

RESEARCH ARTICLE

Changes in Work Arrangements, Psychosocial Working Conditions, and Worker Well-Being Between 2018 and 2022: Evidence From the General Social Survey

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ABSTRACT

Background: We used national-level data to compare worker demographic and socioeconomic characteristics, work arrangements, psychosocial working conditions, safety and health, job security, wages and benefits, and worker health and well-being before the COVID-19 pandemic, in 2018, and in the late stage of the pandemic, in 2022. Understanding these changes helps inform some of the potential ways these factors may shape the future of work.

Methods: We analyzed self-reported and publicly available data from the 2018 and 2022 waves of the General Social Survey (GSS)—Quality of Worklife (QWL) module, focusing on adults working part-time or full-time. We describe differences in the broad categories of interest mentioned above, as well as subcategories within each. For example, we assessed changes in psychosocial working conditions by focusing on subcategories that included job demands, job control, role conflict, resource adequacy, job support, work flexibility, and work and family interface, that is, the boundaries between work and family life. We used Mann–Whitney tests to assess statistically significant changes, using weighted, nationally representative worker samples ($N = 1473$ in 2018; $N = 2112$ in 2022).

Results: Between 2018 and 2022, we observed two changes in work arrangements; the share of independent contractors increased (from 12.4% to 14.4%) while the share of those working full-time decreased (from 81.3% to 78.5%). Psychosocial conditions exhibited mixed trends; job demands and control showed marginal improvement, while role conflict, resource adequacy, and job support worsened. The share of workers who mainly worked at home increased (6.6%–17.2%), alongside those experiencing family-work conflict (from 26% to 32%). Health and well-being also worsened, with more workers reporting lower job satisfaction and very often feeling used up (from 13.1% to 16.0%). In addition, workers reported more days in poor mental health (from 3.6 to 4.4 days) and days with activity limitations (from 1.6 to 2.2) in the past 30 days.

Conclusions: The quality of worklife in 2022 differed meaningfully from 2018, though not uniformly for better or worse. For example, increases in working at home and the share of independent contractor arrangements suggest different potential long-term consequences for worker well-being. Continued monitoring and more nuanced analyses are essential to understanding the evolving future of work.

1 | Introduction

Ongoing changes in the workforce, work, and workplace, including those driven by changes in demographics, work

arrangements, technology, organizational design, and disaster preparedness and response, interact and substantially affect worker safety, health, and well-being [1]. For example, the increasing use of artificial intelligence in the workplace will

continue to impact workers, including through the management of human-machine interactions and job displacement due to automation [2]. Studies have also predicted broad and increasing technology-led disruptions to employment and jobs [3, 4] and assessed associated increases in work precariousness and economic insecurity [5, 6].

The COVID-19 pandemic highlighted and accelerated some of these changes and increased the importance of tracking them. The pandemic resulted in the deaths of over 1.2 million people in the United States from January 14, 2020, onwards, according to the Centers for Disease Control and Prevention (CDC) (CDC COVID Data Tracker: Trends by Geographic Area). The pandemic also significantly affected American workers, the workplace, and the economy [7, 8]. Physical distancing and stay-at-home orders were two primary interventions implemented to limit disease exposure and transmission before vaccines and treatments were available [9, 10]. These drastic measures led to the closure of businesses, disruptions in the global supply of goods and services, and widespread job losses, resulting in the highest unemployment rate (13%) since 1976 during the second quarter of 2020 [11].

Despite government policies and programs designed to alleviate economic instability, including the Coronavirus Aid, Relief, and Economic Security Act of 2020 [12], the pandemic exacerbated economic insecurity, adding to the potential health risks faced by workers and their families [13, 14]. The disruptions caused by the pandemic had sectoral implications, with specific industries such as entertainment, hospitality and food services, retail trade, and transportation facing more challenges [15]. Consequently, studies documented how organizations navigated pandemic-related changes and how workers were affected by changes in work demands and incompatible role pressures between work and family domains [16, 17]. Studies also predicted that the pandemic would lead to significant changes with long-lasting effects on the workplace and in how work is done [18]. The introduction of vaccines in late 2020 began the process of normalizing the economy, albeit slowly, with some sectoral effects persisting. For example, a study using U.S. Census Bureau data found that remote work, including fully remote and hybrid work, increased across all major industries between 2019 and 2021. In addition, the study concluded that four major industries with the most significant percentage of their workers working remotely in 2021, including professional, scientific, and technical services, information, finance and insurance, and management of companies and enterprises, still had at least 33% of their workforce personnel working remotely in 2022 [19].

The National Institute for Occupational Safety and Health (NIOSH) has long prioritized studies and strategies to identify and address such ongoing changes and their anticipated future consequences to work, the workplace, and the well-being of workers [1]. For example, an increase in working at home, which is one of the items we examined in this study under the subcategory work flexibility in the broader category psychosocial working conditions, will likely effect long-term changes in worker well-being. NIOSH has also recognized that holistic workplace and work policies, programs, and practices are vital to ensure the overall well-being of the workforce, as well as the long-term health and continuity of organizations and businesses [1].

We undertook this study to characterize these changes further and inform some of the potential ways they may shape the future of work. We used national-level, granular cross-sectional data to compare worker (demographic and socioeconomic characteristics) as well as work and workplace characteristics (work arrangements; psychosocial working conditions; and safety and health, job security, wages and benefits), and worker health and well-being in 2018, before the pandemic, and in the late stage of the pandemic, in 2022. Given the cross-sectional nature of the data, our analysis is limited to comparing prevalence estimates between the two years under study. We anticipate that our findings will provide a foundation for a better understanding of ongoing changes, to guide future research and workplace interventions, and to enable comparisons with additional data as they become available.

2 | Data and Methodology

We used data from 2018 to 2022, the most recent year in which data were collected, from the General Social Survey (GSS) and its Quality of Worklife module (QWL). Funded by the National Science Foundation, GSS is a biannual, nationally representative cross-sectional survey of U.S. households conducted through face-to-face personal interviews by the National Opinion Research Center. GSS utilizes a multi-stage probability design yielding a representative sample of the civilian, non-institutionalized, English-speaking U.S. adult population [20]. Since 2002, GSS has been supplemented with the QWL module every 4 years (for details, see *Quality of Worklife Questionnaire | Stress at Work | CDC*). Developed by NIOSH with contributions from its partners, the QWL module assesses an array of psychosocial working conditions and quality of worklife topics among GSS respondents who were either working or looking for work at the time of the survey. Previous studies have examined the psychometric validity of QWL items and scales. Myers et al. [21] developed and assessed the validity of scales that used data from 2002 to 2014. Dobson et al. [22] presented results from detailed psychometric testing of QWL items and scales using data from 2002 to 2018. They reported results from a content validity study, factor analysis, differential item functioning analysis, scale reliability (Cronbach α), and predictive (concurrent) validity. The 2022 QWL is one of the most recent and comprehensive databases available that includes information on our topics of interest, at a time when such information remains scarce. We note that in 2018, the GSS was conducted through face-to-face interviews. In contrast, in 2022, three modes (face-to-face interviews, telephone interviews, and online administration) were used to administer the survey. In this study, we only used responses by those who reported working full-time or part-time during the two survey years on which we focused. This activity was reviewed by CDC, deemed not to be research on human subjects, and was conducted consistent with applicable federal law and CDC policy.

We derived descriptive statistics on worker demographic and socioeconomic characteristics, including age, sex, race and ethnicity, education, family income, and marital status, as well as on worker distribution across ten broad industrial sectors as defined by the National Occupational Research Agenda (NORA) [23]. Next, we assessed work arrangements, including

whether workers were self-employed, worked full-time or part-time, and had more than one job. Work arrangements are contributors to worker health and well-being [24, 25]. Next, based on the occupational psychology literature, we examined the psychosocial working conditions that contribute to health and well-being outcomes (job stress, exhaustion, satisfaction, and health-related quality of life [HRQL]). These psychosocial working conditions include individual items as well as items that can be organized in subcategories that are often used to capture several aspects of constructs such as job demands, job control (or decision latitude), role conflict, resource adequacy, job support, work flexibility, and work and family interface, that is, the boundaries between work- and family-life [22, 26–33]. For example, the job support subcategory contains items such as supportive social interactions between supervisors and co-workers that help mitigate job stress [29]. In addition, the consideration and assistance provided by supervisors and colleagues, whether through teamwork or in daily tasks, significantly influence job satisfaction across various work environments and have implications for work engagement and productivity [34]. Another example is work flexibility. While there is no standardized definition for it, we used three common types of flexibility available to workers: flexibility in their work location, their ability to take time off for family needs, and how far ahead they know what their schedule will be [33]. We also assessed three items we placed in a miscellaneous subcategory of psychosocial working conditions: trust in management, working as part of a team, and needing unions to protect worker interests. We further assessed safety and health, job security, wages and benefits.

Finally, to assess overall worker health and well-being, we used job stress, exhaustion, and satisfaction; intention to leave the current job; as well as HRQL. We used the items from the CDC HRQL-4 index to assess HRQL [35]. Developed in the 1980s, the index includes questions on general health status, physical health, mental health, and activity limitations and has been used for government-wide data collections and initiatives. The HRQL-4 questions have been used in national-level surveys such as the CDC Behavioral Risk Factor Surveillance System (BRFSS) (Behavioral Risk Factor Surveillance System) and National Health and Nutrition Examination Survey (NHANES) (National Health and Nutrition Examination Survey | National Health and Nutrition Examination Survey | CDC).

After adjusting for sampling probabilities, which included subsampling non-respondents (the response rate for each survey year we included was approximately 70%) and addressing the underrepresentation of specific populations based on race and geography, our analyses utilized a weighted, nationally representative sample. The weights adjust for the underrepresentation of some population sections to make it a nationally representative sample and are directly obtained from GSS.

The survey questions on the topics we examined included several different response options. Studies using regression analyses that assess associations among variables from questions with several response options usually combine these response options to derive dichotomized responses and simplify the estimations and interpretation of results. Here, because we

focused on descriptive results, we had the opportunity to provide granular information to readers using all response options. This clarifies the drivers of differences between the years we examined and minimizes information loss that may result from aggregation. In addition, certain items demonstrated variation only in the extreme response options, and a binary transformation would have obscured these distinctions.

We used Mann–Whitney tests to assess statistically significant differences between the probability distributions of the responses from 2018 to 2022 [36]. We used this test because the samples we used were independent, and their sizes did not allow us to assume they were normally distributed. We provided 95% confidence intervals (CI) to show the statistical significance of the estimates. While we have organized individual items under subcategories, we only compare individual items, specifically between the same response options for each item. We calculated percent changes by dividing the difference between the values of variables in the baseline year (2018) and 2022 by the baseline value (in 2018) and multiplying by 100. Percent changes provide a standardized measure that facilitates comparison of relative changes in magnitude across groups or time periods.

2.1 | Measurement of Variables

As mentioned above, first we examined worker demographic and socioeconomic characteristics, along with worker distribution across ten NORA sectors. Next, we examined four broad categories of variables that included work arrangements; psychosocial working conditions; safety and health, job security, wages and benefits; and health and well-being. Each of these categories can include multiple numbered questions or items.

Table 1 provides detailed information on the survey questions we used and refer to interchangeably as “items” throughout, along with the response options. Within the four broad categories we mentioned above, there are several subcategories. For example, in psychosocial working conditions, questions 5–7 assess job demands, and 8–12 job control. We note that items 10–12 specifically relate to skill discretion.

3 | Results

A total of 1436 (1473 weighted) and 2034 (2112 weighted) respondents in 2018 and 2022, respectively, reported working part-time or full-time. In the sections that follow and in the Appendix, we present tables with all of our results to provide complete information that may be potentially valuable to readers. However, in the text, we only discuss statistically significant results.

3.1 | Demographic and Socioeconomic Characteristics

From 2018 to 2022, there were three changes in the demographic characteristics of workers: one in race and ethnicity, and two in marital status. Table A1 shows that there was a 32.5% decrease (from 8.3% to 5.6%) in those reporting being

TABLE 1 | Questions and responses related to work arrangements, psychosocial working conditions, safety and health, job security, wages and benefits, and health and well-being, QWL 2018 and 2022.

Questions	Responses
Work arrangements	
1. How would you describe your employment arrangement in your main job?	Regular, permanent employees (standard); workers paid by temporary help agencies (temporary); those working for a contractor (under contract); independent contractors, consultants, or freelance workers (contractors), on-call workers ^a
2. Are you self-employed or do you work for someone else?	Binary response
3. When you worked [in the previous year], was it usually full or part-time?	Binary response
4. Do you have any jobs besides your main job, or do you do any other work for pay?	Yes, no
Psychosocial working conditions	
Job demands	
5. My job requires that I work very fast	Strongly agree, agree, disagree, strongly disagree
6. I have enough time to get the job done	
7. I have too much work to do everything well	
Job control	
8. In your job, how often do you take part with others in making decisions that affect you?	Often, sometimes, rarely, and never
9. I am given a lot of freedom to decide how to do my own work	Strongly agree, agree, disagree, strongly disagree
10. My job lets me use my skills and abilities	Strongly agree, agree, disagree, strongly disagree
11. My job requires that I keep learning new things	Strongly agree, agree, disagree, strongly disagree
12. I have an opportunity to develop my own special abilities	Very true, somewhat true, not too true, not at all true
Role conflict	
13. I am free from the conflicting demands that other people make of me	Strongly agree, agree, disagree, strongly disagree
14. In my job, I know exactly what is expected of me	
Resource adequacy	
15. I receive enough help and equipment to get the job done	Very true, somewhat true, not too true, not at all true
16. I have enough information to get the job done	Very true, somewhat true, not too true, not at all true
Job support	
17. My supervisor is helpful to me in getting the job done	Very true, somewhat true, not too true, not at all true
18. The people I work with can be relied on when I need help	
19. The place where I work is run in a smooth and effective manner	Strongly agree, agree, disagree, strongly disagree
20. Conditions on my job allow me to be about as productive as I could be	
Work flexibility	
21. How often do you work at home as part of your job?	Never, a few times a year, about once a month, about once a week, more than once a week, mainly work at home
22. How hard is it to take time off during work to take care of personal or family matters?	Not at all hard, not too hard, somewhat hard, very hard
23. How far in advance do you usually know what days and hours you will need to work?	Number of weeks: < 1, 1–2, 3–4, and > 4
Work and family interface^b	
24. How often do the demands of your family interfere with your work on the job?	Often, sometimes, rarely, never

(Continues)

TABLE 1 | (Continued)

Questions	Responses
25. How often do the demands of your job interfere with your family life?	Often, sometimes, rarely, never
26. After an average work day, about how many hours do you have to relax or pursue activities that you enjoy?	0–24
Miscellaneous	
27. I trust the management at the place where I work	Strongly agree, agree, disagree, strongly disagree
28. In your job, do you normally work as part of a team, or do you work mostly on your own?	Binary response
29. Workers need strong trade unions to protect their interests	Strongly agree, agree, disagree, strongly disagree
Safety and health, job security, wages and benefits	
30. The safety and health conditions where I work are good	Strongly agree, agree, disagree, strongly disagree
31. The job security is good	Very true, somewhat true, not too true, not at all true
32. The chances for promotion are good	Very true, somewhat true, not too true, not at all true
33. How fair is what you earn on your job in comparison to others doing the same type of work you do?	Much less than you deserve; somewhat less than you deserve, about as much as you deserve, somewhat more than you deserve; much more than you deserve
34. My fringe benefits are good	Very true, somewhat true, not too true, not at all true
Health and well-being	
Job stress	
35. How stressful is your work?	Always, often, sometimes, hardly ever, never
Job exhaustion	
36. How often during the past month have you felt used up at the end of the day?	Very often, often, sometimes, rarely, never
Job satisfaction	
37. All in all, how satisfied would you say you are with your job?	Very satisfied, somewhat satisfied, not too satisfied, not at all satisfied
38. Taking everything into consideration, how likely is it you will make a genuine effort to find a new job with another employer within the next year?	Very likely, somewhat likely, not at all likely
HRQL	
39. Would you say that in general your health is excellent, very good, good, fair, or poor?	Excellent, very good, good, fair, poor
40. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?	Number of days
41. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?	Number of days
42. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?	Number of days

^aAbbreviations are added in parentheses.^bFor terminology, see NORA Implementation Plan for Healthy Work Design and Well-Being.

multiracial. There was a 7.7% increase (from 50.5% to 54.4%) in those who reported being married and a 16.9% decrease (from 14.2% to 11.8%) in those who reported being divorced.

Table A2 shows the distribution of workers in NORA sectors. There were two changes: a 23.9% increase (from 7.1% to 8.8%) in

workers in construction and a 20.3% decrease (from 7.4% to 5.9%) in workers in transportation, warehousing, and utilities.

Table 2 shows results for work arrangements. There were three changes, including a 70.7% decrease (from 1.6% to 0.5%) in temporary workers, a 17.2% increase (from 12.4% to 14.4%) in

TABLE 2 | Work arrangements, QWL 2018 and 2022.

	Estimate (%) and 95% confidence interval				Relative percent change
	2018		2022		
1. How would you describe your employment arrangement in your main job?					
Standard	79.7	77.2–81.9	80.0	76.7–82.5	
Temporary ^b	1.6	0.9–3.0	0.5	0.2–1.0	−70.7
Under contract	3.4	2.2–4.6	3.1	2.2–4.3	
Contractor ^a	12.4	10.5–14.4	14.5	11.7–17.7	17.2
On call	2.9	2.0–4.1	2.2	1.5–3.3	
2. Are you self-employed or do you work for someone else?					
Self-employed	12.1	10.4–14.2	13.5	11.2–16.3	
3. When you worked [in the previous year], was it usually full or part-time?					
Full-time ^a	81.3	78.5–83.8	78.5	75.7–81.1	−3.4
4. Do you have any jobs besides your main job, or do you do any other work for pay?					
Had more than one job	19.0	16.7–21.6	13.3	11.0–16.0	

^aDifferences between years were statistically significant at $\alpha = 0.10$, Mann–Whitney tests.

^bDifferences between years were statistically significant at $\alpha = 0.05$, Mann–Whitney tests.

contractors, and a 3.4% decrease (from 81.3% to 78.5%) in those who reported working full-time.

Table 3 presents significant results for psychosocial working conditions; safety and health, job security, wages and benefits; and health and well-being. Table A3 contains the items with non-significant results in these categories, including items 7, 11, 18, 22, 25, 27, 32, and 40 shown in Table 1.

3.2 | Psychosocial Working Conditions

Job Demands: Compared to 2018, in 2022, there were changes in two of the three items in job demands: working fast and having enough time to get the job done. There was a 44% increase (from 2.5% to 3.6%) in workers who strongly disagreed with the statement that their job required working very fast, while there was a 7.8% increase (from 40.9% to 44.1%) in workers who agreed that they had enough time to get the job done.

Job Control: There were changes in all four items in this subcategory. There was a 9.4% increase (from 36.1% to 39.5%) in workers reporting often taking part with others in making decisions that affect them. Workers reported mixed changes in their freedom to decide how to perform their work. There was a 7.7% decrease (from 56.1% to 51.8%) in workers who strongly agreed with this statement, but also a 13.1% increase (from 32.8% to 37.1%) in those agreeing with the statement. Two specific items in this subcategory, using skills and abilities and having the opportunity to develop one's special abilities, addressed role discretion. There was an 11.9% increase (from 36.0% to 40.3%) in workers who strongly agreed they could use their skills and abilities and a 5.8% decrease (from 56.7% to 53.4%) in workers who agreed. There was a 50% increase (from 4.4% to 6.6%) in workers reporting that it was not at all true that they had opportunities to develop their own special abilities, but the overall percentage of workers who provided this response was small. These changes, along with the changes in freedom to

decide how to perform work (7.7% decrease in strongly agree and a 13.1% increase in agree), illustrate the benefit of assessing more granular information, instead of dichotomizing responses.

Role Conflict: There were changes in all three items in this category. There was a 44.0% increase (from 4.8% to 6.9%) in workers strongly disagreeing with being free from conflicting demands. There was 44.4% increase (from 4.5% to 6.5%) in workers reporting they disagreed with knowing what is expected on the job. In addition, there was a 62.5% increase (from 0.8% to 1.3%) in workers responding that it was not at all true that they had enough information to get the job done. Therefore, taken together, responses in the subcategory of role conflict items seem somewhat worse in 2022 compared to 2018.

Resource Adequacy: Responses in receiving enough help and equipment showed a 8.2% decrease (from 48.6% to 44.6%) in workers reporting that it was “very true.” However, there was a 7.5% increase (from 39.8% to 42.8%) in workers reporting that this statement was “somewhat true.” In addition, the percentage of workers who strongly disagreed that they had enough information to get the job done increased by 62.5% (from 0.8% to 1.3%), though the overall percentage of workers giving this response remained very small.

Job Support: Responses to three items in this subcategory showed significant changes. Our findings indicate that there was a 66.7% increase (from 0.3% to 0.5%) in workers reporting that it was “not at all true” that their supervisor was helpful in getting the job done. This difference might not seem meaningful given the very small percentage of responses to that particular response option. In addition, there was a 12.4% increase (from 17.8% to 20.0%) in workers who disagreed with the statement that their workplace operated smoothly and efficiently. Also, there was a 100.0% increase (from 1.0% to 2.0%) in workers who strongly disagreed that work conditions allowed them to be productive, even though the response percentages were very small. Overall, responses in this subcategory show that job support seems to have decreased.

TABLE 3 | Psychosocial working conditions, safety and health, job security, wages and benefits, and health and well-being, QWL 2018 and 2022.

	Estimate (%) and 95% confidence interval				Relative percent change
	2018		2022		
Psychosocial working conditions					
Job demands					
5. My job requires that I work very fast					
Strongly agree	23.3	20.8–26.0	21.6	19.1–24.3	44.0
Agree	45.9	42.8–49.0	44.4	41.1–47.7	
Disagree	28.3	25.8–30.9	30.4	27.2–33.5	
Strongly disagree ^a	2.5	1.7–3.7	3.6	2.4–5.4	
6. I have enough time to get the job done					
Strongly agree	43.8	40.6–46.9	41.8	38.8–44.9	7.8
Agree ^a	40.9	37.3–44.5	44.1	40.1–47.2	
Disagree	11.3	9.4–13.4	10.4	8.6–12.5	
Strongly disagree	4.1	3.0–5.6	3.7	3.1–4.6	
Job control					
8. In your job, how often do you take part with others in decisions that affect you?					
Often ^a	36.1	33.3–39.1	39.5	35.7–43.4	9.4
Sometimes	38.8	35.7–41.9	37.7	34.0–41.5	–7.7
Rarely	16.3	14.1–18.7	15.5	13.2–18.2	
Never	8.8	7.2–10.7	7.3	5.6–9.4	
9. I am given a lot of freedom to decide how to do my own work					
Strongly agree ^a	56.1	53.1–59.5	51.8	48.1–55.4	13.1
Agree ^a	32.8	29.7–36.0	37.1	33.7–40.6	–5.8
Disagree	7.9	6.3–9.9	8.5	6.5–10.9	
Strongly disagree	3.2	2.4–4.2	2.7	1.9–3.7	
10. My job lets me use my skills and abilities					
Strongly agree ^b	36.0	33.1–39.0	40.3	37.2–43.6	11.9
Agree ^b	56.7	53.6–59.8	53.4	50.0–56.7	50.0
Disagree	5.8	4.6–7.4	4.9	3.8–6.3	
Strongly disagree	1.5	0.8–2.7	1.4	0.8–2.3	
12. I have an opportunity to develop my own special abilities					
Very true	36.9	33.7–40.1	37.5	34.6–40.6	44.0
Somewhat true	45.3	41.9–48.8	43.6	40.2–47.2	
Not too true	13.3	11.2–15.8	12.2	10.5–14.1	
Not at all true ^a	4.4	3.3–5.9	6.6	4.9–8.7	
Role conflict					
13. I am free from the conflicting demands that other people make of me					
Strongly agree	28.8	26.1–31.7	27.9	24.9–31.3	44.0
Agree	48.3	45.2–51.4	46.5	43.3–50.0	
Disagree	18.1	16.0–20.3	18.6	16.0–21.6	
Strongly disagree ^a	4.8	3.5–6.4	6.9	5.6–8.6	
14. In my job, I know exactly what is expected of me					
Strongly agree	36.3	33.6–39.1	37.0	33.4–40.6	44.4
Agree	58.8	55.9–61.7	55.8	52.0–59.6	
Disagree ^a	4.5	3.3–5.9	6.5	5.0–8.5	
Strongly disagree	0.4	0.2–0.9	0.6	0.3–1.5	
Resource adequacy					

(Continues)

TABLE 3 | (Continued)

	Estimate (%) and 95% confidence interval				Relative percent change
	2018		2022		
15. I receive enough help and equipment to get the job done					
Very true ^a	48.6	45.5–51.7	44.6	41.7–47.6	–8.2
Somewhat true ^a	39.8	36.9–42.7	42.8	39.9–45.8	7.5
Not too true	8.7	7.0–10.7	9.2	7.5–11.1	
Not at all true	2.9	2.0–4.2	3.3	2.5–4.4	
16. I have enough information to get the job done					
Very true	56.8	53.6–59.8	54.3	50.6–58.0	
Somewhat true	37.9	36.5–43.0	39.7	36.4–43.0	
Not too true	4.4	3.3–5.8	4.7	3.6–6.1	
Not at all true ^b	0.8	0.5–1.5	1.3	0.7–2.5	62.5
Job support					
17. My supervisor is helpful to me in getting the job done					
Very true	51.9	48.2–55.5	51.3	47.7–54.9	
Somewhat true	35.9	32.6–39.3	34.7	31.6–37.9	
Not too true	9.0	7.4–10.8	9.0	7.1–11.3	
Not at all true ^b	0.3	0.2–0.5	0.5	0.4–0.6	66.7
19. The place where I work is run in a smooth and effective manner					
Strongly agree	17.4	15.2–19.8	15.9	13.4–18.8	
Agree	61.6	58.8–64.4	60.1	56.8–62	
Disagree ^b	17.8	15.7–20.1	20.0	17.4–22.8	12.4
Strongly disagree	3.2	2.3–4.5	4.0	3.1–5.2	
20. Conditions on my job allow me to be about as productive as I could be					
Strongly agree	24.7	22.0–27.6	21.8	18.8–25.1	
Agree	63.8	60.6–66.9	63.8	60.1–67.3	
Disagree	10.7	8.7–13.0	12.5	10.8–14.5	
Strongly disagree ^b	1.0	0.4–1.5	2.0	1.2–2.8	100.0
Work flexibility					
21. How often do you work at home as part of your job?					
Never ^a	59.5	55.9–63.0	54.9	51.0–58.8	–7.7
A few times a year	6.7	5.3–8.4	6.1	4.8–7.9	
About once a month ^a	6.5	5.0–8.4	3.5	2.6–4.8	–46.2
About once a week ^a	9.1	7.5–10.9	5.5	4.1–7.2	–40.6
More than once a week	11.6	9.8–13.7	12.7	10.5–15.2	
Mainly work at home ^a	6.6	4.9–8.8	17.2	14.5–20.4	160.6
23. How far in advance do you usually know what days and hours you will need to work? ^c					
Less than 1 week ^a	43.2	39.8–46.6	23.4	19.7–27.4	–45.8
1–2 weeks	12.8	10.8–15.0	13.1	10.8–15.8	
3–4 weeks	5.9	4.6–7.4	5.8	4.3–7.7	
More than 4 weeks ^a	38.2	34.8–41.8	8.5	6.7–10.7	–77.7
Never changes	Not asked		49.3	45.9–52.6	
Work and family interface					
24. How often do the demands of your family interfere with your work on the job?					
Often ^a	3.9	2.8–5.2	5.1	3.7–7.1	30.8
Sometimes ^a	22.1	19.7–24.8	26.9	24.1–29.9	21.7
Rarely ^a	44.2	40.9–47.5	40.7	37.8–43.7	–7.9

(Continues)

TABLE 3 | (Continued)

	Estimate (%) and 95% confidence interval				Relative percent change
	2018		2022		
Never	29.8	26.6–33.3	27.2	24.6–30.0	
26. After an average work day, about how many hours do you have to relax or pursue activities that you enjoy? ^d					
Average number: 0–24 ^b	3.7	3.5–3.8	3.9	3.7–4.1	5.4
Miscellaneous					
28. In your job, do you normally work as part of a team, or do you work mostly on your own?					
Part of a team ^a	54.8	51.4–58.1	60.2	55.8–64.3	9.9
On my own ^a	45.2	41.9–48.5	39.8	35.7–44.2	–11.9
29. Workers need strong unions to protect their interests					
Strongly agree ^a	10.9	9.3–12.5	14.6	12.9–16.3	33.9
Agree	42.3	40.2–45.5	44.5	42.1–46.9	
Disagree ^a	40.0	37.3–42.6	32.5	31.0–35.1	–18.8
Strongly disagree ^b	6.8	5.3–8.0	8.4	6.0–8.7	23.5
Safety and health, job security, wages and benefits					
30. The safety and health conditions where I work are good					
Strongly agree	40.3	37.4–43.1	39.1	36.0–42.3	
Agree ^b	56.7	53.6–59.8	53.4	50.0–56.8	–5.8
Disagree	5.8	4.6–7.4	4.9	3.8–6.3	
Strongly disagree	1.4	0.8–2.7	1.3	0.8–2.3	
31. The job security is good					
Very true ^a	61.0	57.9–63.8	56.6	52.9–54.9	–7.2
Somewhat true ^a	29.1	26.5–31.8	35.6	32.6–38.6	22.3
Not too true ^a	6.8	4.9–9.2	3.9	2.7–5.7	–42.6
Not at all true	3.2	2.2–4.6	3.9	2.8–5.5	
33. How fair is what you earn on your job in comparison to others doing the same type of work you do?					
Much less than deserved	10.5	8.9–12.4	10.8	9.2–12.8	
Somewhat less ^a	27.4	24.6–30.4	31.2	28.0–34.5	13.9
About as much	51.7	48.3–55.0	50.3	46.9–53.8	
Somewhat more ^a	8.8	6.9–11.0	6.4	5.1–8.2	–27.2
Much more	1.7	0.9–2.9	1.2	0.7–1.9	
34. My fringe benefits are good					
Very true ^a	37.2	34.1–40.3	33.7	30.4–37.2	–9.4
Somewhat true	39.4	36.3–42.6	38.9	35.6–42.5	
Not too true	11.3	9.4–13.4	11.6	9.9–13.5	
Not at all true ^a	12.2	10.3–14.3	15.7	12.6–19.4	28.7
Health and well-being					
Job stress					
35. How stressful is your work?					
Always	7.1	5.8–8.7	7.8	6.1–9.9	
Often	21.9	19.2–24.9	22.1	19.4–25.2	
Sometimes	43.2	39.8–46.7	44.9	40.9–48.9	
Hardly ever ^a	20.2	17.6–23.4	17.5	14.6–20.1	–13.4
Never	7.5	5.9–9.4	7.7	5.8–10.1	
Job exhaustion					
36. How often during the past month have you felt used up at the end of the day?					
Very often ^a	13.1	11.1–15.1	16.0	13.3–18.2	22.1

(Continues)

TABLE 3 | (Continued)

	Estimate (%) and 95% confidence interval				Relative percent change
	2018		2022		
Often	23.0	20.1–25.8	23.4	21.1–25.8	
Sometimes	35.6	32.6–38.6	34.5	30.9–38.2	
Rarely	20.3	17.8–23.0	17.9	15.9–20.2	
Never	8.2	6.4–10.3	8.5	6.6–10.9	
Job satisfaction					
37. All in all, how satisfied would you say you are with your job?					
Very satisfied ^a	49.4	45.7–52.9	46.0	42.5–49.6	–6.9
Somewhat satisfied ^a	38.2	35.0–41.5	42.9	39.6–46.3	12.3
Not too satisfied	9.9	8.2–11.9	8.3	6.6–10.4	
Not satisfied at all	2.5	1.8–3.3	2.7	1.8–3.9	
38. Taking everything into consideration, how likely is it that you will make a genuine effort to find a new job with another employer within the next year?					
Very likely	18.2	15.9–20.7	12.6	10.6–15.1	
Somewhat likely	24.4	21.7–27.5	26.4	23.1–30.0	
Not at all likely ^b	57.4	54.0–60.6	61.0	57.0–65.0	6.3
HRQL					
39. Would you say that in general your health status is excellent, very good, good, fair, or poor?					
Excellent ^a	21.4	18.9–24.2	15.9	13.1–19.1	–25.7
Very good	33.1	30.3–36.1	32.1	28.8–35.6	
Good ^a	29.8	27.1–32.7	35.0	31.7–38.4	17.45
Fair	14.2	12.3–16.3	15.6	12.8–18.8	
Poor	1.4	0.9–2.2	1.5	0.8–2.5	
41. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? ^d					
Days in poor health during the past 30 days ^a	3.6	3.1–3.9	4.4	3.9–4.9	22.2
42. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities? ^d					
Days with limitations during the past 30 days ^b	1.6	1.3–1.9	2.2	1.8–2.5	37.5

^aDifferences between years were statistically significant at $\alpha = 0.05$, Mann–Whitney tests.^bDifferences between years were statistically significant at $\alpha = 0.10$, Mann–Whitney tests.^cCategories are not comparable between years.^dEstimates measured in hours or days, not percent.

Work Flexibility: We observed changes in one of the three items in this subcategory, the frequency of working at home. There was a 7.7% decrease (from 59.5% to 54.9%) in workers who reported “never,” a 46.2% decrease (from 6.5% to 3.5%) in those who reported “about once a month,” a 40.6% increase (from 9.1% to 5.5%) in those who reported “about once a week,” and a 160.6% increase (from 6.6% to 17.2%) in workers who reported mainly working at home. Changes in one of the other two flexibility items, “how hard is it to take time off,” were not significant. Additionally, for the other item, how far in advance workers knew their working days and hours, the results for 2018 and 2022 were not entirely comparable, but we included this item in Table 2. There were four response options in 2018 and five in 2022. However, the response “more than 4 weeks” in 2018 may be at least partially captured by the same option in 2022, combined with the new option “never changes.” The

response to the question “hours to relax or pursue enjoyable activities” changed from 3.7 to 3.9 h within 24 h.

Work and Family Interface: We found significant changes in one of the three items in this subcategory, the family–work interface. There was a 30.8% increase (from 3.9% to 5.1%) in workers reporting that family demands often interfere with work, a 21.7% increase (from 22.1% to 26.9%) in workers who reported “sometimes,” and a 7.9% decrease (from 44.2% to 40.7%) in workers who reported “rarely.”

Miscellaneous: We considered three additional items in this sub-category, “miscellaneous” within the psychosocial working conditions, two of which had significant results. There was a 9.9% increase (from 54.8% to 60.2%) in workers who strongly agreed they mostly work as part of a team and an 11.9%

decrease (from 45.2% to 39.8%) in workers who reported working on their own. There was a 33.9% increase (from 10.9% to 14.6%) in workers who strongly agreed, an 18.8% decrease (40.0% to 32.5%) in those who disagreed, and a 23.5% increase (from 6.8% to 8.40%) in workers who strongly disagreed that workers need strong unions.

3.3 | Safety and Health, Job Security, Wages and Benefits

Four of the five items in this subcategory had significant results. There was a 5.8% decrease (from 56.7% to 53.4%) in workers who agreed that the workplace safety and health conditions were good. There was a 7.2% decrease (from 61.0% to 56.6%) in workers reporting it was very true that the job security was good, a 22.3% increase (from 29.1% to 35.6%) in those reporting it was somewhat true, and a 42.6% decrease (from 6.8% to 3.9%) in those reporting it was not too true. Therefore, job security seems to have improved somewhat from 2018 to 2022. There was a 13.9% increase (from 27.4% to 31.2%) in those reporting that their earnings were somewhat less compared to others, and a decrease of 27.2% (from 8.8% to 6.4%) in those who reported they were somewhat more. When asked whether their fringe benefits were good, there was a 9.4% decrease (from 37.2% to 33.7%) in workers reporting that this was very true and a 28.7% increase (from 12.2% to 15.7%) in those who reported that this was not at all true.

3.4 | Health and Well-Being

There were changes in seven of the eight items. There was a 13.4% decrease (from 20.2% to 17.5%) in workers reporting that their work was hardly stressful. There was a 6.9% decrease (from 49.4% to 46.0%) in those reporting being very satisfied with their job and a 12.3% increase (from 38.2% to 42.9%) in those reporting being somewhat satisfied. Also, there was a 6.3% increase (from 57.4% to 61.0%) in workers who reported it was not at all likely they would make an effort to find a new job in the next year. Additionally, there was a 22.1% increase (from 13.1% to 35.2%) in workers who felt “used up” very often.

We found significant changes in three of the four HRQL items. There was a 25.7% decrease (from 21.4% to 15.9%) in those reporting their health was excellent and a 17.4% increase (from 29.8% to 35.0%) in those who reported it was good. The number of days in poor mental health increased from 3.6 to 4.4, a 22.2% increase, and the number of days with activity limitations increased from 1.6 to 2.2 days, a 37.5% increase.

4 | Discussion

We undertook this study to assess ongoing changes in the workforce, work, and workplace, and to inform some of the potential ways they may shape the future of work. We used national-level weighted data to compare worker, work, and workplace characteristics, and worker health and well-being, before the pandemic (2018) and in the late stage of the pandemic (2022). Although the GSS-QWL is based on a nationally representative probability sample with survey weights and

nonresponse adjustments, like all large-scale survey datasets, it may still be subject to residual selection and nonresponse bias, particularly in subjective assessments of job quality and well-being. However, given the relatively high response rate among those administered the QWL module and the use of weighted data in our analyses, we believe that any such bias, if present, is unlikely to materially affect the results presented here. The value of this study is its focus on the quality of work-life that has not been previously reported. The only other study we are aware of that reported on quality of worklife markers and their comparison before and during the pandemic was that of Nigam et al. [37], which focused on the healthcare sector specifically and healthcare workers only.

Though not statistically significant, some changes we observed in worker demographics, including the lower number of female workers, lower average age (even in an aging society), and higher number of non-Hispanic Whites, may be reflective of the pandemic's realities [11]. During the pandemic, older workers were disproportionately affected, and their return to work remained slow in 2022. Similarly, women stayed home more than men [38]. Although not statistically significant, the overall proportion of workers earning \$75,000 or more increased. Our findings corroborate these earlier studies on demographics reporting on national-level statistics from other data sources.

It is important to note that there was no significant change in the percentage of workers in standard arrangements performing regular paid work under a single employer. A standard work arrangement is secure or permanent. Overall, workers in such an arrangement have employee status; stable and adequate pay; access to fringe benefits, including health insurance, paid leave, and retirement benefits; a regular, full-time work schedule; and the ability to negotiate their schedule and take time off. However, not all workers in standard arrangements have comparable opportunities, including, for example, the ability to negotiate their schedule. We characterize any other arrangement as non-standard. This provides another data point for the continuing lack of change in these arrangements, at least based on QWL data. Previous research with QWL data reported the prevalence of standard work arrangements was 80.5% in 2002, 78.9% in 2006, 78.9% in 2010, and 79.2% in 2014 [39]. This is important because previous studies using different datasets have reported an increase in non-standard arrangements [6], such as contractual jobs, which are not supported in this study and also in previous QWL studies. Note that, regardless of the data source used, detailed information on work arrangements is usually not collected beyond the main or primary job as reported by the worker. This can influence the accuracy of the reported information. Within non-standard arrangements, we found three changes, including a 68.8% decrease in temporary workers, a 16.1% increase in contractors, and a 3.4% decrease in those who reported working full-time.

Fourteen of the items in Table 3 included only one significant response option change. In the largest category, psychosocial working conditions, it seems that job demands and control showed some improvement. At the same time, role conflict worsened slightly between 2018 and 2022, and job support appears to have decreased. Next, we summarize the most significant percentage changes in this broad category. The largest

increases were in mainly working at home, strongly disagreeing that conditions allowed one to be productive, reporting that it was not at all true that the supervisor was helpful, reporting that having enough information to do the job was not at all true, and reporting that having the opportunity to develop one's own special abilities was not at all true. Even though many of these increases were significant, we need to be cautious with firm conclusions based on them, given the moderate size of the sample we are reporting upon. The most significant percentage decrease in psychosocial conditions was in those reporting knowing their schedule more than 4 weeks in advance. As we mentioned in Section 3, there were four response options for this item in 2018 and five in 2022, so the results between years are not fully comparable. The findings on working at home also relate to family interfering with work. As we reported in the results section, we found significant changes in this item, which, when considered along with the changes in knowing one's schedule in advance, point to increased interference between 2018 and 2022. In addition, workers were expected to continue to have access to working at home. As we noted above, four major industries with the largest percentage of their workers working remotely in 2021 still had at least 33% or more of their workforce working remotely in 2022 [19]. Another recent study concluded that as of 2025, working at home accounted for a quarter of paid workdays among those aged 20–64, and more workers desire this flexibility than those who have access to it, especially women, workers with young children, and workers with lower-level educational attainments [40]. Results for receiving enough help and equipment showed that there was an 8.2% decrease (from 48.6% to 44.6%) in workers reporting it was very true. However, there was a 7.5% increase (from 39.8 to 42.8) in workers reporting that this statement was somewhat true. Such changes, along with those of the changes in freedom to decide how to perform work (7.7% decline in strongly agree and a 13.1% increase in agree), illustrate the benefit of assessing more granular information, instead of dichotomizing responses. If we had combined responses for this item into strongly agree and agree in an overall agree response, we would have assumed that the overall agreement remained unchanged because it would have resulted in 88.9% in both years, which was a zero percent change.

In the category of safety and health, job security, wages and benefits, the most significant percentage decrease was in workers reporting that it was not too true that their job security was good. Also, there was an overall reduction in workers' satisfaction with their workplace safety and health conditions and fringe benefits.

The most significant percentage point decline in HRQL was in those reporting that their health status was excellent. There were also significant percentage increases in those reporting days in poor mental health and days with activity limitations. In addition, there was a significant increase in workers who felt "used up" very often. These findings align with those of Nigam et al. [37] on health workers, demonstrating that health and well-being worsened in 2022 compared to 2018.

5 | Conclusion

We observed several improving and worsening characteristics and health and well-being outcomes between 2018, a pre-

pandemic year, and 2022, a year late in the pandemic. Our findings on the quality of worklife are mixed, and from the prevalence statistics, there is no one way to tell whether 2022 was a "better" or "worse" year than 2018. Even though in 2022 workers were less pressed for time due to lower demands and higher control, they worked in more conflicting roles and perceived less support on the job. This might reflect an ongoing change in the quality of work, which can be examined by analyzing future data. Nevertheless, our limited analyses that used data from only two years showed that the changes we observed in job characteristics were associated with worker outcome measures, such as higher job satisfaction and perceived under-remuneration. Workers in 2022 were more stressed at work and had lower HRQL. One of the contributions of our analyses was that we did not convert worker responses into bivariate variables.

In summary, we did not observe substantial changes in the quality of worklife between the two years we compared. However, two differences stand out. First, there were more independent contractors in 2022 than in 2018, and second, there was a considerable shift towards workers working mainly at home, rather than infrequently. The second change might have caused family work-life interference, as our results suggest. Future studies can further explore these differences and related outcomes.

Author Contributions

Tapas Ray conceived of the paper and conducted the analyses. Tapas Ray, Regina Pana-Cryan, and Anasua Bhattacharya participated in interpretation of the data, drafting the article or revising it critically for important intellectual content, and approval of the final version. All authors approved the version to be published. All authors agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Disclosure

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

Ethics Statement

This study involved secondary analysis of publicly available, de-identified data from the General Social Survey (GSS) Quality of Worklife module. As no identifiable private information was used, this research was exempt from institutional review board review in accordance with applicable regulations.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data analyzed in this study are from the General Social Survey (GSS) Quality of Worklife (QWL) module, conducted by NORC at the

University of Chicago. The GSS QWL data are publicly available and can be accessed through the GSS Data Explorer (<https://gss.norc.umd.edu/>) and the Inter-University Consortium for Political and Social Research (ICPSR). The authors did not generate new data and have no restrictions on data access beyond those imposed by the data provider.

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Appendix

TABLE A1 | Demographic and socioeconomic characteristics of workers, QWL 2018 and 2022.

Estimate (%) and 95% confidence interval				
Demographic and socioeconomic characteristics	2018	2022		
Age				
Average age	42.7	41.8–43.5	42.6	41.6–43.7
Sex				
Female	50.3	46.9–53.6	48.1	45.1–50.9
Race and ethnicity				
Hispanic	15.7	12.9–18.9	15.5	12.6–18.9
Non-Hispanic				
White	59.7	55.8–63.4	62.9	58.9–66.7
Black	12.3	10.2–14.8	11.4	9.1–14.1
Asian or Pacific Islander	3.5	2.5–5.1	4.3	2.7–6.9
Multiracial ^a	8.3	6.8–10.1	5.6	4.2–7.4
American Indian or Alaskan Native	0.4	0.2–0.9	0.3	0.1–0.6
Education				
1–7 years of school	1.8	1.0–3.1	1.3	0.7–2.2
8 years of school	1.1	0.6–1.9	0.8	0.5–1.3
9–11 years of school	6.6	4.9–8.9	5.5	4.1–7.4

(Continues)

TABLE A1 | (Continued)

Estimate (%) and 95% confidence interval				
Demographic and socioeconomic characteristics	2018	2022		
High school graduate	25.8	22.8–29.1	26.7	23.8–30.0
13–15 years of school	27.0	24.2–30.1	26.5	23.5–29.7
Bachelor's degree	20.9	18.0–24.2	21.9	19.8–24.9
Postgraduate	16.6	14.0–19.6	17.2	15.0–19.7
Family Income				
\$0–\$10,000	3.1	2.1–4.4	3.1	2.1–4.5
\$10,001–\$25,000	10.6	8.8–12.6	6.7	5.3–8.4
\$25,001–\$50,000	17.4	15.4–19.7	14.5	12.3–17.0
\$50,001–\$75,000	17.7	15.6–20.2	16.1	13.7–18.8
\$75,000 and above	51.2	48.1–54.3	60.0	56.3–63.0
Marital status				
Married ^a	50.5	47.1–53.8	54.4	50.1–58.6
Widowed	2.8	2.0–4.0	2.1	1.4–3.1
Divorced ^a	14.2	11.9–16.9	11.8	10.1–13.7
Separated	2.3	1.7–3.3	2.3	1.7–3.2
Never married	30.1	27.3–33.1	29.5	26.2–33.1

Note: We assessed income using average estimates.

^aDifferences between years were statistically significant at $\alpha = 0.10$, Mann–Whitney tests.

TABLE A2 | Workers by NORA industry sector, QWL 2018 and 2022.

Estimate (%) and 95% confidence interval				
	2018	2022		
Agriculture, forestry, and fishing	1.0	0.6–1.6	1.4	0.7–2.8
Construction ^a	7.1	5.7–8.9	8.8	6.9–11.1
Healthcare and social assistance	14.6	12.4–17.0	15.8	13.6–18.3
Manufacturing	9.7	8.1–11.7	9.3	7.5–11.5
Mining	0.6	0.3–1.0	0.8	0.2–1.2
Oil and gas extraction	0.1	0.0–0.4	0.0	0.0–0.2
Public safety	1.4	0.8–2.5	1.0	0.7–1.5
Services	47.8	44.5–51.0	47.0	42.9–51.2
Transportation, warehousing, and utilities ^b	7.4	5.7–9.3	5.9	4.2–8.1
Wholesale and retail trade	10.4	8.6–12.6	10.0	8.2–12.2

^aDifferences between the years were statistically significant at $\alpha = 0.05$.

^bDifferences between the years were statistically significant at $\alpha = 0.10$.

TABLE A3 | Psychosocial working conditions, safety and health, job security, wages and benefits, and health and well-being, QWL 2018 and 2022: items with estimates that were not statistically significant.

	Estimate and 95% confidence interval (%)			
	2018		2022	
<i>Psychosocial working conditions</i>				
Job demands				
7. I have too much work to do everything well				
Strongly agree	9.3	7.6–11.4	9.1	7.2–11.5
Agree	26.1	23.6–28.7	25.2	22.2–28.3
Disagree	54.6	51.5–57.6	55.7	52.2–59.1
Strongly disagree	10.0	8.2–12.2	10.0	8.0–12.4
Job control				
11. My job requires that I keep learning new things				
Strongly agree	44.7	41.4–48.1	42.5	39.1–45.9
Agree	44.1	40.9–47.3	45.4	41.8–48.9
Disagree	9.1	7.5–10.9	9.2	7.5–11.2
Strongly disagree	2.1	1.4–3.1	2.9	2.0–4.1
Job support				
18. The people I work with can be relied on when I need help				
Very true	52.8	49.4–56.2	51.9	48.2–55.4
Somewhat true	38.6	35.6–41.6	38.9	35.7–42.2
Not too true	6.2	4.9–8.5	6.5	4.9–8.5
Not at all true	2.3	1.6–3.3	2.8	1.9–3.9
Work flexibility				
22. How hard is it to take time off during work to take care of personal or family matters?				
Not at all hard	42.2	39.1–45.3	40.8	37.1–44.7
Not too hard	32.9	29.8–36.1	34.7	31.2–38.3
Somewhat hard	16.6	14.4–19.0	15.9	13.4–18.8
Very hard	8.4	6.7–10.5	8.6	6.7–10.6
Work and family interface				
25. How often do the demands of your job interfere with your family life?				
Often	12.5	10.9–14.2	11.5	9.5–13.7
Sometimes	31.3	27.9–34.9	32.9	29.2–36.6
Rarely	32.9	29.7–36.2	33.9	30.5–37.5
Never	23.3	20.0–26.9	21.8	19.4–2.5
Miscellaneous				
27. I trust the management at the place where I work				
Strongly agree	26.7	23.7–29.9	27.3	24.3–30.5
Agree	56.2	52.5–59.9	55.0	51.0–59.0
Disagree	13.8	11.9–15.9	13.2	10.9–15.9
Strongly disagree	3.4	2.3–4.8	4.5	3.3–6.1
<i>Safety and health, job security, wages and benefits</i>				

(Continues)

TABLE A3 | (Continued)

	Estimate and 95% confidence interval (%)			
	2018		2022	
32. The chances for promotion are good				
Very true	20.3	17.7–23.2	20.5	18.1–23.1
Somewhat true	40.1	36.9–43.3	41.9	38.3–45.5
Not too true	23.6	20.9–26.4	21.3	18.2–24.8
Not at all true	16.1	13.9–18.5	16.4	13.4–19.8
Health and well-being				
HRQL				
40. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? ^a				
Days in poor health during the past 30 days	2.5	2.2–2.9	2.6	2.2–3.0

^aEstimates measured in hours or days, not percent.