Literature Review

Workplace Culture of Health and Equitable Workforce Well-Being: A Scoping Literature Review

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Abstract

Objective: To evaluate the evidence base regarding employer-sponsored health and wellbeing (HWB) programs in relation to addressing workforce health inequities.

Data Source: Multiple databases were systematically searched to identify research studies published between 2013 and 2022 regarding employer-sponsored HWB programs.

Study Inclusion and Exclusion Criteria: Researchers included studies based on the following criteria: (1) described an employer-sponsored initiative to improve employee HWB; (2) included employees as the population of interest; (3) provided detail regarding participant demographics, and (4) included outcomes measures.

Data Extraction: Four researchers screened the identified studies with abstraction conducted by a primary and secondary reviewer. Of the 3420 articles identified, 98 studies were eligible and abstracted.

Data Synthesis: Data synthesis focused on research approach and design, as well as work setting, HWB program characteristics, and approach to inclusion of historically underrepresented or low-wage subpopulations.

Results: The majority of studies highlighted programs focused on improving employee physical health (54) and/or mental health (24) or the workplace environment (27). Fourteen studies incorporated a randomized experimental design. Though nine studies intentionally recruited historically underrepresented populations and ten studies involved low-wage workers, none included race or ethnicity as independent variables. Various facilitators and barriers to employee participation were explored.

Conclusions: Despite increasing employer focus on workforce HWB, few studies explored the program implications on historically underrepresented or low-wage populations or subpopulations.

Keywords

underserved populations < specific populations, low income < underserved populations < specific populations, racial minority groups < underserved populations < specific populations, workplace < specific settings, population health < interventions

Introduction

Employer efforts to implement an organizational culture of health (COH) have become increasingly common during the past two decades.[1-4] Many of these COH initiatives evolved from the worksite health promotion programs of the late 20th century, which targeted individual employee behavior change, including physical activity and healthy diet. In contrast, more recent efforts derived from the social-ecological model promote a population health approach that integrates a focus on organizational policies, practices, and interpersonal relationships, with a consideration for the employee's unique needs.[5] As a result, the scope of health promotion offerings has expanded to include an array of well-being considerations, including mental, financial, social, and environmental domains.

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However, gaps exist in program inclusivity, highlighting barriers around participation and access to well-being programs among individuals in historically marginalized subgroup populations. For instance, there is evidence that low-wage workers are less likely than their higher-wage peers to participate in well-being programs.[6] At the same time, low-wage workers generally experience poorer health outcomes, have less capacity to manage their health, and are less likely to have a usual care physician.[7] In addition, the COVID-19 pandemic raised organizational awareness of broad workforce health inequities[8] and the need to ensure that all individuals have equitable opportunities to improve their well-being. More work is needed to understand how to deliver equitable and inclusive well-being programs.[9] To that end, this scoping review evaluates how researchers have aligned organizational philosophy, workplace supports, and program offerings to favorably impact workforce health equity in employer-sponsored health and well-being (HWB) initiatives, in order to contribute to sustained improvements in workforce HWB for all employees.

Accordingly, the primary objective of this scoping review was to synthesize the literature on workplace well-being programs, identify associated evaluation metrics, and characterize the extent to which they address inequities in workforce HWB, particularly for individuals in minority and low-wage subpopulations. Our intent was to characterize gaps and best practices in equitable HWB offerings and their associated evaluation metrics, thereby providing a foundation for subsequent research.

Methods

Data Source

In June 2022, a literature search was conducted using four electronic databases: Medline, Web of Science, CINAHL, and Business Source Complete. Key terms in these searches focused on topics related to well-being (e.g., well-being, health promotion, culture of health) and work (e.g., workplace, worksite, employer, employer-sponsored). Table 1 in the Supplemental Material includes detailed search terms. After removing duplicates, abstracts were further screened by at least two authors using the inclusion and exclusion criteria below. Finally, data extraction of the full-text articles was performed by two authors. In cases of disagreement, a third author provided independent feedback and a final decision was made collectively by all three reviewers. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for Scoping Reviews (PRISMAScR) 2020 Checklist was used as a guideline.[10]

Study Inclusion and Exclusion Criteria

Articles included in the scoping review (1) were full-text peer-reviewed articles in English, based in the United States, (2) were published during or after 2013, (3) focused on employees as the population of interest, (4) described a program or programs that aimed to improve employee health, evaluate employer culture of health, and/or presented a tool to evaluate a determinant of health variable with sufficient employer involvement, and (5) included outcomes measures.

Articles were excluded if they did not meet the inclusion criteria or were opinion or position papers. Articles were also excluded if they described a study without sufficient employer input. This meant that the study focused on an academician-led effort to test program feasibility or effectiveness across organizations or industries, without consideration of the specific organizational context or collaboration with employers during program design or implementation. It is important to note that studies were neither included nor excluded based on keywords specifically related to health equity or the subpopulations of interest. The research team assumed this would exclude otherwise eligible studies. Of the 508 articles in the final dataset, 52 included the term "equity" or "equitable", but were excluded because they did not meet the eligibility requirements (international studies (31), insufficient employer involvement (9), methodology reports (5), not relevant (4) or reviews (3)). Notably, none of the included studies included either of the two terms.

Data Extraction

Electronic database searches using key terms resulted in 5373 records, the titles of which were reviewed to remove clearly ineligible and duplicate records. Following this, abstracts of the remaining 3420 records were screened, with 2912 excluded based on the criteria detailed above. Full-text manuscripts were retrieved for the remaining 508 records, from which 410 articles were excluded, leaving 98 studies in the final set. Figure 1 shows the PRISMA flow diagram of the search and screening process.

Data Synthesis

Information from each article was extracted using a structured template on the software platform Covidence (Melbourne, Australia).[109] The data extraction process captured general information about the study design, participant sample, and findings from each study's primary objectives and outcomes. More detailed information was collected regarding the organization's industry, the employees' occupations, and whether the study intentionally included or analyzed historically marginalized subgroup populations. The full set of included studies can be found in the Supplemental Materials.

Results

Study Objectives

All 98 studies were categorized into one or more of the following three broad domains: 1) workforce well-being (employee physical health, employee mental health, program development and evaluation); 2) factors in the work

Table 1. Categorization of Included Studies.

Domain	Definition and Study Objectives	Example	Studies Addressing Domain	Number of Studies
Workforce Well-Being				
Employee physical health	Improving employees' physical health. Key focus areas of these studies included diet changes, weight loss, physical exercise, and disease prevention or management.	Losina[11] assessed the feasibility of individual- and team-based financial incentives at work to increase physical activity among sedentary hospital employees.	11-64	54
Employee mental health	Improving employees' mental health. Key focuses of these studies included mindfulness training, stress management, and increased social support.	Allexandre[65] studied the effectiveness of a web-based mindfulness stress management program and clinical onsite support in a corporate call center.	21,25,37,38,40,43,49,53,62,64-78	24
Program development and evaluation	Implementing processes related to the development, creation, design, redesign, or evaluation of existing, new, or proposed initiatives. Key focuses of these studies included the use of employee surveys, dashboards and scorecards, and engagement of employees in evaluation and solutions.	Jenkins[79] described the process of developing a macro-level summary dashboard to reflect large-scale constructs associated with a well-being program.	16,40,44,51,64,68,79-93	21
Factors in the work environment				
Total Worker Health®	Inclusion of total worker health components. Total Worker Health® is a NIOSH-trademarked strategy defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness-prevention efforts to advance worker well-being.	Punnett[90] used a stepped-wedge protocol to evaluate a total worker health protocol to engage employees in problem-solving for workplace health issues.	73,81,82,90,94-96	7
Work environment	Implementing mechanisms to enhance employees' work environment or generally improve employee well-being through changes in work environment. Focus areas of these studies included leadership support, and physical and cultural aspects of the workplace.	Hoert[40] assessed the role of leadership support and perceived job stress on employee participation in wellness activities and healthy lifestyle behaviors.	18,21,31,33,34,40,42,48,60,63,71,85,88,89,93,96-106	27
Workplace safety	Improving employees' physical, mental, and emotional safety and well-being.	Sorensen[63] evaluated an organizational intervention to improve low-wage food service workers' safety.	24,63,80,82,88,90,94,95,97	9
Business metrics				
Healthcare utilization and costs	Understanding the impact of programs or organizational changes on utilization of healthcare services and/or healthcare costs among covered employees.	Musich[22] studied the impact of a comprehensive health management program on healthcare cost savings and productivity.	13,22,55,62,87,107,108	7

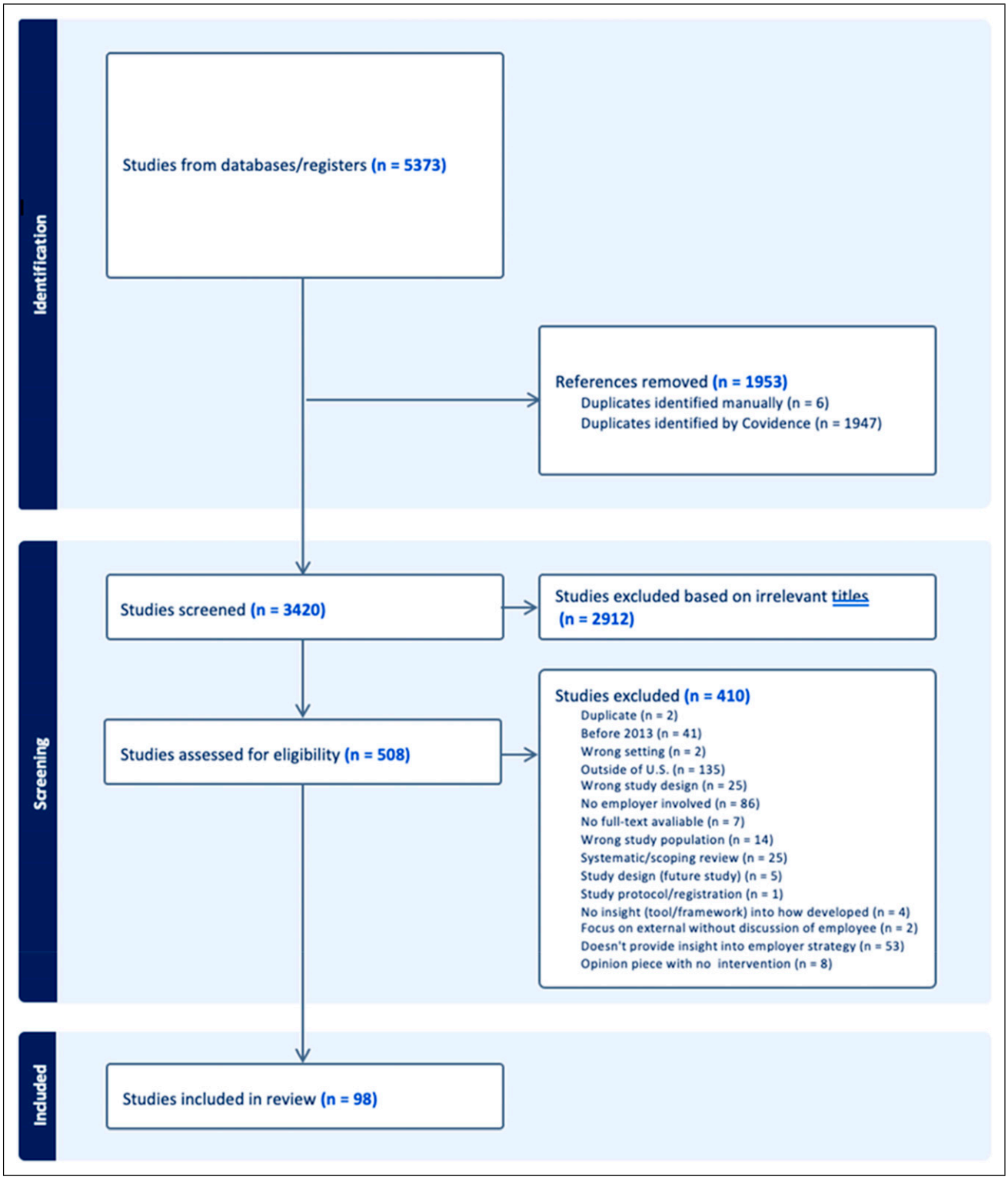

Figure 1. PRISMA flow diagram of identification, screening, and eligibility for literature search. PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analysis.

environment (Total Worker Health®,[110] workplace safety, work environment); and 3) business metrics (turnover, healthcare utilization and costs). Table 1 shows the conceptual definition of each domain, a representative example of one of the studies in that domain, and the distribution of the included studies.

Of the 98 included studies, 38 were characterized as intervention studies (14 randomized or cluster-randomized controlled trials and 24 non-randomized experimental studies), 54 as non-intervention studies (cohort, cross-sectional, descriptive, longitudinal, feasibility, or qualitative research studies, and case reports), and 6 as mixed-methods studies.

The majority of studies were implemented in health and medical settings including hospitals, pharmaceutical companies, academic medical centers, and laboratories (52/98, 53%), and also included educational settings such as universities (10/98, 10%), as well as public or private employment settings (36/98, 37%). Employees were recruited to participate in studies by their employers in a multitude of ways, including email, word of mouth, newsletters, and flyers.

Study outcomes evaluated various aspects of employee well-being, including physical health and mental health, as well as employee engagement, job satisfaction, and performance. All studies reported the numbers of participants. However, explicit participation rates were not often noted. In many studies, the number of participants represented a small proportion of total eligible employees. Additionally, few studies characterized the participation of individuals from historically underrepresented subpopulations.

An in-depth analysis of study subcategories provides additional insight into the findings from this scoping review. Specific subcategories include randomized, controlled studies, historically underrepresented populations, and low-wage workers. As previously noted, these last two subcategories may often be associated with inequities in healthcare utilization and outcomes.

Randomized, Controlled Studies

Fifteen studies incorporated a cluster randomized or individually randomized design and assessed the effectiveness of well-being programs in the organizations, evaluating how program offerings impacted participation and health behavior. Four studies focused on an online or web-based program to improve health,[37,42,58,65] Seven studies included a comprehensive program for employees aiming to improve health-related behaviors and/or workplace conditions,[14,20,42,55,56,62,63] 5 included a coach or group-based intervention,[14,26,58,62,65,72,90] 3 studied the inclusion of incentives,[34,42,55] and 2 included medication in the intervention.[56,61] Most studies demonstrated some evidence of short-term improvements in participant lifestyle behaviors, but reporting regarding long-term effects on health or healthcare cost was limited.

Historically Underrepresented Populations

None of the 98 studies incorporated subpopulation analyses with racial or ethnic subgroups or income as independent variables, although some studies reported descriptive statistics regarding race, ethnicity, gender, or income and controlled for them in regression analyses. Many studies focused on one particular occupation, providing an opportunity to explore impacts on specific subpopulations, but limiting the opportunity to compare outcomes for employees in different job roles.

Low Wage Workers

Ten studies intentionally recruited low-wage workers[18,27,28,56,63,65,73,92,95,97] as shown in Table 2. Specific occupations included call center workers[68] food service workers,[28,63,95] cashiers and merchandise stockers,[27] nursing assistants,[18] construction workers,[56] prison workers,[73] and others.[92,97] Studies incorporated specific recruitment strategies to engage the population of interest. Three studies used bilingual or multilingual recruitment strategies to engage non-English speaking employees,[28,56,97] with researchers conducting recruitment at multilingual worksites using bilingual or multilingual personnel, and/or providing recruitment materials in multiple languages.

Among studies focused on low-wage workers, a study of debt collectors found that group practice and a web-based program reduced stress, but that engagement rates were low.[65] One intervention with food service workers saw limited effectiveness due to turnover, business demands, and employee time constraints.[63] Similarly, Flannery, et al, found that work demands and time limitations limited participation in workplace health programs among certified nursing assistants.[18] In contrast, another study of food service workers that used texts to promote a walking intervention saw participants increase their step counts over 12 weeks.[28] A qualitative study involving low-wage workers found that job characteristics sometimes made it hard to manage health.[27]

Facilitators and Barriers to Employee Participation and Engagement

To be effective in an equitable manner, HWB initiatives have to be accessible to all employees, irrespective of socioeconomic status or work demands. In our analysis, several themes emerged as either facilitators or barriers to employee participation in HWB initiatives, depending on the extent to which they were included in each study. In general, facilitators included resources that provided accommodation for employee needs, leadership advocacy, support from wellness champions and use of technology. Barriers included job demands, which were a common reason for non-participation. Each theme is discussed in more detail, below.

Availability of Resources Based on Employee Needs. Some organizations utilized focus groups, surveys, interviews, or other information-gathering processes to understand employees' needs

Table 2. Overview of Studies With Low-Wage Workers.

Author (Year)	Study Aim	Study Sample	Key Findings	Key Measures
Nagler (2021)[95]	To illustrate how Total Worker Health® (TWH) implementation guidelines were used to develop and implement an organizational intervention to reduce pain and injury, and improve well-being.	5 worksites with 7-22 food service employees	No results were provided, only a discussion of the development of study design.	Work engagement; well-being; on site-specific priorities
Jaegers (2020)[73]	To use a TWH approach and assessment to define and develop evidence-informed solutions to improve health promotion and protection in rural and urban criminal justice system settings.	401 correctional officers and sheriff's deputies	Groups expressed frustration over a lack of respect and the need for self-defense and mental health training. Their process yielded appreciation, safety training, and community-based training. The team-based process was feasible for developing programs.	Participation; well-being; involvement in intervention planning
Buchholz (2016)[28]	To determine the feasibility of implementing a bilingual Text4Walking intervention and the effect of the intervention on physical activity and health status.	33 food service employees	Participants were satisfied with the text message content, delivery, and amount. Participants increased their step count by more than 2000 steps during the 12-week intervention.	Participation; satisfaction with program; health behaviors; measures of health status
Crollard (2013)[96]	To describe one approach to creating and implementing a training intervention aimed at improving health and safety committee function and effectiveness at a multilingual worksite.	13 health and safety committee members and 50 scrap metal recycling plant employees	Communication and engagement in the health and safety committee by workers and management was shown to be effective, leading to improved committee functioning and management of workplace safety concerns.	Participation; satisfaction with the program; usefulness of materials and effectiveness of communication
Allexandre (2016)[65]	To determine the effectiveness of a web-based mindfulness stress management program and clinical onsite support in a corporate call center.	161 debt collectors, customer service, or fraud representatives from a corporate call center	Group practice and support led to higher engagement and participation, web based program reduced stress and improved well-being in the work setting. Engagement was challenging and online use was low among all participants. No difference was observed when providing expert onsite support in addition to group support alone.	Participation; satisfaction with the program; health behaviors, reduction in stress; increase in psychological well-being

(continued)

Table 2. (continued)

Author (Year)	Study Aim	Study Sample	Key Findings	Key Measures
Flannery (2014)[18]	To explore factors that facilitated and hindered employees' participation in a pilot physical activity and diet focused worksite health promotion program aimed at reducing cardiovascular disease risk.	12 nursing assistants at a long-term care facility	Factors that improved motivation included group interaction and positive reinforcement from pedometers. Factors that improved participation included weekly tastes of healthy food, exercise DVDs, and use of exercise room. The largest barrier to participation was patient load and work demands. Other barriers included time limitations with child care, outside of work responsibilities and work load due partly to high rates of turnover.	Participation; satisfaction with the program; well-being; access to exercise room
Strickland (2015)[27]	To examine workplace determinants of obesity and participation in employer-sponsored wellness programs among low-wage workers.	61 health care system and national labor union representing retail employees	Employees revealed how their job characteristics contributed to their weight: Irregular schedules, shift work, short breaks, physical job demands, and food options at work were among the most commonly discussed contributors to poor eating and exercise behaviors.	Participation; workplace factors related to obesity
Fetherman (2021)[92]	To describe a process where community based participatory research was used to engage employers in identifying the health promotion needs of smaller workplaces that employ low-wage workers and develop worksite well-being programs.	596 employees at a nonprofit serving individuals with disabilities	Program evaluation at 3 years involved use of the CDC Worksite Health ScoreCard, which showed improvement. Wellness champions contributed to the intervention's efficiency and efficacy.	Participation; CDC Worksite Health ScoreCard scores, improvement in engagement with workplace health promotion programs
Asfar (2021)[56]	To examine the feasibility, acceptability, and potential efficacy of the intervention "enhanced care"as compared to "standard care", workplace-based smoking cessation interventions through a pilot trial.	134 Hispanic and Latino construction workers from 17 construction sites	Smoking abstinence was improved among Hispanic/ Latino workers.	Participation; satisfaction with the program; health behaviors; enrollment rate; adherence to treatment; 6-month retention rate

(continued)

Table 2. (continued)

Author (Year)	Study Aim	Study Sample	Key Findings	Key Measures
Sorensen (2021)[63]	To examine how factors such as organizational context influenced the implementation of an organizational intervention focused on improving health, safety, and well-being among employees.	5 sites of a large multinational company that contracts food services with corporate clients	The intervention had limited effectiveness. Despite strong support from corporate senior leadership, they encountered barriers in intervention implementation including financial demands that drove work intensity, turnover of site and district managers disrupting continuity, and staffing constraints that further increased the work load and pace.	Participation; satisfaction with the program; well-being; safety and ergonomics

and their perspectives regarding ongoing or upcoming initiatives. Implementation teams used these tools to gauge employee interest, guide intervention strategies, and facilitate buy-in.[64,72,88] The results of these studies revealed current barriers to program participation such as time and work constraints or limited awareness, which could have resulted in under-utilization of existing program offerings.[27,32] These barriers can increase inequities when those who could benefit most from programs face barriers to using them. Further, the process helped to uncover the resources and training that employees needed to be successful in their roles and in the intervention, such as dedicated time and space for program participation.[44,66,81,91,106] The use of existing organizational infrastructure including faculty, workforce hierarchy, and communication channels was shown to be an effective way to promote worksite initiatives and ensure program sustainability.[32,44]

Extent of Leadership Support. A recurring theme was the recognition of leadership support as a facilitator to the promotion of HWB programs. Multiple studies described how leadership enhanced program promotion by enhancing publicity or facilitating the allocation of resources for employee engagement.[20,28,35,66,80,86,97,106] One study found a favorable association between employee perceptions of leadership support and wellness program participation.[40] However, the study also noted that this association may not be as strong in organizations that are smaller or those that lack developed HWB programs. This suggests the need for health equity leaders to eliminate employee barriers to program use.

Wellness or Peer Champions. Several studies were designed for employees to participate in HWB programs in groups to create moral support and establish social norms for behavior change. Some reported increased engagement, higher intervention completion rates, and improved outcomes attributed to the use of groups.[18,34,35,65] For instance, one study that monitored physical activity through a steps challenge found that team participants were more likely to complete the challenge and logged significantly more steps than individual participants. Similarly, some studies used wellness or peer champions to promote wellness programs or facilitate implementation,[17,44,60,83] One study found that peer helpers in an obesity prevention program became effective role models and contributed to "health-promoting social and environmental changes at work".[16] Beyond serving as role models that promote positive lifestyle changes, wellness champions support employees by raising awareness of wellness opportunities, fostering a positive work environment, serving as trusted resources, and providing personalized communication about program benefits. Peer champions could increase health equity by increasing awareness of programs among vulnerable employee groups and also helping employees understand how to use the programs.

Technology Use. Some studies demonstrated that technology can enhance the feasibility of interventions, often proving to be cost-effective while also improving convenience and participation among employees. Examples include online mindfulness training modules,[65] virtual fitness trackers[58] and digital chatbots for COVID-19 screening,[51] which illustrate some of the ways technology can be integrated into HWB interventions. However, in one case, computer-based training was found to be less effective for older, long-tenured employees and non-computer users.[98] Some occupational groups have limited access to computers or technology during the day, which could also limit HWB intervention participation. The successful use of technology may require some form of training; one study found that without a formal presentation to employees, utilization of telehealth services was significantly lower.[107]

Extent of Accommodations for Job Demands. Common barriers to employee participation in wellness programs included job demands and time constraints stemming from both work-related and personal conflicts with scheduled sessions. In

particular, in the absence of supervisor support, employees may hesitate to participate in offerings if they are not given dedicated time to participate without using personal time or needing to find coverage for their work responsibilities.[18,27,33,44,52,64,66,84] Many employees may already face limited availability due to the nature of their work or organizational factors such as high turnover rates or inadequate staffing.[18,63] Further, if the initiatives inadvertently add to employees' workloads without compensation, they may be seen as disrupters to their work rather than facilitators to their HWB.[104] Some employees may face disciplinary action for leaving their space, clocking out, or failing to find coverage. Outside responsibilities such as child care may further restrict employee availability and complicate participation.[18]

Discussion

While these facilitators and barriers may exist for any employee group, their effects are often more pronounced for employees with less power or control over their time at work, fewer resources (e.g., time, financial), and more exposure to work-life conflicts. Previous literature has highlighted how low wages and pay inequities affect employees at work and could increase the relative costs of managing their health.[6,111,112] Four key themes emerge from this scoping review: A gradual expansion of HWB program scope, no mention of health equity, the prevalence of short-term pilot studies, and scant discussion of broader business implications of the observed findings.

First, in the peer-reviewed literature from 2013 through 2022, there has been a progressive expansion of focus on HWB—from physical health measures, including exercise and healthy diet, to a broader, whole-person approach. However, more work is needed to assess the extent to which these more comprehensive interventions are meaningfully impacting employee HWB, as well as healthcare utilization and costs.

Second, health equity was not specifically addressed in the reviewed literature, even as some articles discussed concerns about equitable implementation for all employees.[60] Instead, the articles generally focused on individual-level HWB behavior change, with less concern around the barriers that employees faced when using well-being programs. As noted, ten studies in the scoping review specifically targeted low-wage populations for enrollment and none rigorously examined subpopulation-level analyses of program outcomes by occupation, race, ethnicity, or wage. Since these studies did not include explicit measures of equity, we focused on the outcomes reported in the study, namely participation, well-being, and satisfaction with or involvement in the program. Overall, participation rates were poorly characterized in comparison with the eligible population, mirroring results from other studies. As a result, even when studies reported that employees experienced beneficial changes in wellbeing or satisfaction, it was unclear whether this was due to selection bias or whether non-participants would have benefitted in the same way. Additionally, we were unable to identify any studies that provided demographic attributes, including race, ethnicity and wage, for both the eligible population and the participant group. Yet, we know that employee participation in well-being programs differs by wage level.[6,113,114] As a result, it is possible that a number of the studies included in this analysis improved HWB for some employees, while simultaneously worsening health inequities for others. More detailed analysis could provide insight into employee perceptions of program access and value on the basis of different race, ethnicity and wage subpopulations.

Third, in this review, many studies described pilot or feasibility evaluations with associated outcome measures that were generally short-term in nature, reflecting participation and satisfaction with the initiative. Fewer studies included evaluation of sustained improvements in workforce well-being domains or randomized trials to measure program impacts on health or behaviors. In addition, outcomes were primarily measured within an organizational context, with less attention paid to the potential impact on employee HWB outside of the work environment. Yet, research on work-life balance suggests that spillover effects between work and home have an impact on employee stress and health.[115,116] Longer-term studies that incorporate an array of work- and life-related measures, including impacts on job satisfaction, employee engagement and retention, and factors at home, can enhance our understanding of the broader health equity impact of these initiatives.

Fourth, while the included studies typically included participant HWB outcome measures, evaluation of the broader business implications of the observed findings was only included in a third of the articles, often as supplemental analysis. Business metrics included work engagement, absenteeism, and turnover/retention. Inclusion of quantitative metrics to monetize impact can provide a basis for quantifying the incremental business value of equity-based well-being initiatives, and provide a more compelling basis for employer investment. However, our experience indicates that such analyses are seldom performed. Further research is needed to understand the association of equitable workforce HWB initiatives with workforce health and business performance outcomes.

Implications for Practice

To achieve health equity, well-being programs must fit into a broader, systems-based approach to HWB at the organizational level, incorporating the workplace as an important determinant of health.[117] In order to improve workforce health equity, the goal of this scoping review is to provide an understanding of prior literature on employer HWB efforts and the extent to which those efforts have explicitly addressed workforce health inequities, particularly among racial and ethnic minorities and low-wage workers.

Building from the identified facilitators and barriers, future efforts to achieve equitable workforce well-being could benefit from a systems-based, evidence-driven, and human-centered approach to achieving equitable workforce

well-being.[118] For example, we found that programs benefit from system-level factors, like leadership support, the availability of resources to address employee needs, and accommodations for job demands. One challenge for employee equity is that many organizations focus on equality—where everyone has the same access to programs or resources—rather than equity. Employees may have to pay the same amount for child care or health insurance benefits, even if one employee makes three times more than the other. Organizations that want to improve employee health equity need to think about the system(s) in which employees are embedded and to develop programs that address employee needs, including the resources and benefits available to employees, but also the system's interconnectedness, accessibility, and ease of use. Another challenge is the lack of available data about workforce health equity. As we found, few studies evaluated potential differences across sociodemographic subcategories, including wage or race/ethnicity, which can mask inequities. Organizations need to invest in better data systems for understanding and responding to health equity considerations. This could involve building enterprise data warehouses, being purposeful about how data is analyzed to emphasize underrepresented groups, and/or developing processes for using the data to prioritize internal initiatives. Finally, employee engagement and participation is often lower among low-wage workers. Organizations may need to seek new ways of engaging employees. This could be through the engagement of peer champions, technology, or enhanced communications. It could also be through systems that foster employee trust. While much of our discussion in this paper focuses on the needs of low-wage workers, we recognize that these tactics can apply to many groups of workers. In some cases, addressing the needs of different groups of workers can provide insight into how to develop better programs for all employees.

While some studies included aspects of these foundational elements in development of initiatives, many were more focused on the tactical aspects of program implementation and outcomes. Incorporation of a systems-based approach can ensure that organizational initiatives are meaningfully aligned with business goals, including health equity. In addition, ensuring employee input into program focus and design can improve the likelihood of broader and more equitable participation and outcomes. Finally, a structured approach to data collection that includes evaluation of subpopulation-level participation and outcomes can provide a means for ongoing evaluation of program benefit while also providing opportunities to identify and mitigate barriers to more equitable outcomes.

This scoping review reflects the need for more rigorous research regarding organizational culture of health and workforce well-being efforts. Ideally, these studies should explicitly include quantitative, subpopulation-level analyses of well-being program participation rates and outcomes, recognizing that race, ethnicity[119] as well as wage level[6,113,114,120] may be associated with differences in these measures. Inclusion of business-related measures from a broader array of occupational settings can facilitate the transition of workforce health equity initiatives from being viewed as a business expense to a strategic investment in workforce human capital and business performance. Well-being program vendors – perhaps in collaboration with academic institutions – are particularly well positioned to engage in these studies and derive benefit from demonstrating favorable results for employer clients. Insights from program outcomes may also allow some vendors to incorporate performance-based guarantees for equitable health outcomes into their contracts with employers. We acknowledge that more rigorous analyses are expensive, but necessary for improving equitable health outcomes for all employees.

Limitations

This scoping literature review has limitations that warrant consideration. First, there are many types of workforce HWB initiatives that can be implemented to improve health equity outcomes. Despite the breadth of our literature review, it is possible that we may have failed to include some studies because we were primarily focused on employer-driven initiatives. Second, the observed results and published studies may reflect positive publication bias and should be interpreted with caution, as we did not critically evaluate study methodology. Third, the included studies may have limited generalizability because the interventions are largely limited to academic and medical settings. Additional research in other business settings and gray literature can help validate generalizability in other industries. Finally, the lack of subpopulation analyses makes it difficult to appreciate whether the observed improvements in employee HWB are generalizable to low-wage workers or those in demographic minority subgroups.

Conclusions

Based on this scoping literature review, the role of employer-sponsored HWB programs in promoting workforce health equity is poorly understood. While many of the included studies reported demographic attributes of participants, none considered race, ethnicity, or wage as independent variables. Despite an increasing focus on employer-sponsored HWB offerings, the specific implications of HWB programs on historically underrepresented or low-wage populations are not well characterized. Additionally, the preponderance of studies was comprised of research that was non-randomized or included single arm studies, which make it more difficult to understand program effects or to reduce potential selection or participation biases in the data. In addition, few studies included subgroup comparisons, so it was difficult to understand whether some groups participated less or received less benefit from the programs than others. ost incorporated short timelines that precluded evaluation of potentially more significant outcomes, including healthcare utilization and costs, and measures of business performance.

This review underscores the need for more rigorous, long-term studies that not only account for socioeconomic and

demographic factors but also assess the broader implications of HWB programs on equitable workforce health and business outcomes. A more comprehensive understanding of these program outcomes can result in greater effectiveness and business value for employers, as well as equitably enhance HWB for all employees.

So what?

What is Already Known on This Topic?

Employers are increasingly prioritizing efforts to implement organizational cultures of health, with a particular focus on addressing the broad domains of employee well-being.

What Does This Article Add?

This scoping review provides an overview of key attributes and themes of employer-sponsored health and well-being programs. Importantly, the review highlights a foundational knowledge gap regarding equitable development, implementation, and use of well-being programs among low-wage and racial and ethnic minority subpopulations.

What are the Implications for Health Promotion Practice or Research?

The findings from this review reflect the need for a greater focus by employers and researchers on equitable implementation and use of well-being programs, which should specifically include subpopulation-level analyses. Lack of consideration for racial, ethnic, wage level, and other differences among employee subpopulations in the development, implementation, and outcomes of well-being programs may result in the exacerbation of existing disparities.

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Declaration of Conflicting Interest

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