggest that power is becoming more centralized in fewer hands—in the workplace, the society, and globally (29, 37, 84). The loss of connectedness to social institutions and collective forms has left many workers increasingly isolated and unprotected either by society or by older forms of collective solidarity (2, 50, 60, 70, 85). At the same time, transnational social movements have arisen, particularly in the global south, that are creating new forms of community and collective action (2, 38, 39, 46, 83, 86). The intensification of effort, power, and collectivity are the root concepts from which the demand–control–support model was developed, and they continue to provide a

critical lens with which to understand the human costs of neoliberal globalization.

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