

Job Burnout: Consequences for Individuals, Organizations, and Equity

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Consequences of Burnout: Table of Contents

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Context and Methods

Objective: Synthesize evidence on the consequences of burnout for individuals, organizations, and equity in science, engineering, and medicine

Status: Completion expected mid-November

Methods:

- Review-of-reviews approach (6,459 articles screened; 98 full-texts extracted)
- Search for non-review articles in science and engineering (1,090 screened; 35 full-texts extracted)
- Backward and forward reference search with 15 seminal/key articles

What we know

We have enough data to act.

1. Researchers have captured a sufficient breadth of individual- and occupational-level consequences.

However, most of our knowledge is concentrated in the medicine/health care setting.

Individual-level consequences of burnout

Categories	Manifestations
Somatized symptoms	Headaches, neck pain, body pain
Poorer Quality of Life	Loss in appetite, loss in sleep, chronic fatigue
Physical health conditions	Gastrointestinal infections, respiratory infections
Mental health conditions	Anxiety, depression, post-traumatic stress disorder, mood disturbances
Poorer Cognitive function	Poorer prospective memory, delayed memory
Substance use*	Alcohol use, medication use
Suicide ideation	Suicide ideation

Note: * indicates mixed evidence, in part due to inconsistency in measurement tools

Occupational-level consequences of burnout

Categories	Manifestations
Talent loss	Intention to leave training programs, job, or profession
Poorer work performance	Absenteeism, reduced ability to work, less professionalism
Poorer employee wellbeing	Lower job satisfaction, regretting career choice
Less talent growth	Reduced engagement in professional development activities

2. Early-career workers in science, engineering, and medicine seem particularly vulnerable to the consequences of burnout.

- Burnout predicts mental health conditions in newly-qualified nurses

(Rudman et al., 2011; Laschinger et al., 2015)

- Employees with 1-3 years of organizational tenure most likely to leave when burned out, vs. those <6 months and 5+ years, in a study of 13,000 software professionals (U-curve effect)

(Trinkenreich et al., 2024)

3. Occupations, work responsibilities, and work settings drive, in part, differences in consequences of burnout.

- **Occupations (e.g., physicians vs. nurses)**
Nurses scored higher in burnout and reported more changes in workload during COVID-19 pandemic (Peck & Porter, 2022)
- **Work responsibilities (e.g., direct involvement in treating patients vs. no direct involvement)**
30.8% at high risk for burnout for frontline physicians vs. 21.3% for non-frontline
10.5% frontline physicians reported PTSS vs. 5% for non-frontline (Mukherjee et al., 2022)
- **Work settings (e.g., emergency medicine)**
Relationship between burnout and patient safety incidents most pronounced in emergency medicine and intensive care (Hodkinson et al., 2022)

Persisting gaps

We don't have all of the data, but we can already take meaningful action.

4. Lack of attention to pronounced gender differences in burnout.

Differences in consequences of burnout by gender need attention;
Interventions need implementation and testing.

- 51.4% of health care workers who are women (vs. 42.2% who are men) intended to leave their jobs during the COVID-19 pandemic in a study of 4,165 workers. Of these, 3/4 cited burnout as the reason.

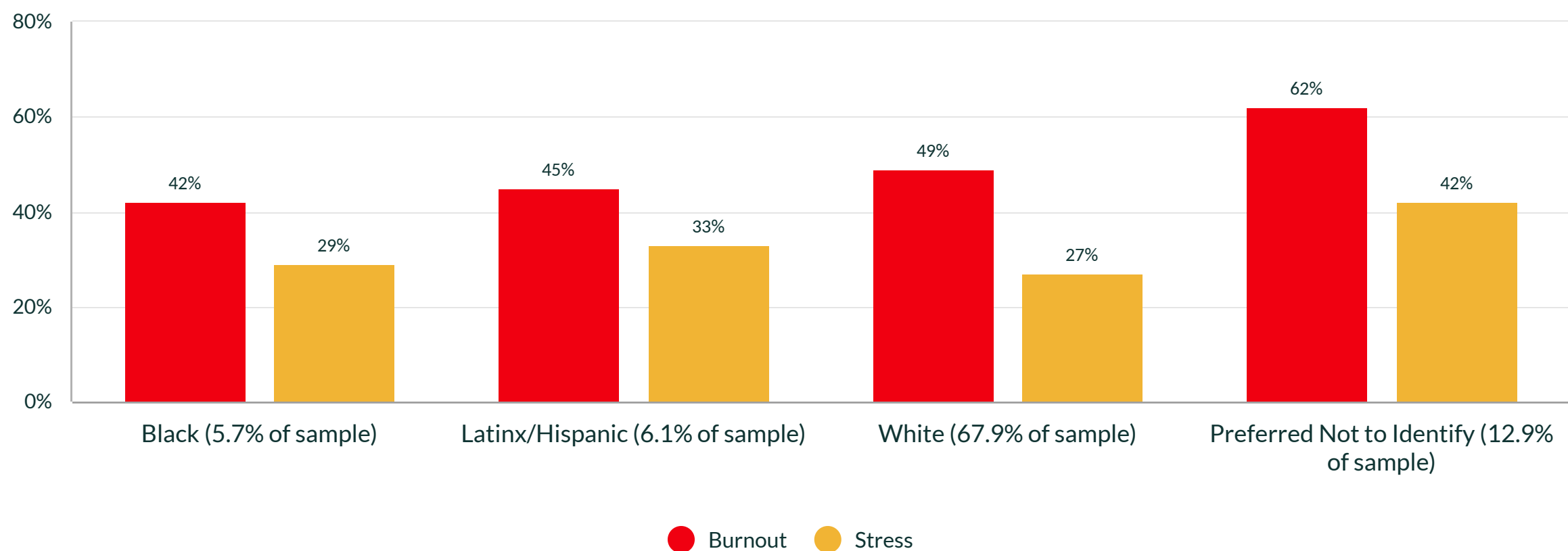
(Apple et al., 2023)

- Women neurologists more likely to report suicide ideation than men.

(Lafaver et al., 2018)

5. We need to better understand how persons of color *choose to report* burnout in research studies, as well as their lived experiences in the context of burnout .

Highest burnout and stress levels noted for U.S. health care workers who Preferred Not To Identify race or ethnicity (12.9% of 20,947 respondents) in a national survey



6. More research is needed to link the mechanisms between worker burnout and organizational and societal consequences.

Potential areas of research include:

- Domino effect: burnout among leaders and detrimental effect on employees
- Absenteeism in organization; attrition within field

Where do we go from here?

Some directions for future work



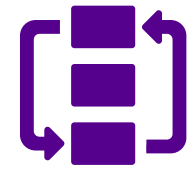
Measurement issues

(e.g., subjective vs. objective measures of outcomes)



Organizational and societal contexts in which human capital is being eroded or lost

(e.g., domino effect between burned out leaders and employees)



Translating knowledge into action for workers, leaders, and institutions

(e.g., childcare, eldercare, and pregnancy-related support for women at the workplace)

Thank you

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