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Unproductive Feelings: The Moral Framing of Burnout across Three Domains (1970-2023)

By

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DISSERTATION

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DAVIS

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Unproductive Feelings: The Moral Framing of Burnout across Three Domains (1970-2023)

Abstract

This project traces the historical development of burnout as it moves from an ambiguous collection of feelings to a codified and measurable health condition that allows for critique of working conditions while also emphasizing individual responsibility for health. Using a mix of computational text analysis and qualitative content analysis, I trace changing meanings of burnout over time and across the three domains of psychology, management, and public depictions of burnout in the *New York Times*. While the components of burnout remain consistent after psychologists develop tools to measure it, specifically the Maslach Burnout Inventory (MBI), the strategies of action to address burnout change over time, as does the typical burned-out subject. I identify two broad groups that tend to be recognized and fore-fronted as the subjects suffering from burnout: constrained caring professionals and disengaged contingent professionals. The former have been the subjects of burnout research since burnout entered psychological discourses in the 1970s, as researchers were primarily conducting research or practicing alongside caring professionals (i.e. in medicine and education). Burnout was applied to the second group later, during a time of rapid economic transformation in the US that made the employment relationship for white collar workers less secure. Over time, as burnout expanded to different domains, its association with working conditions and power relations declined while frames that emphasized individual causes and solutions increased. My findings help to illustrate how the framing of burnout is shaped by different historical factors that may have implications for who is recognized as legitimately distressed, whether their distress rises to the level of a social or organizational problem or is perceived as self-inflicted, and the possibilities for individual, organizational, and/or policy-level solutions.

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Table of Contents

List of Figures

Chapter 1: Introduction

This project traces the historical development of burnout as it moves from an ambiguous collection of feelings to a codified and measurable workplace health condition that allows for critique of working conditions that are precarious and extractive but also emphasizes individual responsibility for health. By tracing burnout through multiple domains, I observe how expertise is developed and leveraged over time by different actors to make claims about what is healthy for individual workers and organizations.

I use a mix of computational text analysis and qualitative content analysis to trace changing meanings of burnout over time and across the three domains of psychology, management, and public depictions of burnout in the *New York Times*. This project is limited to specific text produced by academics, managers and journalists, all writing in English and largely located in the US. The timeframe that bounds my analysis begins with its "social discovery" by psychologists in the 1970s onward, even though the term "burnout" has been used colloquially since the 1960s.

While the components of burnout remained consistent after psychologists develop tools to measure it, the Maslach Burnout Inventory (MBI) becoming the most widely used tool over time, the strategies of action to address burnout changed over time, as did the image of the typical burned-out subject. I identify two broad groups that tend to be recognized and fore-fronted as the subjects suffering from burnout, the *constrained caring professionals* and *disengaged contingent professionals*. The former face new or intensifying marketization or more exposure to market and regulatory pressures of efficiency, standardization, and calculability in spaces that have been thought of as outside of or hostile to the market, especially care work (Bandelj 2015; Stacy 2011; Gaston 2022). These are often the kinds of workers that continue to

deliver care or keep organizations functioning despite conflicting demands and operate in conditions of very limited resources (Jenkins 2023; Winant 2021). The latter are the newly contingent professional employees who are expected to exchange their emotional/cognitive/physical energy and dedication for the promise of future dividends through experience and increasing employability rather than higher pay, benefits, or job security (Eberhart et al. 2020). These groups are the most visible in the burnout discourses, as the burnout narratives are oriented around a loss of valued resources such as drive, passion, autonomy, security, or the breaking of the promise for a fulfilling job. In general, the primary burnout victims that gain research and public attention are those who are in the process of losing something valued compared to those who are assumed to have nothing left to lose or perhaps nothing to begin with.

By using computational text analysis in the study of burnout, I contribute to sociological arguments related to the social construction of illness (Brown 1995; Conrad and Barker 2010), emotion (Cottingham 2016; Hochschild 1979; Illouz 2008), and the dynamics of expertise in the context of changing material and ideological landscapes (Epstein & Timmermans 2021; Eyal 2013; Figert 1995; Illouz 2008). I find that, through focusing my analysis on a psychological/managerial/popular conceptualization of a health condition, the ways that competing logics evolve over time become more visible. Specifically, the often-conflicting logics of health and markets as well as the shifting arguments that frame burnout as caused by broad social and economic factors, the workplace environment and power relations, and individual mindsets and behaviors.

FRAMING BURNOUT: WHOSE EMOTIONAL/COGNITIVE/PHYSICAL EXHAUSTION
MATTERS?

This project follows a well-worn path that is concerned with the ways that the framing of
health conditions as well as the kinds of people to whom they are attached have implications for
their broader recognition and treatment (Armstrong et al. 2006; Saguy 2013; Saguy and Gruys
2010; Saguy 2013). Within the sociology of health and illness, the social process of recognizing
and defining a health problem and attributing it to a cause or set of causes is consequential for
health outcomes through numerous pathways (Aronowitz 2008; Conrad and Barker 2010). The
framing of a condition impacts access to valued resources such as insurance or recognition
(Kempner 2006; Levin-Dagan and Baum 2021), interactions with institutions such as work,
medicine, and the state (Bell 2009; Pryma 2017), and the strategies used by individuals to obtain
those valued resources (Levin-Dagan & Baum 2021; Pryma 2017).

Additionally, the framing of conditions in different spaces is consequential as it helps to
draw attention to some aspects of the causes, consequences, and solutions of a condition while
obscuring others (Brown 1995; Epstein and Mamo 2017; Saguy and Gruys 2010). However, the
process of developing frames does not happen in a vacuum. I identify psychology as a key site
where the emotional vocabulary and cultural scripts for understanding burnout emerge and then
spread to other spaces, specifically business management and press accounts of burnout in the
New York Times.

Developing the Cultural Toolkit: Collaboration between Psychology and Managerial Science to
make sense of (Un)healthy Feelings

Swidler (1986) proposed that culture, rather than prescribing values that individuals must
act towards (culture as deterministic), is something that provides a "toolkit" of habits, skills, and

styles from which people learn and construct their own "strategies of action." Emotional cultures "[allow] members of a society to identify and discuss emotions, evaluate them as desirable or undesirable, and regulate them in line with values and norms" (Gordon 1990: 152). In the case of burnout, psychologists act as burnout experts who articulate what burnout is and how it should be treated with an eye towards promoting what is understood to be healthy and good. Psychology as a discipline has come to wield considerable cultural authority, as psychological and therapeutic definitions of reality have become more influential (Epstein & Timmermans 2021; Eyal 2013; Illouz 2008; Starr 1982). As such, psychology provides authoritative moral frameworks of what is good/healthy and bad/unhealthy (Illouz 2009).

Illouz (2008) shows us how psychologists have been instrumental in developing the available tools to address all manner of problems generated by modern life, often taking an approach that individualizes these problems. The cultural authority of psychology, or power of expertise, grew out of historical cooperation with other institutions, such as the military, education, and business that helped to increase psychology's power of expertise by gradually "linking together objects, actors, techniques, devices, and institutional and special arrangements" (Eyal 2013; Illouz 2008). The areas of psychology that are particularly concerned with burnout are Industrial-Organizational psychology, Applied Psychology, and Organizational Behavior Management. These subfields in psychology also have a closer relationship with managerial sciences than other subfields. The stated goal of these sub disciplines is to make psychology more useful in everyday life, largely by providing tools for managers in the private sector (Salas, Kozlowski, and Chen 2017). It is through the diffusion of the psychological "conceptual apparatus" and the use of its tools and methods in other spaces that the power of psychological expertise is strengthened.

However, the capacity to make claims and intervene in burnout are not the exclusive jurisdiction of psychologists. New ways of seeing emotions emerged through the parallel development of psychological/therapeutic (Illouz 2008) and managerial (Barley and Kunda 1992) discourses and practices. These discourses and practices mutually constitute each other and are shaped by a historical "interplay between broad cultural and economic forces" (Barley & Kunda 1992: 392). The relationship between psychology and management is significant as it aligns and intertwines the languages of emotionality and productivity (Illouz 2008: 72). As such, work on burnout in psychology is oriented towards the concerns of managerial sciences as a space where psychological tools are put into practice. Researchers and practitioners in management draw on the cultural toolkit, or expertise, provided by psychologists to understand emotional distress and wellness in terms of dollars and cents and make decisions about how to best organize work relationships and practices. This also helps to strengthen the authority of certain business management practices as they draw on the moralized health framework of psychology.

Psychologists provide a moral framework oriented around health that managers (and workers) can employ to make claims about the health of working conditions as well as the varying degrees of responsibility for maintaining individual emotional, mental, and bodily health. Here, burnout becomes a tool for making claims about right or wrong courses of action oriented towards the protection of individual health. However, the emphasis on psychological knowledge, particularly on deviant emotion, tends to individualize or isolate problems that are patterned by larger social forces, "often at the cost of collectively linking emotions to their social roots and collective solutions" (Cottingham 2023: 10).

INTRODUCING BURNOUT

Before the mid 1970s, burnout was spoken of colloquially, but did not exist as a recognizable academic or psychological concept and was not legible in the way that it is today. Its transmutation into a calculable "thing" has been part of an ongoing research project within academia and applied disciplines since its "discovery" in the mid-1970s by psychologists. I conceptualize major contributors to burnout literature in psychology, specifically Herbert Freudenberger and Christina Maslach, as "burnout experts" who defined the condition, developed tools to measure it, and validated these measurement tools. These tools have since been taken up and used by other kinds of actors, specifically managers, to identify and intervene in burnout.

Herbert Freudenburger (1926-1999), a German-born American psychologist, is cited as the first to use the term. He did so in the mid 1970s, while working with mental health professionals in a New York free clinic that he had helped to establish (Freudenburger 1974; Martin 1999; Schaufuli et al.1993; Neckel et al. 2017). In his partially autobiographical popular self-help book, *Burn Out: The High Cost of High Achievement*, Freudenberger (1980) theorized that it was high-achieving professional workers, especially those in the "helping professions," (i.e. people working in education, health and human service professions) who were the most at risk for burnout when their idealism and desire to make a difference, is undermined by the realities of their ineffectiveness (Schaufuli et al. 1993).

At around the same time Christina Maslach (1976), an American occupational psychologist at UC Berkeley, used the term "occupational burnout" to describe the experience of exhaustion in particular occupational settings - again, within the helping professions of teaching and nursing. Early versions of this measurement tool were oriented towards and tested within the

helping professions as these were the context where burnout experts in psychology were practicing and conducting research. The 1970s and 80s were also a time of rapid reorganization of institutions like medicine, with increasing demands on health care workers that came with the weakening of the welfare state.[1] Consequently, the helping professions also became increasingly impacted by demands that undercut ideals of professional work such as autonomy and meaningful relationships with the recipients of care (Pescosolido 2013; Pugh 2022; Starr 1982; Timmermans and Oh 2010).

Narratives around burnout in the helping professions echo the cultural schema of work devotion where people are understood to be devoted or committed to a profession (or an organization) and willing to put in long hours or work hard because they feel that what they do is meaningful (Blair-Loy and Cech 2017). This commitment, specifically to care, is also a gendered phenomenon as women disproportionately occupy positions in care work and within this area tend to do the most undervalued work (Stacey 2011; Winant 2021). This commitment is strained by the contradictions between ideals of care and pressures of bureaucratic and market logics that require efficiency, standardization, and rationalization (Gaston 2022; Reich 2014). In emphasizing the helping professions, discussions of burnout highlight "contradictory lives" where "individuals and organizations work imperfectly to reconcile previously institutionalized values with market pressures that remain out of their control" (Reich 2014: 1577). I observe that, in the earlier periods of burnout research, the relationship between the caring professional and the organizational environment was more salient, reflecting this tension. However, the emphasis

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[1] 4] Reorganization in terms of the increasing demands on health care institutions through economic and regulatory changes such as the passing of Medicare and Medicaid in 1965, deinstitutionalization, and rapid economic shifts that pushed more people into poverty - coupled with the rise of low-skill care work (Winant 2021)

shifted towards individual resources and responsibility as the tools to measure burnout become more abstracted and widely used.

Maslach and her colleague Suane Jackson are credited with developing the first measurement instrument to classify and quantify burnout in the helping professions, the Maslach Burnout Inventory (MBI) in 1981. The MBI offered a more clinical description of burnout, made its characteristics quantifiable, and gave researchers a common language through which to understand it (Schaufuli et al. 1993: 255). This was a key moment in the legibility of burnout, making it possible for applied psychologists, and later management professionals, to measure burnout empirically for the purpose of intervention. Maslach and colleagues later expanded the MBI in 1996, developing the MBI-General Survey (MBI-GS), which modified the language of the questionnaire to be more applicable to occupations that did not involve contact with patients or clients. The MBI-GS made burnout portable to occupations beyond the "helping" professions.

After the publishing of the MBI-GS in 1996, burnout was more readily attached to the growing class of skilled contingent professionals who were no longer guaranteed job security in an environment of insecurity that promotes employee "flexibility," which diminishes the expectation that companies will remain loyal to people, while employees are still obligated to remain loyal to their employer (Pugh 2015). In this context, more emphasis is placed on entrepreneurialism and the responsibility of individuals to protect and invest in themselves (Scharff 2016).

Since the initial publications by Freudenberger and Maslach, burnout has sparked academic interest, with publications on the topic increasing rapidly. Figure 1 below visualizes the increasing number of publications about burnout in PsycInfo (PI) and Business Source

Complete (BSC), two of the databases I utilize in this project.[2] Early definitions by Freudenberger, Maslach, and others helped to frame burnout as a condition of professional work with specific emotional components. The MBI aided in the increased academic interest in the phenomenon and conceptualized burnout as "a syndrome of three types of feelings": emotional exhaustion, 2) cynicism or depersonalization, and 3) reduced feelings of personal accomplishment (Maslach & Jackson 1981; Maslach et al. 1996-2018:1; Neckel et al. 2017). The three components of the MBI and their relation to one another are summarized by Maslach and colleagues below:

> The Emotional Exhaustion dimension captures the problem of lacking sufficient energy to make a useful and enduring contribution at work. But it is the Cynicism (Depersonalization) dimension that captures the difficulty in dealing with other people and activities in the work world. Furthermore, Professional Efficacy captures the self-evaluation people make regarding the value of their work and the quality of their contribution. (Maslach et al. 1986-2018: 73)

Interest increased initially in the applied psychological space but rose in business management more recently. In the PI and BSC, burnout is now consistently represented as a multifaceted phenomenon that connects embodied feelings of emotional/cognitive/physical[3] exhaustion, the relational and emotional attachment to one's work or role, and one's perceived or actual capacity to perform that role. By explicitly connecting the individual to the social environment of work, the characteristics of burnout have the potential to give more context to what might otherwise be an amorphous and private feeling of distress.

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2 Figure 1 includes articles that name burnout somewhere in the title or abstract of the document. The number of documents that include burnout anywhere in the full text are much higher.

3 I link these different feelings of exhaustion with backslashes because they are often conceptualized together and are closely linked.
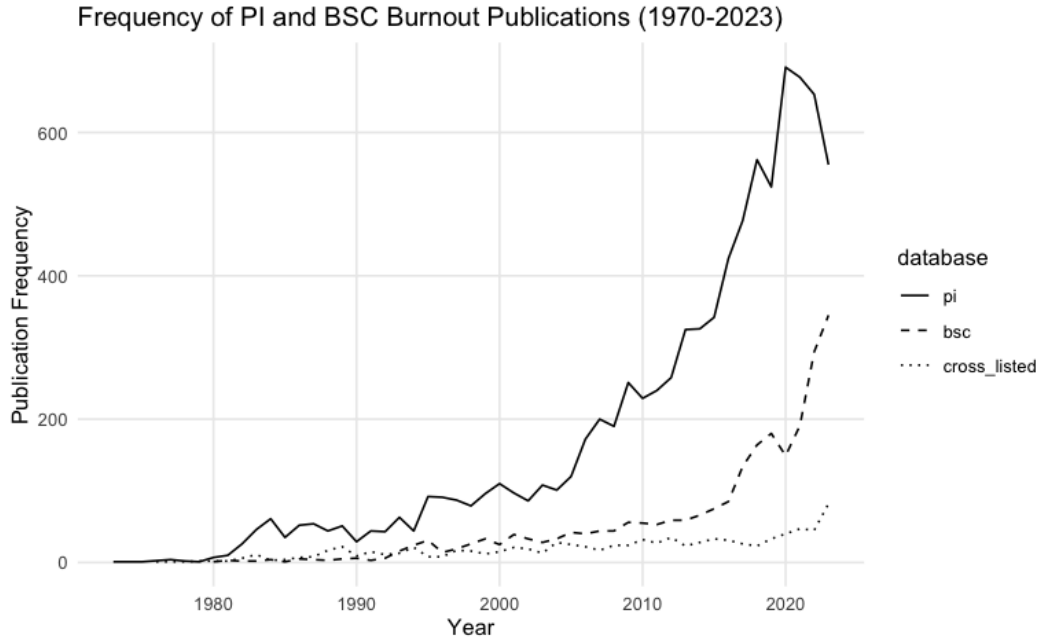
Figure 1: Frequency of PI, BSC and Cross Listed Burnout Abstracts (1970-2023)

More recently, the successful taking up of burnout as an object of expert concern has been further legitimized through clarifying efforts by the World Health Organization (WHO). In 2019, the WHO elaborated on the symptoms of burnout and officially recognized it as an occupational phenomenon in the 11th edition of the International Classification of Disease (ICD-11) (WHO 2019). This clarification by a major global health organization has played a key role in the legitimation and visibility of burnout. It is also responsible for the boom in popular reporting on the topic after the announcement in 2019, just before the onset of the COVID-19 pandemic. Figure 2 shows how discussions of burnout spiked in the NYT after the WHO announcement and the pandemic.

Frequency of Burnout Publications in the New York Times (1970-2023)
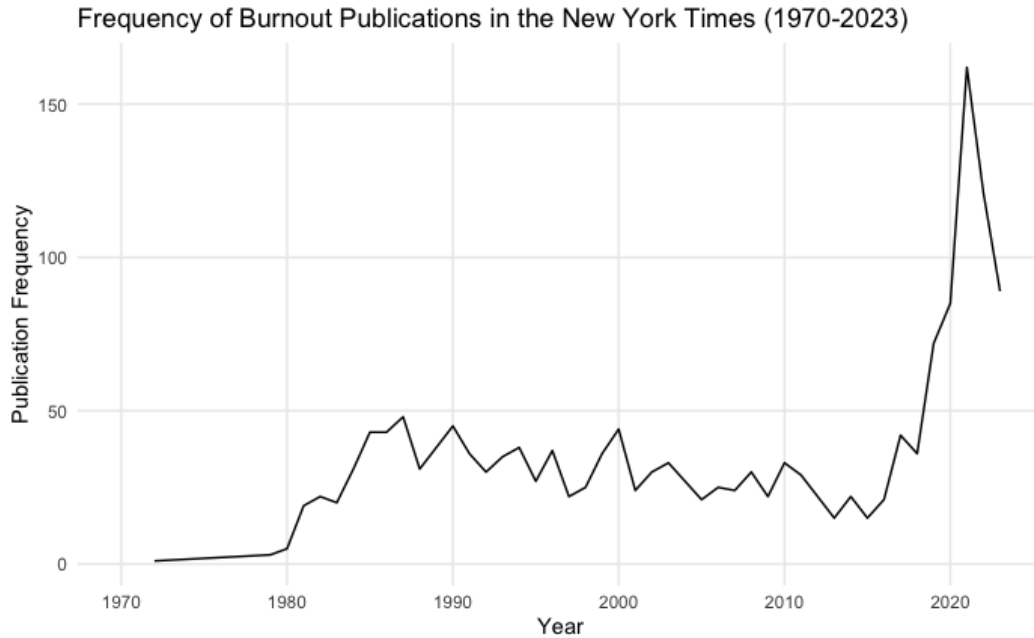
Figure 2 Frequency of NYT Burnout Documents (1970-2023)

This widely publicized re-classification solidified the shared definition of burnout around the three-component model developed by Maslach and colleagues:

> Burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: 1. feelings of energy depletion or exhaustion; 2. increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and 3. reduced professional efficacy. Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life. (WHO 2019)

This definition of burnout states in no uncertain terms that it is NOT a medical condition. However, it is described in the chapter "factors influencing health status or contact with health services." While specific tools may have developed to measure it, burnout occupies a liminal space where it has not been fully medicalized but is still something that has the potential to lead to bad health outcomes if left unaddressed. This not-quite-medical definition also has consequences for the strategies of action that are available to sufferers and forecloses on others, such as being able to make claims for health insurance or accessing sick leave in the US.

However, this is not the case everywhere. Departing from this non-medical definition, in some European countries such as Sweden and the Netherlands, burnout has become more clinical in character, as sick days due to burnout are documented and one can become a "burnout patient" and receive treatment for clinical burnout (Neckel et al. 2019).[4] This does not mean, however, that burnout is accepted as an unproblematic condition and there is still reluctance to take time off.

The resistance of burnout to medicalization comes from its being understood more as a syndrome that is defined by its symptoms, not having a singular cause, and not containing clear "biomarkers" of disease. Burnout falls under what Brown (1995) typologizes as a "contested illness" where the condition is generally accepted as a thing (due to the cultural work of psychologists), but a biomedical definition has not been applied. This situates burnout alongside other conditions that are argued to be caused by environmental and occupational conditions. In this context, communities, workers, employers and governments may have different agendas for recognizing health conditions as a particular kind of thing. Recognizing environmental conditions as causes of illness, such as exposure to coal dust in the case of black lung (Brown 1995), pollution in the case of asthma (Aronowitz 2006), or even more ambiguous conditions such as sick building syndrome and multiple chemical sensitivity related to chemical exposures (Murphy 2006) means that resources need to be allocated or regulations need to be put into place to change the working and/or living environment to protect public health and the health of workers. Because of the ambiguity and the lack of grounding within a concrete bio-medical

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[4] Schaufelli (2017), one of the burnout experts in psychology outlines a history of burnout that situates its emergence and acceptance as a medical condition in places like the Netherlands as historically contingent on the structure of the welfare state and the existence of another similar exhaustion condition (overstrain).

framework (i.e. it lacks a clear medical frame), discussions of burnout and its causes, consequences, solutions, and who or what is responsible for dealing with it are a site of negotiation.

Rather than being a medical condition that can be easily explained by medical knowledge and treated through medical intervention, burnout is a more ambiguous issue that is a problem for individual, organizational and economic health. By existing somewhat outside of the jurisdiction of medicine, burnout is situated in the broad and increasingly influential "domain of health" where many more kinds of actors (in addition to medical professionals) can make claims about what is healthy (Epstein and Timmermans 2021). The claims makers I focus on are psychologists, managers and journalists; they are not, however, the only groups with an interest in defining burnout and how to intervene.

COMPLICATING THE BURNOUT ORIGIN STORY

The dominant origin story of burnout tends to exclude alternative attempts to classify the condition, citing Freudenberger and Maslach as the originators of the term and leaving it at that. However, other kinds of people were also referencing burnout as a complaint years before Freudenberger and Maslach "discovered" it within free clinics and the healthcare setting. Specifically, air traffic controllers collaborated with psychologists in the early 1970s to address the unsustainable pressures of their jobs. Had their collaboration been successful, external and systemic causes as well as power relations within workplaces might have been given greater prominence in subsequent framings of burnout.

In the late 1960s, the Professional Air Traffic Controllers Organization (PATCO), a public sector union representing air traffic controllers, was circulating concerns about the problem of air traffic controller stress. In December 1969, The PATCO newsletter published an

article on "Controller Stress" that uses burnout to describe a state of exhaustion of highly trained and intelligent air traffic controllers.

> The average air traffic controller with the experience to run heavy traffic loads entered the FAA service in 1956 after the Korean War and after four years of experience in military air traffic control. Although they are in their mid 30's, they are exhausted and nearly burned out due to the mental athletics of 13 years of peak performance with an exponential rise in air traffic and a dwindling number of controllers. Such a situation, if it continues, invites destruction to the planes and the controllers. Therefor it is of special concern to evaluate the state of the controllers' health, training, and morale" (PATCO 1969: 36)

These workers (all men) are characterized as victims of the increasing demands of air traffic control without adequate resources – a concern that would be exacerbated by the deregulation of the airline industry in 1978. These employees were also characterized by PATCO as valuable because they were committed, hardworking, and willing to stay after their shift if they were "on fire" or having a good day (Rose et al. 1978). This framing of burnout by PATCO positions controllers as sympathetic victims, who despite their skill and commitment, cannot sustain their performance without adequate support from the Federal Aviation Administration (FAA). It locates the causes of burnout as external and systematic issues and concerns with underfunding and understaffing of controllers, which also pose a danger to the flying public (Calabrese 1971). Burnout is framed by PATCO as an issue of an unequal exchange between controllers who devote themselves to their career but are forced to retire early due to lack of support and their uncaring employers.

By 1972, due to concerns with the effect of changes in air traffic control work on the health of controllers, the FAA commissioned the "Air Traffic Controllers Health Change" Report, or the "Rose Report," which was a multi-year study by psychologists at Boston University (Pels 1995; Rose et al. 1978). This report was eventually published in 1978 and names burnout and the fear of burning out as an issue that was consistently reported by controllers and provided an early operationalization of it in the context of air traffic control.

> [Burnout] was operationalized as the premature exhaustion of a man's physical, cognitive, and psychological resources leading to early retirement for medical and/or personal reasons. It is characterized by a loss of ability to control aircraft in any but the easiest circumstances and a heightened sense of anxiety and fear when called upon to do so. (Rose et al. 1978 105)

The "premature" exhaustion was framed as something wasteful, harming the individual who must retire early and adds a cost to the FAA of hiring and training new controllers. The Rose Report highlighted how fear of autocratic management and lack of reward were a primary driver of stress, locating the causes primarily within the organization of work (Pels 1995; Rose et al. 1978).

However, by 1981, the legitimacy of these grievances and claims to burnout were called into question when PATCO went on strike.[5] Claims of undue stress were framed by some journalists as an unserious complaint (Quinnett 1981) and the strike a poorly formulated bid for pecuniary interests (Serrin 1981). Air traffic controllers were framed by unsympathetic journalists and political opponents as undeserving, seeking "special treatment," and motivated by the material benefits of early retirement from a job with a pension:

> And a longstanding special contention of the controllers - that their work is so demanding that they deserve special treatment - was challenged in a report by two university economists. The report, summing up a two-year study, said that many claims by controllers for disability retirement due to on-the-job "burnout" were prompted not by stress but by the prospect of retiring relatively young and getting as much as 75 percent of their salary tax-free. An officer of the controllers union called the findings "outrageous at best." (Herron and Rand 1981: A2)

Discussions of burnout in air traffic controllers are not prevalent in the emergent academic literature of the 70s and early 80s, even with early operationalization of the condition in the Rose Report. This may be due to the politics around the strike made air traffic controller burnout an

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[5] In the same year that the Rose Report was published, congress passed the Airline Deregulation Act of 1978. Deregulation increased the workload of air traffic controllers who had to adapt to increasing demands (Sitaraman 2023). These are some of the conditions that precipitated the 1981 PATCO strike that was infamously ended by President Reagan who fired over 11,000 of the striking controllers. This event is broadly recognized as an inflection point in the decline of labor in the US (McCartin 2021).

illegitimate grievance rather than a condition worthy of support. If PATCO had been successful

or their complaints widely supported, the conversations around burnout may have looked

different, framing rapid industry deregulation, the weakening of worker autonomy and

antagonistic management, or unsustainable working conditions more concretely as the cause of

worker distress.

Rather than taking on a potentially political character that emphasizes the contentious

power relationship between employee and employer, the frames that take up the most space in

psychological literature characterized burnout as an innate feature of doing "people work." This

shifts the register from antagonistic workplace conflict to the (primarily emotionally) stressful

nature of work that involves helping people. From this starting point, burnout is more associated

with the "inherent" nature of work that is presumed to be emotionally draining (and rewarding)

and the kinds of people affiliated with it – those altruistically motivated to care rather than

motivated by money. The successful conceptualizations of burnout as a problem for the helping

professions define its contours and shape the moral and emotional language around the

condition. Through bringing attention to the burnout of helping professionals over air traffic

controllers, it is possible that burnout experts influence how people understand it today, opening

new avenues for recognition and strategies of action for some while obscuring others.

STRUCTURE OF THE DISSERTATION

The following chapter goes into more depth regarding my methodological approach to mapping

conceptualizations of burnout over time. Because I trace the trajectory of burnout over 50 years

and across multiple domains (i.e. the discussions of burnout in psychology, management, and the

NYT), I utilize a mixed methods approach that integrates new tools from computational text

analysis and more traditional qualitative content analysis. In doing so, I identify patterns in large

volumes of text data, validate findings through close reading, and situate discussions of burnout within broader social and historical contexts. Through these methods, I trace the changes in the kind of problem burnout is framed as, what interventions are offered, and how people work to bring various tensions into alignment. Broadly, my methodological approach contributes to theorizing about the use and spread of expertise over time, specifically psychological expertise that names and objectifies emotion as unhealthy. Additionally, by tracing the same object over time, the shifts between competing logics (i.e. individual v. organizational causes of burnout as well as rational and normative approaches to management) that surround it become more visible.

In chapter 3, I trace the concept of burnout from before its introduction to psychology in the mid 1970s. I follow the mythology of the discovery of burnout as it has been told, while also working to ground the burnout experts and the subjects of their research in time. I argue that burnout experts are involved in the shaping and reinforcing of new emotional vocabularies that help to name, interpret, and stabilize an ambiguous and problematic collection of feelings and define what is healthy (Hochschild 1979). By classifying and intervening in emotional deviance, psychologists also enforce particular kinds of emotional norms, or ways that people ought to feel. I focus on the development of the Maslach Burnout Inventory (MBI), highlighting the ways that ideal and deviant feelings are written into the tool. Even though the boundaries of burnout are constructed and maintained by psychologists, the use of abstract tools such as the MBI are flexible and capable of being used by other kinds of actors to make claims about burnout.

In chapter 4, I expand the analysis of burnout from psychology to other spaces of intervention, interpretation and adoption, specifically in business management literature. This is a domain that is not often considered in thinking about burnout as the focus tends to be on concept construction within psychology (Heinemann and Heinemann 2017; Neckel et al. 2017).

Management, however, is a space where the concepts and tools of psychology are put into action, and offers another angle to view how interventions, practices, and justifications for managing burnout are discussed. In observing how burnout is also used in this space over time, I contextualize it within different movements in managerial paradigms that are also shaped by and responsive to broader macroeconomic trends. In this context, burnout is used in conjunction with other kinds of concepts that are oriented towards normative concerns with organizational culture and more contemporary concerns for employee wellbeing, as well as rational individual self-management (of emotions, thoughts, and behaviors). Arguments in this space often align individual health, performance, and the "health" of organizations. This tendency blurs the distinction between individual bodies and economic ones, but also provides moral grounds oriented towards health as a "super value" that help to justify improving working conditions.

Finally, in chapter 5, I observe how the framing of burnout has changed in more public-facing writing as well. I begin with the observation that the gendered patterns of burnout subjects in the *New York Times* differs initially from academic burnout subjects. Specifically, they key figure was more often a high achieving man, and only recently became more consistently about mostly women health care workers after the onset of the COVID pandemic. In reporting on burnout, particular burnout narratives are used that moralize the character of the burnout-prone. In this space, I observe how the language of burnout experts is applied or modified by journalists as they communicate with the public about the condition, specifically before and after the pandemic. However, the COVID-19 pandemic presents an inflection point in the framing of burnout as more attention is given to social causes beyond the individual or particular workplace. Moral language of the responsibility of employers to protect health become more salient in the NTY at this point and have implications for workplace health policy. The more intense focus on

working conditions brings questions of the causes of burnout to more structural concerns, departing from the focus on individual and workplace causes.

Chapter 2: Methods: A Computational and Qualitative Approach to Understanding Burnout

For this project I use mixed methods to observe how burnout is defined and used over time and to whom it is attached. In doing so, I highlight the social processes by which claims are made about an ambiguous health condition, adding a unique case and methodology to the arsenal of medical sociology. Through systematically gathering and analyzing text data from three databases from the 1970s to the end of 2023, I trace the trajectory of burnout as it changed over time and became attached to particular kinds of people. My use of a combination of computational and qualitative methods allows for a comprehensive analysis of large volumes of text data, facilitating the identification of different patterns, validation through close reading, and contextualization within broader social and historical contexts.

My methodological approach contributes to theorizing in the sociology of health and illness as well as other areas of sociology that are concerned with framing or understanding how the same social thing (i.e. a concept, diagnosis, practice, etc.) can do different work for different social groups (Cho et al. 2020; Epstein & Mamo 2017; Figert 1995; Pop et al. 2024). This chapter outlines my methodological process of collecting and analyzing data to this end.

A MIXED METHODS APPROACH

Because this project focuses on text data as the object of analysis, I am tracing representations and meanings of burnout in terms of frames, concerns, and ideologies rather than actual experiences or occurrences of burnout. In order to answer a question about how meanings of burnout have changed over time and as the concept travels through different spaces, I needed to be able to collect, process, and analyze a large amount of text data. This was made possible through the availability of digitized and computer-readable texts.

To aid in analyzing an ever-increasing amount of data, new statistical methods have

evolved in areas of linguistics and computer science to process this wealth of information (Bail

2014; Roberts et al. 2019; Vaisey and Miles 2014). These methods have spread to the social

sciences, allowing for new ways to analyze the social world. In particular, new techniques in

computational text analysis have an affinity with sociological theorizing concerned with

meaning. Because I examine the transformations of meanings over a 50-year period and across

multiple domains, these methods offer an ideal "fit between theory and method" (DiMaggio et al.

2013).

Computational text analysis can also offer a "grounded" approach that finds patterns in

the text that a researcher might miss or overemphasize, avoiding some of the bias in human

interpretation (Nelson 2017). Computational methods are not just about counting words

(although word frequencies are still important descriptive information), but can also highlight

hidden patterns and relationships among words (Dimaggio et al. 2013). For this project, I use n-

grams to assess patterns in the use of key terms and structural topic modeling to help

operationalize cultural frames of burnout over time.

Topic modeling uncovers "hidden thematic structures" within a collection of documents,

or a corpus (Blei 2012; Blei, Ng, and Jordan 2003; Merchant & Alexander 2022). The

assumption underlying topic modeling algorithms is that each document in a given corpus can be

modeled as if it contains a blend of topics, and each topic contains a blend of words. All words

have a nonzero probability of appearing in each topic, and those with the highest probability

distinguish one topic from another and ideally represent a coherent theme in the text data (Blei

2012; Merchant & Alexander 2022). For this project I use a structural topic model (STM)

because of its capacity to retain metadata that can later be used as covariates (i.e. the year of

publication and database of origin) that aid in my analysis of how the prevalence of topics changes over time and across domains.

Despite these advantages of using computational methods to uncover patterns, human interpretation is still essential. Nelson (2017) calls for a computational grounded theory that integrates both computational and qualitative methods by finding patterns through "unsupervised" methods, then developing hypotheses and validating findings through more human-centered interpretation. Rather than working purely inductively or deductively, I move back and forth between theory and evidence. My initial question and data collection process were guided by the theoretical concerns outlined above; however, I resist imposing a rigid theoretical frame and allow for potentially surprising patterns to emerge and change how I understand the data (Timmermans and Tavory 2012). Through first using quantitative text analysis (QTA) techniques, I "delayed" my interpretation and allowed for findings from the QTA to highlight major patterns and topics that then guided my more qualitative practice of hand coding different burnout "frames" (Lee and Martin 2015: 24). In the following chapters, I work to locate my findings within historical context, as major events and dominant ways of thinking are consequential in the trajectory of burnout.

DATA COLLECTION: BUILDING THE BURNOUT CORPUS

To use computational tools like STM and n-grams, I needed to first collect the texts that would make up my burnout corpus (or collection of documents), then "clean" and reformat them for analysis. The following sections give an overview of the process for data collection, methods used to prepare text data for computational text analysis, and methods for close reading and qualitative text analysis.

Databases and search criteria

The data collection process was shaped by my interests and my assumptions about where significant discussions were happening regarding what burnout is and how to deal with it. I gathered text data from three databases, each of which speaks to a different kind of audience and provides a different vantage point to understand how burnout is framed. The databases I sampled are *PsycInfo* (PI), which has a topical emphasis in psychology; *Business Source Complete* (BSC), with a topical emphasis in business management; and the *New York Times Current Newspapers* database (NYT), which has more public-facing writing. Between these three databases, I distinguished between two genres of academic writing (PI and BSC) and non-academic writing (NYT) on burnout. All publications were in English and provided rich "unstructured data" in the form of abstracts and full text documents. Within academic writing on burnout (PI and BSC), I collect journal abstracts from the 1970s to 2023 that have topical emphasis on psychology and business management. Abstracts are useful in that authors are forced to be very intentional about the framing of their project, and the conventions of writing abstracts mean that specific groups, problems and solutions, or interventions are likely to be named.

The psychologically oriented database I sampled was *APA PsycInfo* (PI) via ProQuest, which is oriented toward academic researchers and contains abstracts of psychological literature from the 1840s to the present. The business oriented and more applied database I drew on was *Business Source Complete* (BSC) via EBSCO, which contains indexing and abstracts from important scholarly business journals, some extending back to 1886 (UC Davis Library 2023). This database is oriented toward managers and decision makers in the areas of business and organizational management and content is more applied in nature. Here, I can see how burnout is presented as a problem to management professionals. Both of these databases offered good

breadth and depth in terms of the available timeframe, number of publications available, and emphasis on scholarly psychological and business management journals. The PI and BSC corpora included some publications that were cross-listed, appearing as duplicates in the sample. To deal with these observations, I kept only one of each duplicate and labeled them as "cross-listed."

The third collection was non-academic and public facing writing from the *New York Times* (NYT). I choose to focus on the NYT as it is regarded as a top publication for well-balanced journalism and includes substantial reporting on issues of health and wellness. It has been shown to influence the reporting of other publications, making it a dominant voice in how issues are framed to the public (Saguy and Gruys 2010). Press accounts are important because they "embody the assumptions and narratives [authorized] speakers use to frame the topic at hand" (Dimaggio et al. 2013: 573; Saguy and Gruys 2010). This sample provides insight into how burnout is presented to the public by journalists, how this has changed over time, who is situated as the authority on the issue, and which groups garner the most media attention (Armstrong et al. 2006). I use the *ProQuest New York Times Current Newspapers*, which has digitized full-text coverage from 1980 to the present. I also supplement this with the *ProQuest Historical Newspapers* in order to see coverage about burnout from before 1980. However, the historical newspaper coverage does not always include digitized full text documents that are legible to computers, so I rely on the *NYT Current Newspapers* database for the quantitative text analysis. There were only four relevant NYT articles that covered burnout before 1980, all published in 1979. These documents were not computer-readable, so were included in my content analysis but not in the quantitative text analysis.

I used the Boolean search capabilities of the various databases to find cases of burnout and its variations (i.e. "burnt out", "burned out", etc.) anywhere in the title, abstract (for PI and BSC), or text (NYT) of the document. [6] Burnout had to appear at least once to be included. This method still required filtering, which involved removing miscellaneous observations that were not about burnout as a health condition (i.e. burnout as a description of damage, a chemical or mechanical process, space travel, etc.), as well as duplicates and near duplicates. After removing these observations, I was left with the following number of documents for each sample to use in my quantitative text analysis.

Table 1: Overview of Databases and Documents

Database	Final Count	Type
PsycInfo	8,782	Abstract
Business Source Complete	2,501	Abstract
PI/BSC Cross-Listed	929	Abstract
ProQuest: New York Times	1,594	Full Text

Datatypes and organization

For this project, I use the programming language "R", which is a powerful, non-proprietary software that allows the researcher to work with large datasets that quickly become unwieldy in applications like Excel or Sheets. Text analysis requires data to be structured in ways that are not tabular (i.e. structured as a table where each column is a variable and each row is an observation), such as nested lists or tree structures, which is something that R can accommodate. Data that were collected in the above steps ranged in the kinds of file formats that were available

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[6] The initial searches for cases of burnout and its variations (i.e. "burnt out", "burned out", etc.) anywhere in the document, which included post-hoc topic tags, yielded tens of thousands of documents for each database.

and required different approaches to "clean," process, or structure the data. The goal of pre-processing was to get each dataset into a standardized format for analysis.

The PI search results could be downloaded as .csv files, which needed very little modification other than removing metadata that was not relevant to the project (i.e. subsetting the data so that only key information was included). The BSC sample was downloaded as .xml files, a tree structure that needed to be converted into a tabular format by un-nesting different items to get to the desired information. Finally, the NYT full text data could only be downloaded as .txt files with up to 100 articles for each file. I used different techniques to split these documents by specific delimiters and convert them into the same format as the PI and BSC samples.

DATA CLEANING AND EXPLORATION

In order to gain a deeper understanding of the documents, computational methods facilitate interpretation by providing a "bird's eye view" of data and condensing a vast array of information. However, in order to use these tools on my data, I needed to first "clean" or "pre-process" the unstructured text data. This involved making decisions on how to standardize words for later analysis. In this case, I converted all characters to lower case, removed punctuation, lemmatized words, and removed generic and corpus specific stop words. After completing these steps, I used quantitative text analysis (QTA) techniques, specifically n-grams and structural topic modeling, to explore the data and to help formalize methods to understand a messy cultural object.

Decisions for Word Standardization

I used several techniques of Natural Language Processing to "clean" text data and prep it for analysis. Because computers interpret text through text encoding, which assigns a different numeric value to characters (i.e. "E" and "e" look different to a computer), I needed to make sure

that my computer could group similar words at later points of analysis. For example, I would not want the computer to interpret "nurse", "nurses", and "Nurses" differently, so I needed to manipulate the text such that the computer would see all of these as "nurse". To do this, I used standard text-cleaning methods of making all characters lower case, removing punctuation, and "lemmatizing" the text. Lemmatization converts all words into their dictionary form (or a "lemma") so that they can be treated as the same kind of thing. Instances of "nurse" and "nurses" thus all become "nurse." This approach is useful for standardizing most plural forms of words.[7]

Corpus-Specific Stop Words

In order to create topic models and find important terms, I needed to take a few steps to remove common stop words, or terms that appear frequently across many documents (i.e. "the," "and," "is," etc.) that do not provide much information. I removed common stop words using the stop words libraries that are included in the *tidytext* package. In addition to generic stop words, I also removed stop words that were unique to each corpus. For example, I treated "burnout" as a unique stop word because it is present in all documents, so it is assumed that topics will be related to burnout in some capacity. I also compiled a list of other unique stop words comprising words that appeared frequently but did not provide information central to this project, specifically words that are used often in the writing of abstracts or phrases from the *New York Times* that centered around publication rather than the content of the article. For example, the NYT sample had consistent reference to "getty images" for photo credit and documents from the PI database were tagged with "APA PsycInfo" at the end of each abstract.

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[7] I used the *lemmatize_strings* function in the *textstem* package to do this.

N-grams

Another way I explored my data was through calculating and visualizing "n-grams", which are a combination of any number of words that appear together. N-grams allowed me to identify common two and three-word phrases in the burnout corpus and helped to highlight specific groups (i.e. "social worker" is a bi-gram with two words) and academic concepts and measurement tools (i.e. "occupational stress" or "organizational citizenship behavior"). These n-grams help to provide more context as to the kinds of terms that researchers and journalists use alongside burnout over time.

STRUCTURAL TOPIC MODELING (STM)

For this project, I use structural topic modeling (STM), which is a topic modeling algorithm that allows for the possibility of a structural relationship between metadata on the one hand and topic content and/or prevalence on the other (Roberts, Stewart, and Tingley 2019). Including as co-variates publication year and database makes it possible to compare topics across the PI and BSC samples and quantify changes in topic proportions over time. This feature makes STM useful for observing how the words that travel with burnout change over time and vary by historical context and domain. STM is an "unsupervised" method in that the content of the topics are not decided in advance. However, the researcher must specify the number of topics (k) that the STM algorithm will find (Merchant and Alexander 2022). Setting this parameter is a critical step as topic models are very sensitive to the number of topics, and a different number of topics can yield different results. There is no "right" number of topics for a given corpus, but there are tools to help researchers evaluate different models (Roberts et al. 2019). In the sections below, I outline how I selected the number of topics for the PI/BSC and NYT topic models and present findings that will be discussed in the following chapters.

Preparing text data for stm

Because there was overlap between these databases and all observations were formatted as

abstracts, I combine the PI, BSC, and cross-listed documents into a single corpus. This allowed

for easier comparison between academic databases in later steps (see Figure 1). The NYT corpus

was left on its own, since each document contains the full text rather than just abstracts and

speaks to a different audience. However, because each full text document contains many words

and topics, I split (or "chunked") them into their constituent paragraphs. Using paragraphs as the

unit of analysis helps to focus the model such that associations between words are limited to

paragraphs rather than the full text.

I used the *TextProcessor* function in the stm package to get the text data into the necessary

format before running the structural topic model (Roberts et al. 2019).[8] This function removes

infrequent words that were likely misspellings and leaving out words that are a single character.

Below are the final numbers of documents (i.e. abstracts in PI/BSC and paragraphs in NYT),

terms (i.e. unique words) for each corpus.

Table 2: Details for the PI/BSC and NYT Structural Topic Modeling

Corpus	Documents	Terms
PI/BSC	12,196	8,586
NYT	17,382	22,571

Table 2 shows that the number of unique terms compared to documents is much smaller for the

PI/BSC sample. This indicates there is much less diversity of language, which is reflective of the

genre of academic abstracts. The NYT sample, on the other hand, had more unique terms, as the

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[8] The *TextProcessor* function allows the researcher to clean data by removing stopwords, making everything lowercase, removing punctuation, removing numbers, etc. at this step as well. Most pre-processes was done at earlier stages to prepare text for n-grams and so were not needed here. This function also offers an option to "stem" words by converting them to their roots, but I did not use it because this is a much less precise method than lemmatization.

range of topics and styles of writing varied much more than the academic writing (i.e. more discussion of daily life and inclusion of direct quotes).

PI/BSC Structural Topic Modeling

In order to make an informed decision about how many topics to include in the model of the PI/BSC corpus, I used the *searchk* function in the *stm* package to help make evaluations about model performance. The results from *searchk* can help researchers decide how many topics should be in the model without the need to generate 20-100 individual models, which would be time consuming and computationally expensive.

Figure 3 shows results for models with between 10 and 40 topics (multiples of 5 only), indicating that a model with 25 topics will likely perform best by maintaining semantic coherence while also improving in the other diagnostic measurements. Specifically, the model with 25 topics is better at predicting topics in documents that were not included in the training of the model (held-out likelihood), more of the corpus is accounted for (there are fewer "residuals"), and the topics are likely to be tractable to human interpretation (semantic coherence). [9] This gives me clearer parameters to narrow down the number of topics I will include in my model. In general, a model with too many topics runs the risk of words being scattered between topics in a way that is not meaningful to humans (reduces semantic

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[9] The results in Figure 3 visualize the expected performance of each model based on specific diagnostic measurements. The goal was to have relatively high *semantic coherence*, which is a measure of how well words in topics are related and meaningful to humans or represent "semantically interpretable themes." However, this characteristic is more negotiable because humans are good at interpreting meaning and semantic coherence is not difficult to achieve even if its score is lower (Roberts et al. 2014). The second measure of *residuals* calculates how much information is left-over or "residual" that is unexplained by the model, so the lower the residual, the better. The third measure of *held-out likelihood* is how well the data that was used to train the model can account for data that was "held out" from the full dataset. It is up to the researcher to strike a balance between a model with higher semantic coherence (which is always the case for models with fewer topics) alongside higher held-out likelihood and lower residuals (which are always be the case for models with more topics).

coherence), and too few topics means that there may be too much overlap between topics that are conceptually different. The results of model testing indicate that a model with 25 topics will likely perform the best. To validate this, I ran and interpreted the results of a smaller number of models with 23-27 topics and the model with 25 topics had less conceptual overlap or scattering of words between topics compared to the others. For example, a model with 25 topics was able to distinguish between "transformational leadership" and "spiritual leaders" better than models with fewer topics. Additionally, models with more topics included cases where top words appeared to be random, and a closer inspection of the most representative abstracts did not clarify themes.
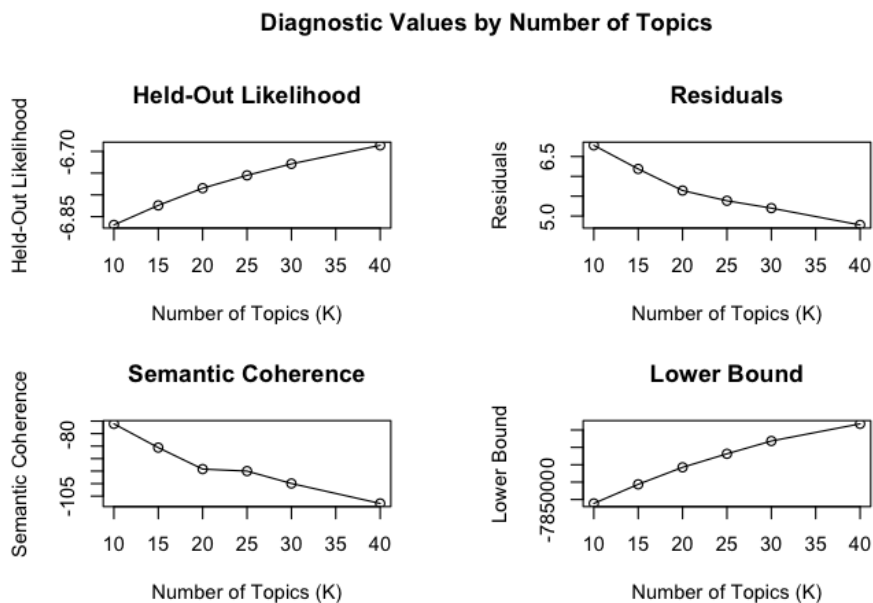
Figure 3: Searchk Results for PI/BSC Corpus

Table 3 includes the list of topics for the PI/BSC corpus. I generated labels for each topic based on the highest probability words and high "FREX" words for each topic. FREX stands for "frequency" and "exclusivity" and considers both how often the word appears and how likely the word is to appear in one topic compared to the others. This makes high FREX words the most

31

unique to the given topic.[10] I also use the *FindThoughts* function in the *stm* package to view the documents that had the highest mix of words from a particular topic. This helped provide more context to generate labels. The sections below provide more context for the PI/BSC topic model by using different covariates (i.e. publication year and database) to understand how topic prevalence changes over time and across domains.

Table 3: Topics for the PI/BSC Combined Corpus with Highest Probability and FREX Words

Topic Label	Highest Probability Words	Most Unique Words
Workplace Factors & Outcomes	job, satisfaction, support, role, demand, social, control	ambiguity, job, satisfaction, strain, correctional, overload, demand
Spiritual Leaders	faculty, spiritual, pastor, clergy, ministry, church, experience	pastor, clergy, ministry, church, music, pastoral, minister
Stress Management	stress, cope, strategy, stressor, level, relate, perceive	cope, stress, stressor, stressful, firefighter, strategy, conscience
Validating the MBI	scale, factor, measure, item, mbi, construct, validity	validity, confirmatory, reliability, factorial, consistency, property, convergent
Hospital Nursing	nurse, hospital, care, quality, patient, environment, leave	nurse, hospital, oncology, unit, register, intent, icu
Employee Resources & Outcomes	employee, resource, engagement, job, turnover, performance, demand	employee, originality, incivility, insecurity, craft, psycap, capital
Health Service Worker	health, worker, mental, social, wellbeing, physical, service	worker, mental, hiv, health, aid, soc, stigma
Psychological Intervention	intervention, group, program, train, mindfulness, participant, control	mindfulness, intervention, officer, police, session, trial, randomize
Professional Emotional Distress	compassion, self, fatigue, care, professional, traumatic, life	compassion, vicarious, proqol, traumatic, trauma, st, fatigue
Business Advice	focus, issue, good, approach, process, cause, help	salesperson, sale, business, say, topic, tip, example
Work-Family Conflict	work, life, relate, woman, conflict, time, family	work, wfc, hour, balance, sickness, absence, imbalance
Co-Morbidities	depression, symptom, anxiety, associate, disorder, sleep, high	depressive, depression, cortisol, sleep, alexithymia, anxiety, phq
Leadership	leadership, leader, style, principal, team, culture, member	leadership, transformational, follower, style, servant, lmx, principal
MBI Components & Correlates	exhaustion, emotional, level, personal, significant, depersonalization, accomplishment	depersonalization, accomplishment, personality, demographic, exhaustion, personal, variable
Athletes	athlete, motivation, profile, coach, sport, high, perfectionism	athlete, sport, perfectionism, athletic, coach, player, profile

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[10] Highest probability and FREX words were found using the *LabelTopics* function from the *stm* package. The full output is available in the methodological appendix.

Students	student, school, academic, high, year, university, learn	student, academic, undergraduate, university, college, learn, pupil
Parents & Caregivers	child, family, parental, parent, caregiver, mother, parenting	parental, mother, parenting, child, father, partner, cp
Educators	teacher, school, education, teach, educator, experience, special	teacher, educator, district, teach, special, classroom, elementary
Statistical Modeling	model, effect, relationship, mediate, psychological, test, structural	equation, structural, indirect, mediate, mediation, model, path
Personal Emotional Resources	self, emotional, behavior, efficacy, negative, emotion, relationship	labor, emotion, justice, surface, intelligence, bully, esteem
Medical Professionals (Physicians)	physician, medical, healthcare, covid, pandemic, resident, patient	covid, pandemic, physician, hcws, doctor, medicine, medical
Organizational Change (technology)	organizational, organization, service, change, human, make, individual	technology, volunteer, decision, organization, communication, human, organizational
Mental Health Professionals	counselor, client, therapist, psychologist, supervision, practice, clinical	counselor, therapist, psychologist, client, supervision, counsel, rehabilitation
Direct Care Staff	staff, care, patient, violence, attitude, psychiatric, home	residential, aggression, hospice, staff, palliative, facility, dementia
Risk & Protective Factors	factor, professional, risk, occupational, identify, high, associate	occupational, risk, psychosocial, personnel, syndrome, factor, protective

Estimated Effect of Publication Year on Topic Prevalence

Using the *EstimateEffects* function in the *stm* package, I calculated topic prevalence in general as well as in relation to the co-variates of interest. Figure 4 represents the expected topic proportions for the entire PI/BSC corpus. Here, the topic I have labeled as "Business Advice" has the greatest expected topic proportion overall. However, what is missing from this is a more historical view that can help researchers make sense of how topic proportions change over time.
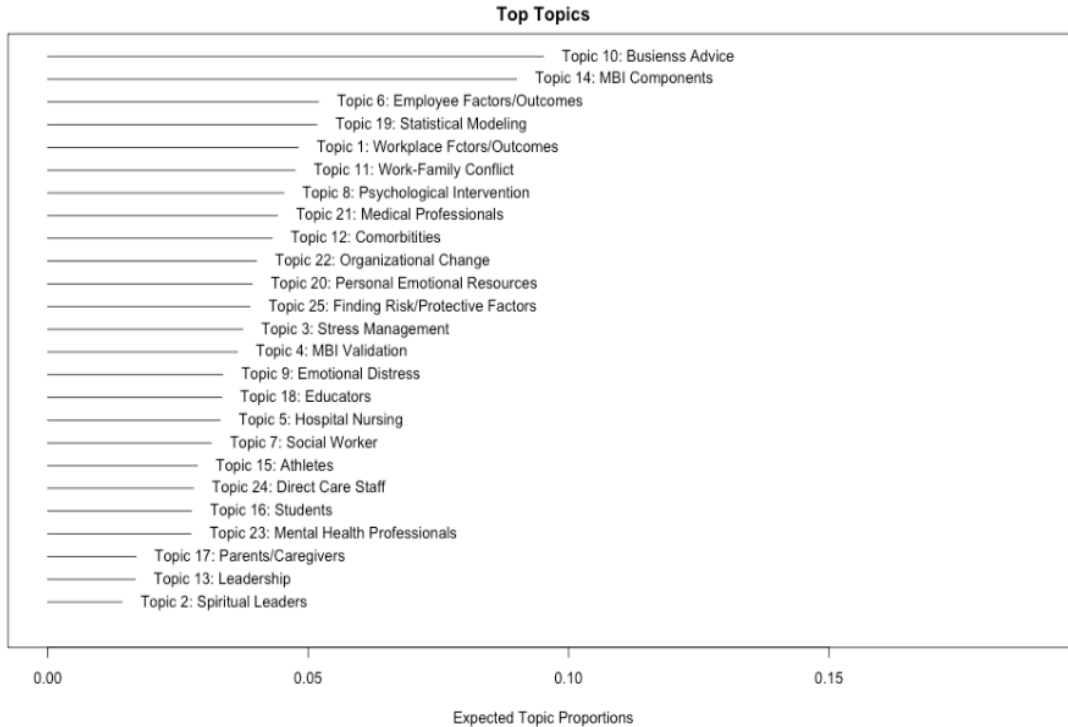
Figure 4: PI/BSC Topic Proportions

Using the publication year as a covariate, I can plot the prevalence of topics over time by

calculating the proportion of words that have been assigned to each topic in a given year. From

Figure 5 below, we can see that topics related to Business Advice have declined over time in PI

but fluctuate in the BSC database. Within the BSC database, business advice appears to peak in the 1990s, declining slowly through the 2000s.
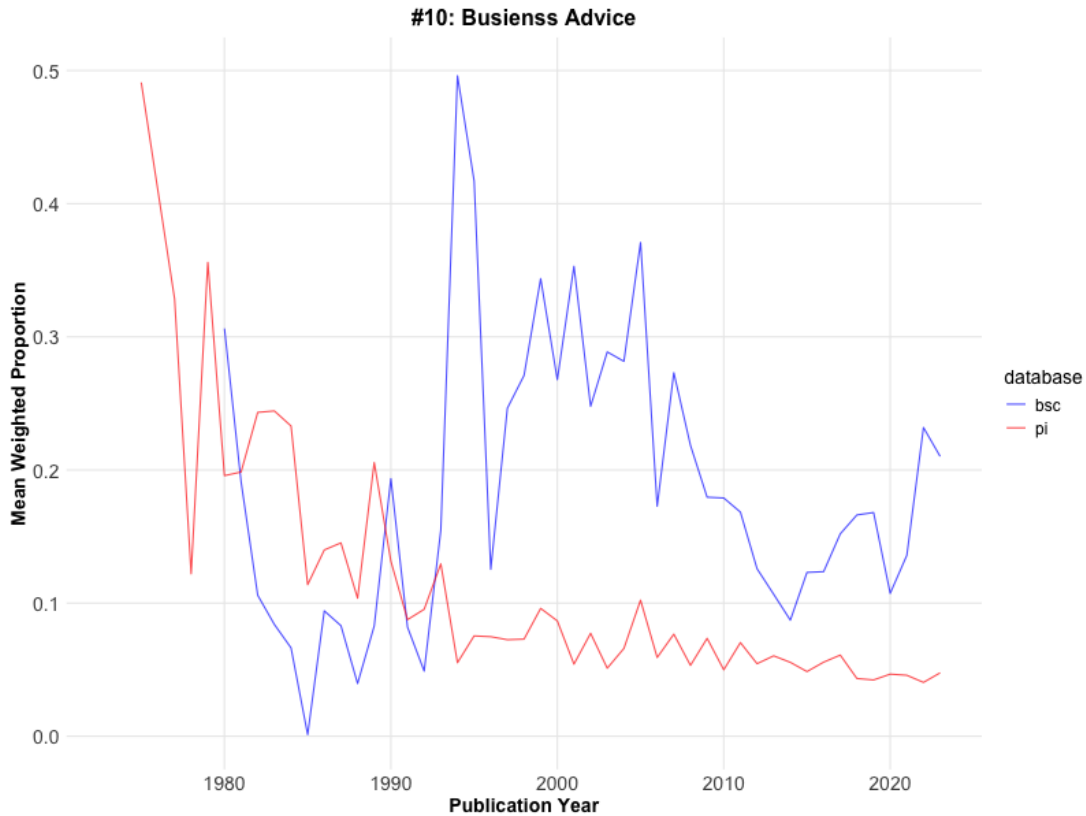
Figure 5: PI/BSC Topic 10 Weighted Proportion for Business Advice

Figure 6 provides the estimated topic prevalence for the remaining 24 topics over time, differentiating between PI and BSD. This visualization excludes the topic on Business Advice as the expected topic proportion is much higher than the other topics in earlier years.[11] With a smaller y-axis here (max of 0.2), trends in the prevalence of other topics are more visible.

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[11] For a visualization with all of the expected PI/BSC topic proportions over time with a y-axis of 0.5, please see Figure 1 in the Appendix.
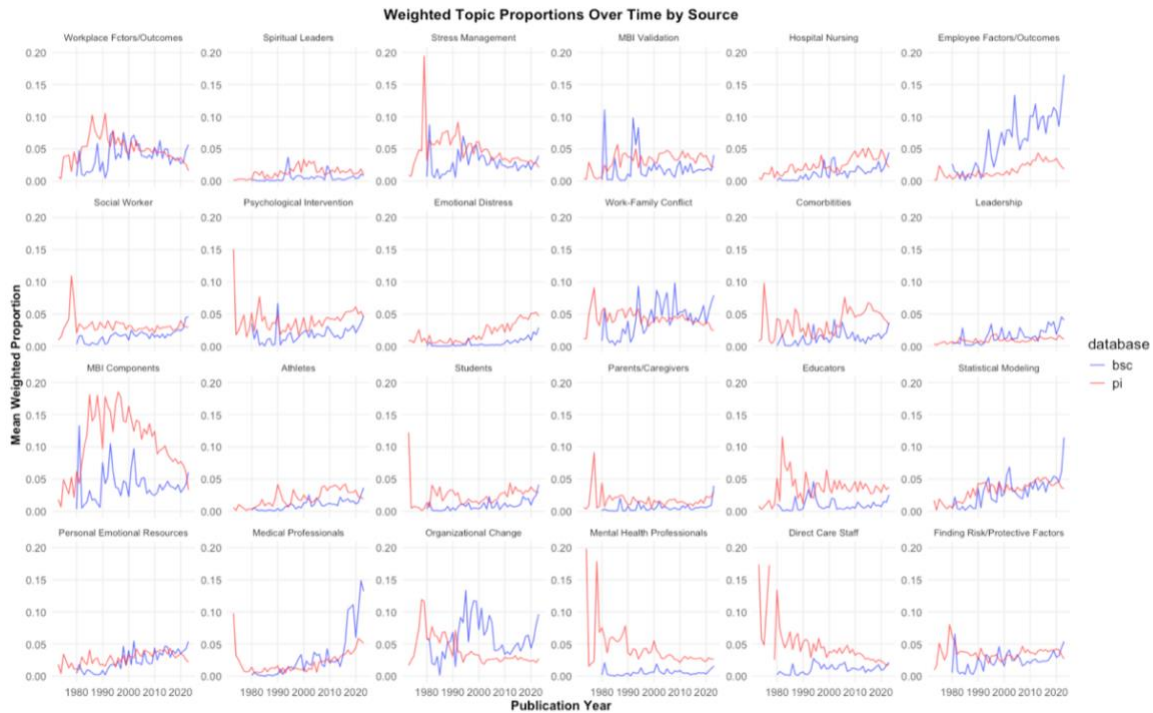
Figure 6: PI/BSC Weighted Estimated Topic Proportion over Time (1970-2023)

Without the historical view of different topic proportions, the trends are flattened and could lead to a misinterpretation of the results. These trends are elaborated on and explored in the following chapters.

Estimated effect of database on topic prevalence

I also use results from the structural topic model to visualize the converging interests of applied psychology and management. Applied psychology and management occupy very similar spaces, but the orientations are somewhat different. Below is a visualization of the different topics that were found after conducting a structural topic model, comparing the effect that the source of the data had on the prevalence of the topic (i.e. how does the source of the data influence the prevalence of a particular topic in the expert academic burnout corpus?). From the results, the topics that appear to the left of the central line are more prevalent in BSC and those to the right are more prevalent in PI.

Effect of Source (BSC v. PsycInfo)

• Finding Risk/Protective Factors
• Direct Care Staff
• Mental Health Professionals

Organizational Change •
Medical Professionals •
Personal Emotional Resources •
Statistical Modeling •

• Educators
• Parents/Caregivers
• Students
• Athletes
• MBI Components

Leadership •

• Comorbitities

Work-Family Conflict •

Busienss Advice •

• Emotional Distress
• Psychological Intervention
• Social Worker

Employee Factors/Outcomes •

• Hospital Nursing
• MBI Validation
• Stress Management
• Spiritual Leaders

Workplace Fctors/Outcomes •

-0.2   -0.1   0.0   0.1   0.2

<- more prevalent in BSC ... more prevalent in PsycInfo ->

Figure 7: Estimated Effect of Database (PI v. BSC) on Topic Prevalence

On the right, topics tend to be more oriented around the classification and measurement of burnout, relationships to other conditions and risk factors, and different areas where burnout has been assumed to be most prevalent (i.e. different caring and human service professions). The different components of the MBI, especially how they are related to individual factors such as personality or demographics, are the most prevalent in the PI sample as this was primarily where the measurement tool was developed and tested.

The topics that are more prevalent in the BSC corpus are more concerned with organizational factors, such as organizational changes, leadership, and individual employee characteristics and outcomes (i.e. commitment and engagement). The topics that skewed the most towards the BSC side include "Employee Factors and Outcomes," which indicates a general concern with employee personal resources such as psychological capital (psycap) and outcomes such as engagement or turnover intention; "Business Advice," which corresponds to

37

general business advice, usually directed at managers and executives; "Medical Professionals," which relates to the specific context of medical work since there are journals included in BSC that are oriented around hospital system management; and "Organizational Change," which is mostly concerned with changes related to communication technology, but also includes changes in decision making.

In the next chapters, I will discuss the affinity between emotional health discourses and economically oriented managerial discourses in these two spaces that influence the development of burnout. Over time, burnout was increasingly framed in a way that aligned the values of individual emotional health, performance, and ideal organizational ends (i.e. lower turnover and turnover intention and more engagement). These alignments have also been discussed, accepted and challenged by NYT journalists.

NYT Structural Topic Modeling

I use the same methods outlined above to generate the structural topic model for the NYT sample. From the *searchk* results shown in Figure 8, I can see that the best option for the *stm* is a topic model with around 25 topics. These have the highest held-out likelihood, relatively high semantic coherence, and there is comparatively less data that is "left-over" or left unaccounted for by the model (residuals) (Roberts et al. 2019).
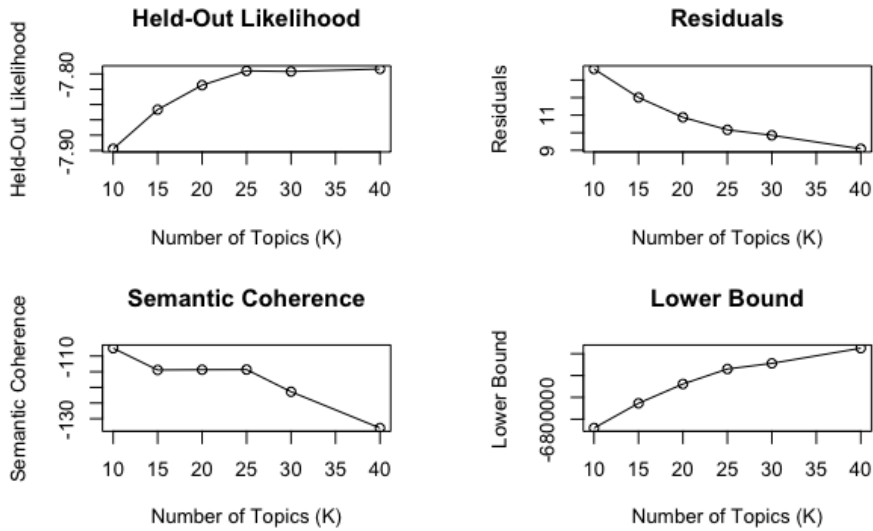
Figure 8: Searchk Results for NYT Corpus

Following the strategy from before, I took a closer look at different models using the *LabelTopics* and *FindThoughts* functions to determine the interpretability of each model. After testing models with 23-28 topics, I decided to use a model with 27 topics as it had the fewest number of topics that had an ambiguous mix of words. Table 4 includes the output of the *LabelTopics* function, specifically the highest probability words and most unique words in each topic, alongside topic labels that I generated. Like the PI/BSC model, the labels for each topic were determined using the words presented below as well as the observations that had the highest mix of topic words using the *FindThoughts* function, which presents observations that are most representative of the topic.

Table 4: Topics for the PI/BSC Combined Corpus with Highest Probability and FREX Words

Topic Label	Highest Probability Words	Most Unique Words
Entertainment	show, news, television, mister, network, series, tv	fox, cbs, nbc, tv, television, podcasts, broadcast
Health Care	health, doctortitle, care, doctor, medical, patient, much	physician, walensky, scribe, medicine, researcher, health, provider
Culinary Arts	food, restaurant, cook, much, table, chef, kitchen	chef, cook, culinary, baroo, mushroom, basquiat, butter

Personal Reflection	woman, write, book, man, story, read, tell	thacker, vizzini, bonenberger, bowlin, memoir, babitz, platoon
Quotes	go, good, think, make, want, know, people	want, think, really, thing, know, lot, go
Acting	play, mister, film, theater, movie, character, game	wolkoff, ansari, faze, hare, clan, actor, character
Employment Relationship	worker, employee, percent, much, service, pay, agency	labor, union, agency, wage, worker, employee, employment
Family/Care giving	child, miss, family, parent, mother, life, kid	mother, mom, husband, wife, son, child, nanny
Political Campaign	mister, president, campaign, republican, trump, state, former	democrat, senator, senate, emanuel, presidency, trump, republican
Advice	much, feel, may, stress, time, help, people	stress, anxiety, feeling, emotional, exhaustion, depression, psychologist
Markets	company, market, unite, much, trade, billion, american	nynex, billion, merc, market, corporation, trade, stock
Professional Sport	coach, team, game, season, player, play, league	vermeil, ram, parcells, quarterback, shula, ers, dolphin
Young Athletes	sport, age, run, train, olympic, young, athlete	gymnastic, ledecka, olympic, triathlon, marathon, gymnast, kenyan
Leisure	back, home, time, room, night, around, spend	morning, walk, sit, back, phone, door, trip
Working Conditions	work, job, time, hour, much, company, office	work, job, boss, vacation, productivity, hour, consult
City Life	city, newyork, mister, street, art, manhattan, center	ballet, wheeldon, museum, undercover, homeless, lamont, manhattan
Social Media	miss, post, medium, online, video, social, much	tiktok, instagram, linkedin, twitter, mx, platform, content
Business Activity	business, money, million, much, sell, pay, company	sale, money, store, sell, business, expense, grocery
Golf	win, play, finish, golf, tour, good, th	golf, wie, pga, hole, putt, daly, finish
Tennis	tennis, play, open, match, player, win, tournament	wimbledon, navratilova, serena, capriati, henin, venus, hingis
Education	school, student, teacher, college, program, high, university	student, teacher, classroom, education, graduate, teach, school
Legal Cases	law, case, right, lawyer, state, issue, judge	law, judge, lawyer, civil, legal, justice, immigration
Hospital Nursing	nurse, hospital, care, patient, pandemic, covid, staff	nurse, vaccinate, omicron, vaccine, coronavirus, covid, hospital
Public Health Crises	aidsvirus, drug, doctortitle, much, patient, treatment, use	overdose, heroin, addiction, methadone, drug, opioid, cancer
Music	music, band, record, song, rock, play, dance	dylan, cliburn, inn, innkeeper, piano, band, muldrow
Religion	mister, man, take, church, eye, black, wear	clergy, staver, rabbi, congregation, bishop, hersey, pastor
General Culture	world, live, decade, note, toward, culture, bring	toward, decade, deep, cultural, note, culture, reflect

NYT topic proportion and change over time

In general, many of the topics in the NYT sample seem to represent or fall into different sections

(i.e. business, lifestyle, culture, sport, etc.). These sections were present in the topic models

alongside other topics that are more akin to the topics that we see in the STM results for the

PI/BSC data (i.e. health care, hospital nursing, education, working conditions, and the

employment relationship). However, this is also an indicator of how widespread the discussion of

burnout is as it is used in a variety of contexts. The following are the expected proportions for

each topic regardless of time:
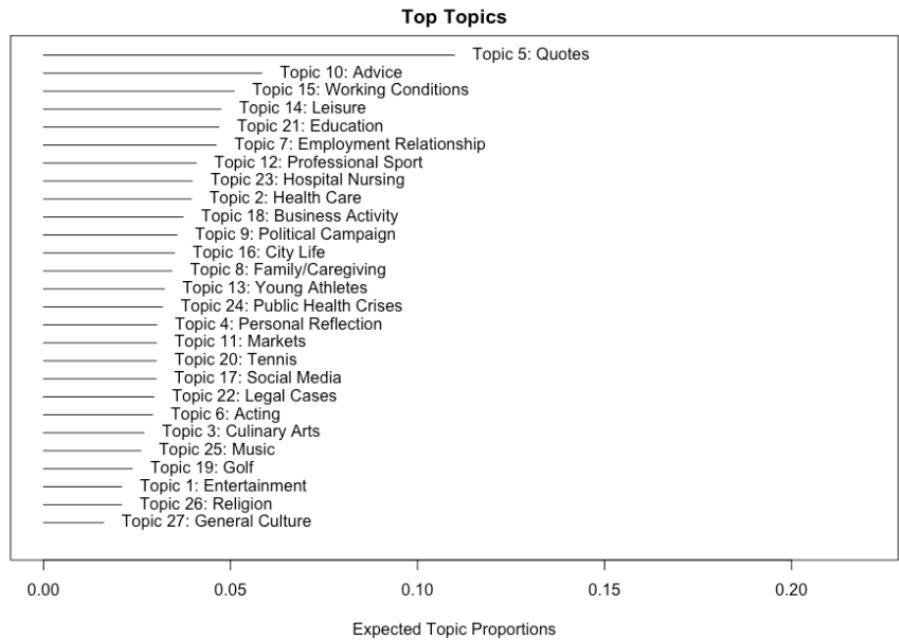
Figure 9: Estimated Effect of Year (2019) on Topic Prevalence

While the visualization above captures the overall expected topic proportions in the NYT,

the visualization below helps to show how topic proportions in the NYT sample have changed

over time.
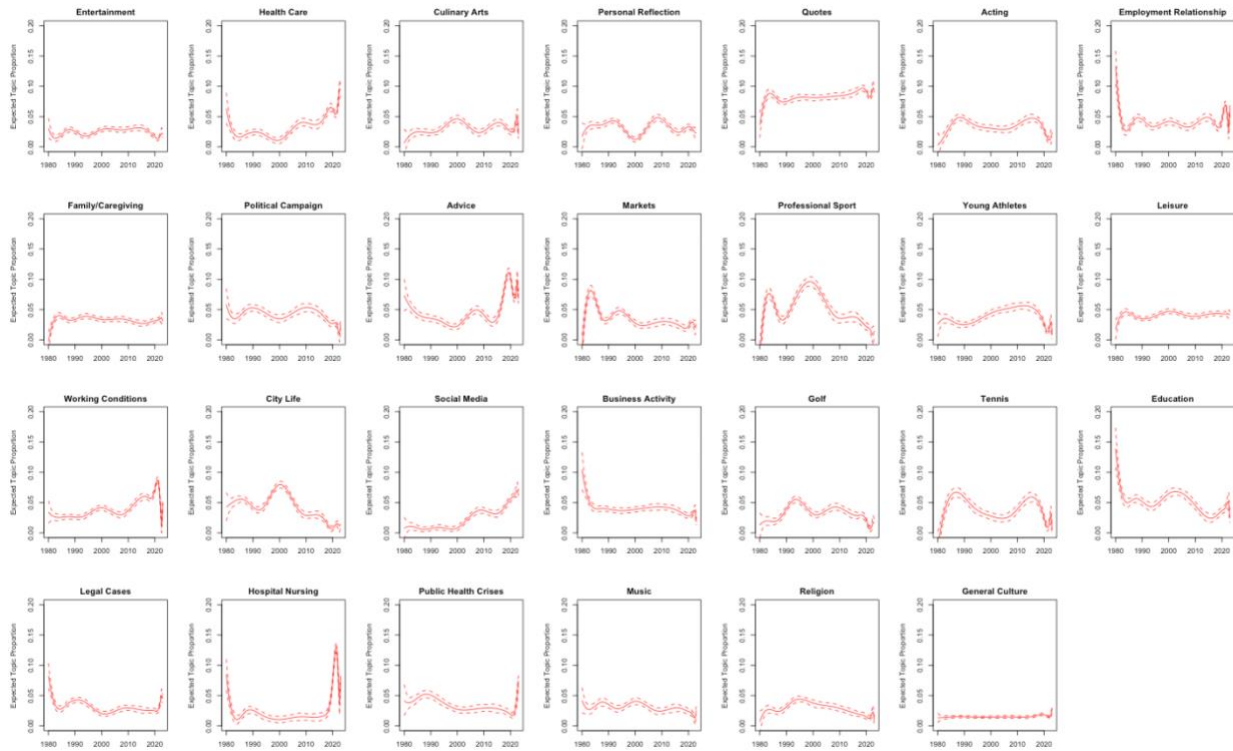
Figure 10: NYT Estimated Effect of Year (1970-2023)

According to the topic model results, it appears that topics that have increased more steadily over time are those related to health care, working conditions, social media. Topics that decline over the years are topics about markets (most prominent in the 1980s and 90s), city life and religion. Topics that spiked around 2019 with the WHO definition and 2020 with the onset of the pandemic are related to advice, hospital nursing, and public health crises. Other topics fluctuate more over time, with sport related topics oriented around major sporting events or stories about elite coaches and athletes.

QUALITATIVE CONTENT ANALYSIS

After completing my distant reading of the thousands of documents collected from PI, BSC, and the NYT samples, I use qualitative content analysis to engage more deeply with selected texts. For the PI/BSC sample, I chose the abstracts where burnout was referenced the most frequently. Such abstracts were more likely to have a more robust discussion of burnout rather than just a

passing reference. In addition to analyzing abstracts for the PI/BSC sample, I collected the full-text versions of the most cited articles in both areas, emphasizing "agenda setting" and highly referenced texts. For the NYT sample, I focused on collecting the full text articles that were representative of a particular topic (i.e. Advice).

Table 5: Abstracts and Full Text for Qualitative Content Analysis

Database	Abstracts	Full Text
PsycInfo	225	32
Business Source Complete	235	45
New York Times	NA	48

Code Construction

My approach to coding is iterative and flexible, creating close to what Reyes et al. (2021) term a "living codebook" that documents change between initial and final codes, documenting criteria for codes, the practice of memo-ing patterns and ideas. I use MAXQDA, a coding software for qualitative analysis, to keep track of documents, codes and memos. I also use findings from the inductive exploration of text data using the methods above by being attentive to important concepts and groups that appeared the most often in the N-gram analysis. The next sections outline the logic behind my initial codes, informed by insights from medical sociology, and the codes that emerged from the quantitative text analysis process and close reading.

A priori frames

I use insights from the sociology of health and illness to guide the ways that I constructed codes. Like other research that is concerned with how illness is communicated and represented, I look specifically for *burnout subjects* who are identified as suffering from or being at-risk for this illness experience, whether their ailments are the product of internal/personal or external factors, and what kinds of interventions are suggested (Conrad and Barker 2010; Saguy and Gruys 2010). Patterns in these results articulate a cultural belief system around burnout that is present in the

43

psychological and business management literature (i.e. whether those who are burned out are seen as victims of circumstance or whether there is something wrong with the individual). Major codes that I adopted from this line of work included problem statements, proposed solutions, and explicit definitions of burnout. Here, I included codes for what kind of *problem* burnout is defined as (i.e. an individual, organizational, structural, or multidimensional). I also coded the kinds of *solutions* that were offered (i.e. individual, organizational or policy interventions). Finally, I coded for who or what is *responsible* for addressing burnout (i.e. individuals, managers, organizations, or policymakers). With this set of codes, I attend to how problems, solutions, and responsibility for burnout are framed.

Insights from QTA

The quantitative text analysis highlighted several patterns that were useful for developing codes. The illumination of key terms through finding n-grams primed me to consider how they were used in context, such as top bi-grams like "social support" and "job performance" as well as concepts like "engagement" that emerged later but rose in prominence quickly. The structural topic modeling also helped to reveal the broader patterns in the kinds of subjects of burnout research (*burnout subjects*), by differentiating between different caring/helping professions (i.e. fields of education, health and medicine) as well as where problems and solutions are located (i.e. workplace v. employee factors and outcomes). Additionally, results from the STM help me see how topics rise and fall over time and between databases.

Emergent codes

Through the process of coding and referring to the insights from the QTA, other codes emerged that I did not start out with. The first was the *collapsing of emotional, cognitive and physical exhaustion and energy* in relation to the first component of the Maslach Burnout Inventory

44

(elaborated on in the next chapter). In coding for this, I observed the ways that human energy is conceptually differentiated into these three types, but also combined into a single kind of embodied resource. The kinds of solutions or interventions that are offered often only seem to address one of these areas but are implied to work on all three kinds of exhaustion.

Second, I identified the articulation of ideals that help to define the *moral emotional vocabulary* oriented around ideals of health and positive emotional states. These were arguments for ideal states, characteristics, values, etc. that were defined in opposition to burnout (i.e. passion and engagement). Combatting burnout becomes a moral good because it is oriented towards these idealized and "healthy" emotional and embodied ends (i.e. energized and engaged as positive states). These states are patterned in relation to professionals, where one's attachment to work or a professional identity is characterized as fulfilling, meaningful, and energizing. In framing burnout as the deviant, unwanted and unhealthy dark side to the idealized "light" side, it also becomes reflective of how certain people ought to feel in their role (i.e. care work) (Hochschild 1979; Stacey 2011).

Third, I code for the stated *alignment of interests* between individuals and employers (i.e. acknowledgement of tensions, joint benefits of managing burnout, and joint responsibility). This alignment is aided by language that couples the values and ideal outcomes of health and engagement with organizational goals (i.e. avoiding costly turnover, increasing productivity). Here, I am interested in the "slippages between the health of individual bodies and the health of economic ones" (Metzl and Kirkland 2010: 4). Through this alignment, the ways that one's personal resources (specifically one's combined emotional/cognitive/physical energies) are drained or enhanced become a joint concern and responsibility of individuals, managers, and organizations.

Finally, for the NYT sample, which includes more personal accounts, I code for *burnout narratives*. These follow the similar pattern of an "illness narrative," by which people make sense of a distressing health condition that impacts one's sense of self. The most common narrative structure of reporting in the NYT tends to follow the archetype of what sociologists of health and illness have called the "quest narrative" (Frank 2013[1997]). This narrative is characterized by the experience of illness that disrupts someone's sense of self, followed by an acceptance of the experience and the belief that something is to be gained from it (Frank 2013[1997]; Whitehead 2006). In news reporting, stories frequently highlight inspiring and high achieving individuals who use their burnout experiences as motivation for social action or change. This emphasis on particular kinds of stories has the capacity to impact the ways that burnout is understood and addressed, especially if the person who claims a burnout narrative does not easily fit the archetype.

LOOKING FORWARD

By drawing on techniques from computational text analysis and qualitative content analysis, I am able to trace the conceptualization and use of burnout over time while being attentive to my primary concern with the archetypal burnout subjects and responsibility for intervention. However, this also requires efforts at historicizing these data by grounding them in people, time, and place. In the next chapter, I follow specific actors—the burnout experts introduced in the previous chapter—as they worked to define the boundaries of burnout while conducting research in New York and Berkeley. I also draw on histories of applied psychology and management to understand why certain ideas and concepts appear alongside burnout at particular times, as burnout is related to a constellation of other academic concepts. The chapter on management attempts to situate burnout within an ideological landscape that responded to changes in the

macro-economy. Finally, the chapter that draws primarily on data from the *New York Times*

emphasizes the importance of the 2019 WHO clarification of burnout and the COVID pandemic

on the way that burnout is covered by the press.

Chapter 3: Developing the Cultural Toolkit: Classification and Measurement of Burnout in Psychology

This chapter grounds my analysis of burnout in the time of its scientific discovery, following it over time as it starts to take shape. Part of the origin story is the surprising fact that two scholars arrived at the same phenomenon almost simultaneously, picking up on a colloquial term that they encountered in their work. While burnout existed in everyday use, it was the concerted efforts of psychologists to identify it as a workplace health problem and create tools to measure it, making it into a more stable sociotechnical object.

I frame Herbert Freudenberger and Christina Maslach in particular, as well as other major co-contributors to burnout research, as *burnout experts* who were also working in a specific social and professional environment when developing their concepts of burnout. These contexts shaped their orientation and the kind of moral framework they drew on for how burnout should be understood. Both Freudenberger and Maslach were working within health and human service professions during a time of change and were thus exposed to the moral ideals of work devotion and care obligation in these spaces. Ideals like the care obligation are seen as conflicting with the rapid restructuring of institutions such as medicine and education, which by the 1990s were becoming increasingly driven by demands for efficiency, profit, and surveillance, undermining the principles of professional work (Gaston 2022; Stacy 2011). These institutional shifts are often left out of or simply gestured to in the psychological literature on burnout, but nonetheless shape the experiences and perspectives of the people conducting burnout research, as well as the subjects of burnout research.

The process by which burnout becomes a social thing and the meanings embedded in it are not value-neutral. Through articulating what burnout is, who it impacts, and what should be

done about it, burnout experts shape the moral frameworks that can be used to evaluate

individual and organizational practices and justify individually focused interventions as well as

arguments for organizational or social change. As such, the imperative to avoid burnout may fall

on individual workers, emphasizing self-discipline and surveillance to maintain health, but can

also bolster arguments for "healthier" working conditions.

In this chapter and the next, I use the mixed methods approach outlined in Chapter 2 to

observe how claims about burnout have been made in the scholarly and trade literature over the

past 50 years. Data for this chapter come primarily from the *PsycInfo* (PI) Database, as well as

the documents from *Business Source Complete* (BSC) where there is disciplinary overlap.

Abstracts from these sources were used for the computational text analysis, and a combination of

full-text and abstract documents were used for qualitative coding. Primary sources from key

burnout experts in psychology are emphasized, as these scholars were consistent claims-makers

in the project of identifying, defining, and intervening in burnout as a troublesome health

condition.

BURNOUT EXPERTS IN CONTEXT

In the next section, I try to place key burnout experts, Herbert Freudenberger and Christina

Maslach (and colleagues) in their time. In doing so, I am attentive to historical context, the

orientations of the discipline that they are writing from (i.e. theoretical movements within

psychology) and within (i.e. the changing environment of healthcare). These scholars developed

their concept of burnout within a historically tumultuous time of change for the medical

profession and for health and human services in general.

The healthcare sector experienced rapid changes in the 1970s as demands on the system increased while resources did not. Broadly, historical factors such as the creation of Medicare and Medicaid in 1965, deinstitutionalization, and rapid economic transformation increased demands placed on healthcare workers as more people became financially insecure and dependent on medical services alongside expanded access to care (Starr 1982; Winant 2022). The health care sector was also undergoing changes as attempts were made to control the costs of healthcare through policy and market mechanisms (Reich 2014; Starr 1982) as well as standardization and surveillance of work where professionals previously had more discretion (Conrad 2005; Timmermans and Oh 2010). These trends broadly increased demands on medical institutions while also limiting or constraining the capacity of providers to respond. There were also demographic shifts in the structure of care work as more women and people of color became medical professionals, paraprofessionals and low wage care workers to meet the increasing demand for health care (Stacey 2011; Winant 2022).

The positioning of the Freudenberger and Maslach in the health field in the 70s likely primed them to locate the problem in kind of work and people they encountered. The focus of burnout experts, then, was largely on understanding the distress of the people in their immediate environment rather than the more distant society-wide dynamics that impacted the experiences of helping professionals more generally.

Freudenberger was a clinical psychologist who had been involved in private practice and had personal experience managing and volunteering his time at free clinics. His concerns were shaped by this environment as well as the kinds of people he interacted with in free clinics. Maslach is a social psychologist, trained to think in a more relational way (i.e. that the social environment is an important factor in understanding individual outcomes) who worked closely

50

with other applied psychologists who were more embedded in organizational-industrial (IO) psychology and Organizational Behavior Management (OBM).[12] These different locations and collaborations influenced the ways these scholars conceptualized burnout. The next sections go into more detail about how Freudenberger and Maslach and colleagues defined burnout, made claims about who is most prone, and shaped the moral expectations of who is responsible for protecting the emotional/cognitive/physical energy of workers in the helping professions.

Freudenberger: The free-clinic space and the problem of too much devotion.
Herbert Freudenberger is credited as the person to coin the term burnout, translating what he observed in the free clinic context to the professional and academic audience in his 1974 article titled "Staff Burnout" (Canter and Freudenberger 2001). Freudenberger was very involved in the Free Clinic Movement that began in the 60s and 70s that emerged as a band-aid solution to serve those who could not pay for care or otherwise fell through the cracks of the rapidly changing health care system. Typical patients included drug addicts and later refugees, people without jobs, as well as those who were prematurely released from state mental hospitals as the need grew (Halliwell 2012). His conceptualization of burnout was oriented towards the free-clinic space, the volunteers working there, and more administrative concerns about the kinds of attitudes and practices that are not sustainable, and the responsibility of individuals to address them.

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12 The stated goals of Industrial-Organizational (IO) psychology and Organizational Behavior Management (OMB) are not completely uniform, but are aligned and tend to be oriented towards practical implementation of specific knowledge to improve the efficiency of work (Bucklin et al. 2000). While the theoretical and methodological orientations of different subfields in psychology (IO v. OBM) are not uniform, they have tended to emphasize the individual characteristics historically, with situational and environmental factors entering the field after the 1970s (Bucklin et al. 2000).

The first free clinic opened in Haight-Ashbury, San Francisco in 1967 to serve people

dealing with drug addiction in a nonjudgmental environment (Rubin 2017). Freudenberger spent

the summer of 1968 at this clinic and later helped to establish the St. Mark's Free Clinic in the

East Village of New York to address a growing need for community services on the East Coast

(Canter & Freudenberger 2001; Freudenberger 1974; Malesic 2022; Martin 1999). At this time,

free clinics started to spread to the rest of the US as a grassroots response to growing health care

demand[13] and an ideological commitment that healthcare is a fundamental human right (Smith

1971). These grassroots organizations occupied a precarious and liminal space in the health care

field, relying on private philanthropic funding, and were constantly under threat of being shut

down (Smith 1971). Clinics also relied on the work of professional volunteers, including

physicians, nurses, and dentists, to provide free or low-cost care, primarily for low-income,

uninsured, or underinsured patients (Geller, Taylor, and Scott 2004; Rubin 2017).

Freudenberger, as a founder and administrator of a free clinic, was concerned with the

people who were necessary for the functioning of the organization. It was in this context that he

developed the concept of burnout, with emphasis on the loss of useful people who become

"inoperative" (Freudenberger 1974). To describe what he observed he drew on the pre-existing

dictionary definition of burnout:

> The dictionary defines the verb "burn-out" as 'to fail, wear out, or become exhausted by
> making excessive demands on energy, strength, or resources.' And that is exactly what
> happens when a staff member in an alternative institution "burns out" for whatever reasons,
> and becomes inoperative for all intents and purposes (Freudenberger 1974: 159-60)

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[13] Creation of Medicare and Medicaid in 1965 expanded access to people who were previously uninsured, increasing the health care utilization of this group (Starr 1982). Additionally, the deinstitutionalization movement that was initiated by the Community Mental Health Act of 1963 increased the demand on community services as various political and economic concerns of the 1970s led to the premature closing of state mental hospitals without adequate infrastructure at the community level to care for people with chronic mental health issues (Rothman 2022).

Freudenberger (1974) also theorized that it was high-achieving professional workers, especially those in the helping professions, who were the most at risk for burnout due to their idealism and desire to make a difference when being met with realities of ineffectiveness (Schaufeli 1993). This framing is echoed later with discussions of the kinds of individual dispositions or personalities who are more prone to burnout:

> It is not the complacent, easy-going worker who runs the highest risk of burnout but rather the men and women with high expectations and a sense of purpose who are the greatest victims. In addition to having a "perfect" script, potential burnouts are often idealistic individuals with a single-minded purpose for their lives. (Helliwell 1981:25)

This quote highlights the characterization of burnout's "greatest victims" are those who are overly committed to an ideal. This is also a moral depiction where boundaries are drawn between those who are driven by intrinsic values and motivations rather than crude pecuniary interests. This dynamic is elaborated further in the quote below:

> While everyone can experience stress, burnout can only be experienced by people who entered their careers with high goals, expectations, and motivation-people who expected to derive a sense of significance from their work. A person who has no such initial motivation can experience job stress but not burnout… Burnout most often happens to people who initially cared most about the people they work with and least about their paychecks (Pines 1996: 51-2)

This distinction reinforces a "hostile worlds" understanding of care and work (Fourcade and Healy 2007; Gaston 2022; Stacy 2011), situating those who are motivated by their paychecks outside of the legitimate claim to burnout because their motivation for a paycheck is at odds with or corrupts the motivation to do good work for its own sake. Volunteers in free clinics are positioned as the most deserving within this moral framing of burnout as they demonstrate their dedication to their professional values by freely giving their time and expertise without compensation. These were usually health professionals who were volunteering their time after working in hospitals or their own practice (Canter and Freudenberger 2001; Freudenberger 1974; Freudenberger 1975).

Burnout in this context is closely tied to the "work devotion schema" – a particular expectation that an ideal worker is someone who is totally committed, always available, and with no external commitments to family or one's own health (Blair-Loy 2001; Blair-Loy and Cech 2017a; Reid 2015). This kind of worker both embodies an ideal but is also the most at risk for burnout. However, burnout becomes an issue when this devotion goes too far. Burnout is framed as something that particular kinds of people are prone to, specifically professionals who also occupy a sympathetic moral position (i.e. caring too much, being too driven, being too dedicated, too altruistic at the expense of their own needs, etc.) and are in danger of "losing" oneself or overidentifying with work (Freudenberger 1975).

The focus is less on the demands of the work; while they do serve as a backdrop, it is assumed that excessive demands are a normal feature of free-clinic work. The emphasis then, was more on the individual responsibility of volunteers to use their personal resources responsibly, understand when they are approaching burnout, and do the right things to remain useful. In theorizing motivation, Freudenberger articulates a threshold where personal attitudinal resources that are productive can also become counterproductive if taken too far. In the passage below, Freudenberger outlines the difference between (immature) over-commitment and mature dedication:

> Let us remember that there are differences between commitment, over-commitment, involvement, and dedication. For me, over-commitment implies a total emotional or intellectual bondage to a certain idea or course of action. Whereas involvement implies mature concern and sympathy, interest in or even absorption by someone or something. Mature dedication implies devotion and consecration of oneself to a particular activity, pursuit, cause, or person. It is the overly dedicated and the excessively committed individual who will suffer. In order for us to be of help to others, we must feel concern, we must have a life of our own, and retain parts of our emotional life which remain entirely our own. Finally, we must be aware of our realities and limitations as human beings. If we are not all of these things, we are headed for a sure burn-out. (Freudenberger 1975: 2-3)

Freudenberger frames commitment, involvement and dedication to the cause as good

when they are balanced with other parts of life, and the inability to achieve this balance indicates

a lack of maturity.[14] To be over-committed is framed as something that is self-inflicted and

counterproductive to the goal of "[being] of help to others," and undermines the activities of the

free clinic as it loses staff. The "total emotional or intellectual bondage to a certain idea or course

of action" also implies that one is a slave to their own work or values (even though they are self-

imposed) and denotes a lack of personal skills or agency to set boundaries. Here, complete

devotion to the cause is framed as a personal choice and the inability to set adequate boundaries

is irresponsible on the part of the individual, who will inevitably burnout and reduce the capacity

of the free clinic to achieve its goals of service.

Finally, as the quote below demonstrates, the inevitability of burnout is taken for granted

in the free clinic space.

> … we cannot prevent burn-out, but we can certainly help to avoid it as much as possible and
> when it does happen to one of us, to admit it, ask others for help and take some time off for
> ourselves. (Freudenberger 1974: 165)

Because burnout is an inevitable feature of free clinic work, the solution frames are not

oriented towards changing the working conditions. Rather, they are more oriented towards

individual responsibility to recognize the signs of burnout and take appropriate action (in this

case, take time off, which is much more possible for volunteers than paid workers).

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[14] Though not cited, Freudenberger's use of maturity here may be influenced by Abraham Maslow's (1943) theorizing on the hierarchy of needs as it was Maslow who encouraged Freudenberger to pursue psychology when he was a student at Brooklyn College (Anon 1993). In this case, free clinic workers are ignoring their more basic needs such as the "physiological need" of rest and "love need" from social connection to other people outside of the free clinic space while also trying to meet needs for esteem (i.e. feelings of being confident and useful) on the way to self-actualization (Maslow 1943).

In framing burnout as a problem of overly-devoted professionals, solutions involve individual intervention to become more mature and realistic about one's devotion to a cause, find purpose elsewhere, and set appropriate boundaries. These are also themes that are taken up in public discussions of burnout, as Freudenberger's (1974) book *The High Cost of High Achievement* appears to resonate with journalists. By 1982, the image of the most frequent sufferers of burnout are characterized in the NYT as follows:

> The most frequent victims of burnout are the people you'd least expect to falter – energetic, competent, accomplished and seemingly self-sufficient men and women. They tend to be idealistic and dedicated, the kind of people you could count on to get things done… In years past, burnout primarily afflicted people climbing the corporate ladder, people driven by a relentless creative impulse and people in the helping professions who become overly involved with their work (Brody 1982)

Additionally, some of the first reporting on burnout followed the highly publicized resignation of Dick Vermeil as the head coach of the Philadelphia Eagles in 1983, explicitly citing burnout as his reason for his departure. Vermeil is reported having received a book on burnout syndrome from the Eagle's chaplain. This gift influenced his articulation of his burnout experience, emphasizing his over-commitment to coaching and his intense and emotional character (also described as driven and obsessive in other reports).

> 'I'm my own worst enemy," said Vermeil, who made a practice of sleeping on a cot in his office at least three nights a week during the season. "I'm far too intense, far too emotional.''… ''I'm emotionally burned out," he said, repeating the phrase about a dozen times during the conference. "I don't mean I'm about to go off my rocker, but I'm burned out." … ''Last spring," Vermeil said, "I did a series of public-service announcements for Blue Cross and Blue Shield, with the message being, 'Take good care of yourself, you belong to you.' Well, I'm going to listen to that message, take my own advice… ''Right now I'm going to take my own advice and step out of coaching. I feel that I need a break from coaching, just get out of it for a while and see if I can live without it. If I can't live without it, I will eventually find my way back into it." (Vermil Quits 1983).

He is not depicted dishonorably and resists the stigmatized image of someone who is "off their rocker," drawing a boundary between his experience of burnout and mental illness. Rather, Vermeil is characterized as overly dedicated to coaching, sacrificing his health for his job. Even though it is self-inflicted (i.e. "I am my own worst enemy"), Vermeil's story is still sympathetic

as he then uses his platform to speak out about the need to "take care of yourself." The cause of a self-inflicted over-commitment to one's work and the need to step back and find meaning in other areas of life follow the conceptualization of burnout articulated by Freudenberger as well as his strategies for action.

Maslach and Colleagues: Constrained helping professionals and the problem of cynicism. Rather than writing as a provider of care, Christina Maslach was initially working *with* human service providers in institutional settings as the subjects of her research. At this time, Maslach, who was a social psychologist at UC Berkeley,[15] was interested in emotions in the workplace and used the term "occupational burnout" to describe the experience of exhaustion in particular occupational settings (Maslach 1976).

Maslach's early work was oriented towards the emergent concept of "detached concern" in medicine as an idealized professional emotional style as well as a coping mechanism that involves dehumanizing patients (Underman and Hirchfield 2016: 95). The ideal of detached concern acts as a "feeling rule" that directs medical practitioners on how to feel and how to express those feelings (Hochschild 1979). However, these feeling rules are difficult to live up to because of the seemingly irreconcilable tension between the emotional detachment required to protect oneself from the intense emotional environment of medical work and the professional expectation to express the "appropriate amount of concern" for patients (Maslach 1996; Underman and Hirchfield 2016: 95). Maslach was concerned with the tendency of medical students and practitioners to slip into "excessive" detachment and run the risk of dehumanizing

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[15] Maslach was a professor at UC Berkeley during the 1974 Bay Area Nurses Strike. This may have been significant in developing the moral framework for burnout as nurses were able to successfully "moralize" or justify their economic action (of going on strike) by framing the caring obligation of nurses and capacity to give quality patient care was diminished by uncaring employers (Gaston 2022).

their patients, becoming cynical or treating the people they work with "like objects" (Maslach 1996). Cynicism is problematized as an inappropriate feeling that repels caregivers from something they *should* have positive feelings about, specifically the patient as the object of care. This concern with cynicism became a core component of the Maslach Burnout Inventory in 1981.

In reflecting on the trajectory of her arrival at the term "burnout", Maslach cited a chance encounter with an attorney:

> Up to this point, my thinking about this phenomenon had been framed within the context of health care. However, my focus was broadened as the result of a chance event. I happened to describe the results of my health interviews to an attorney, who told me that a similar phenomenon, called "burnout," occurred among poverty lawyers working in legal services. Not only did I learn that the phenomenon I was studying had a name, but I learned that it was present in a wider range of occupations. What seemed to link poverty law and health care was the focus on providing aid and service to people in need-in other words, the core of the job was the relationship between provider and recipient. The implication was that working with other people, particularly in a caregiving relationship, was at the heart of the burnout phenomenon. (Maslach 1996: 36)

The initial conceptualization of burnout emphasized the impact of the caregiving relationship, where practitioners were expected to use more personal "social skills, attitudes, and personality characteristics" alongside professional skills to interact with "needy" patients who are often troubled or suffering (Schaufeli et al. 1996: 268).

The assumption that burnout occurred in professional domains with these interpersonal dynamics shaped the development of the first and most widely used Maslach Burnout Inventory questionnaire, later renamed the MBI-Human Services Survey (MBI-HSS).[16] This survey

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[16] In addition to the health professions, the MBI-Educator's Survey was published in 1986 as "a version of the original MBI for use with educators, including teachers, administrators, other staff members, and volunteers working in any educational setting" (Maslach et al. 2018: 2). In the fourth edition of the MBI Manual, Maslach and colleagues situate this survey within transformations in the teaching profession that had been "subject to increased societal pressure to expand their roles beyond education. Teachers are often expected to correct social problems (for example, drug, alcohol, and sexual abuse), educate students in academic subjects while also developing job skills, provide enrichment activities, meet the individual needs of students with a wide range of abilities, and encourage

instrument was constructed to capture three types of feelings and uses a Likert scale oriented around "I feel" statements as the unit of measurement (Maslach et al. 2018). It was designed with occupations that were conceptualized as "focusing on helping people live better lives by offering guidance, preventing harm, and ameliorating physical, emotional or cognitive problems" (Maslach et al. 2018: 2). These groups included nurses, physicians, health aides, social workers, health counsellors, therapists, police, correctional officers, clergy, etc., many of whom are consistently represented in the burnout literature. Figure 11 below presents the proportion of topics over time that are related to different subjects of burnout research (i.e. clergy, nurses, medical professionals, social workers, educators, etc.).
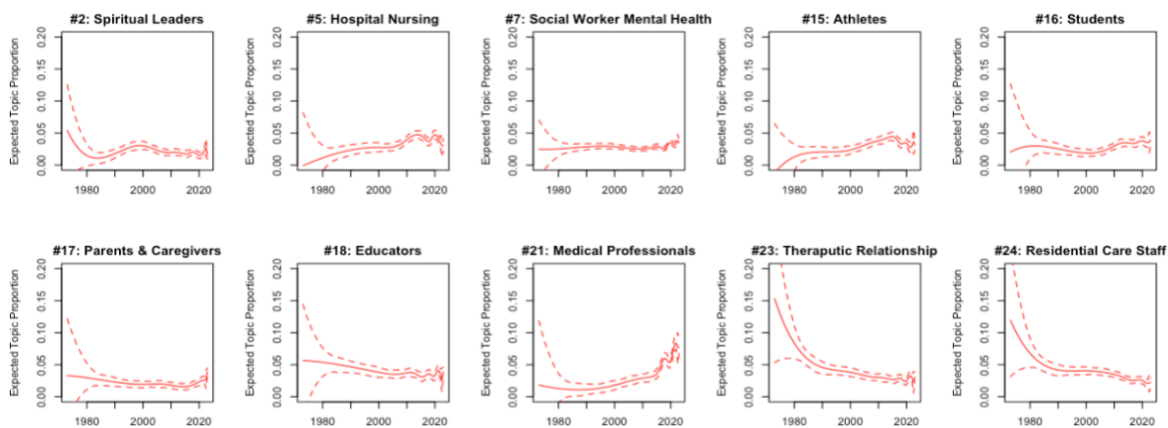
Figure 11: PI/BSC Burnout Groups over Time (1970-2023)

From Figure 11 we can see the that earlier writing about "residential care staff" and mental health professionals in "therapeutic relationships" took up a larger proportion than other topics. These were the contexts in which Freudenberger and Maslach and colleagues wrote during the early periods of burnout research. The emphasis on these particular groups declined in the 1990s as other areas of the helping professions associated with the initial MBI measurement

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students' moral and ethical development. Third, the human and financial resources required to meet these diverse expectations have not been forthcoming (Maslach et al. 2018: 30)

tool grew or maintained their share of interest in burnout publications. This is not to say, however, that there were no publications that focused on people in different occupational settings. As I discuss below, the expansion of the MBI in 1996 led to the inclusion of more kinds of professions and occupational settings. However, discussions were not as coherent there as they were in the groups that have been associated with burnout since its inception.

Women also tend to be represented in the early academic literature on burnout more than men; a consequence of the focus on the feminized helping professions. Figure 12 depicts proportion of women, men and gender as each category[17] is referenced across the PI/BSC abstracts over time.[18]

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[17] I choose the terms women and men to refer to the cultural categories of gender, and in the case of the data that I am working with, it is very likely that terms like female and male conflate the biological sex and gender category. There were only four articles that explicitly discussed people with different gender identities, appearing after 2010.

[18] For the purposes of data exploration, I use different methods to preserve and visualize explicit reference to gender in academic and public facing writing. For the academic abstracts, demographic information about subjects was often reported, making it possible to map how gender was referenced over time and between the PI and BSC corpora. For Figure 12, I calculate the occurrences of gender (i.e. was gender used at least once) and male/female subjects (i.e. these groups were named at least once) as a weighted proportion of all abstracts.
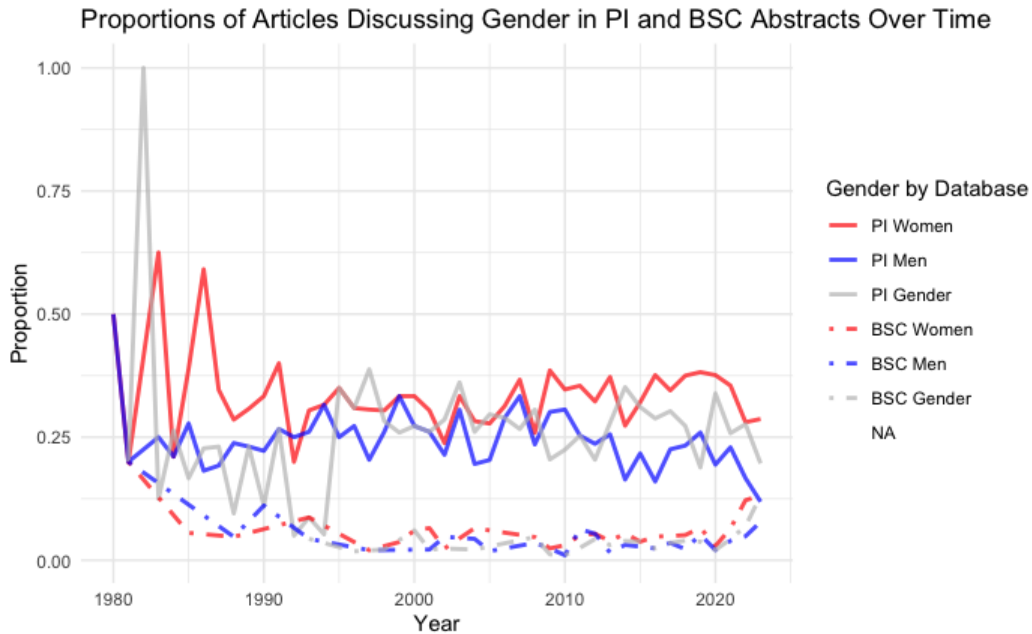
Figure 12: PI/BSC Proportion of Gender Articles (1970-2023)

The gap between references to men and women narrowed beginning in the 1990s (around the time when the MBI is expanded to include work outside of the helping profession). This pattern could be a result of the inclusion of technical professions where men are overrepresented in the growing industries of technology, finance, and engineering. However, the proportion of abstracts referring to men and women begin to diverge in the late 2000s.

ATTEMPTS TO EMPHASIZE ORGANIZATIONAL FACTORS

In the 1990s, after the development of the MBI and collaboration with IO psychologists – most from Europe and Canada – Maslach and colleagues began to emphasize the need for a "situational analysis" that attends to the impact of changeable working conditions in addition to the innate nature of care work and the therapeutic relationship. This shift in emphasis echoes the earlier work done with air traffic controllers but comes almost 20 years later.

This shift in emphasis attempted to expand attention beyond the level of individual feelings as Maslach and colleagues adjusted their tools to respond to the rapid organizational

restructuring that characterized the 80s and 90s. In *The Truth About Burnout: How*

Organizations Cause Personal Stress and what to do about it (1997), Maslach and Leiter offered

their most structurally oriented argument of what causes burnout.

> tight resource management - or micromanagement - has become the order of the day with
> policies that focus employees on the bottom line. But the employees, especially those who
> have been through graduate professional programs, put other values first. Health care providers
> in HMOs are frustrated by policies that prescribe treatments. Teachers feel constrained by
> curriculum standards established by legislation… Middle Managers feel constrained by
> dictates from central management and regulatory agencies (Maslach and Leiter 1996: 7).

This criticism emphasizes the role of workplace policies, legislation, and regulatory

agencies that place bureaucratic and economic constraints on professionals. This dynamic is

conceptualized by Pugh (2022) as the "systemization of connective labor," or a process by which

the emotional and relational work done to care for patients, educate, or provide some kind of

service is flattened to fit new rationalized metrics of success. Here, the tension is made clear

between such professional values as the moral obligation to care and the autonomy to deploy

expertise, which are undercut by concerns with the "bottom line" and increasing surveillance and

standardization. The argument for a "situational analysis" allows for the MBI (which emphasizes

the feelings of individuals) to remain relevant as these feelings are understood in context.

However, the path to resolving the situational constraints is typically presented as being out of

the control of managers and employees; the pragmatic goal is to try to reduce burnout within

these constraints. Maslach offered a pragmatic but somewhat defeatist approach to what can be

done:

> One of the most popular proposals for any type of problem (including burnout) is "more" –
> more staff, more money, more time, more facilities, more equipment. It is indeed true that
> more of these resources would alleviate some of the pressures that produce burnout. Heavy
> caseloads could be reduced, people would not have to be "processed," successful achievements
> would be more likely, and so forth. If it is possible to get "more," then getting more should be
> given high priority… But the possibility of getting more resources in these times of tight
> money is highly unlikely. While "more" may be the ideal, "less" is often the reality. At a time
> when funds are being cut back or even eliminated, the problem becomes how to get by on less,
> not how to get more. (Maslach 2003[1982]: 189).

The above quote highlights the awareness of the issue of asking for/getting more resources – but paints a gloomy picture as it also emphasizes the reality of working with less. The concern, then, is how to pragmatically sustain the productivity of individuals within particular workplace environments rather than looking for ways to make the institutional landscape more accommodating to human needs or values. Because of this, there is a tendency to over emphasize the individual as a site of intervention rather than addressing the more challenging organizational or social factors that contribute to burnout. This is a trend that Maslach and colleagues have consistently tried to address by calling attention to the role of the organization and sometimes making arguments about structural causes. However, these more externally focused problem frames were adopted more slowly and even declined as uses of the individual-focused MBI spread (See Figure 13 below).
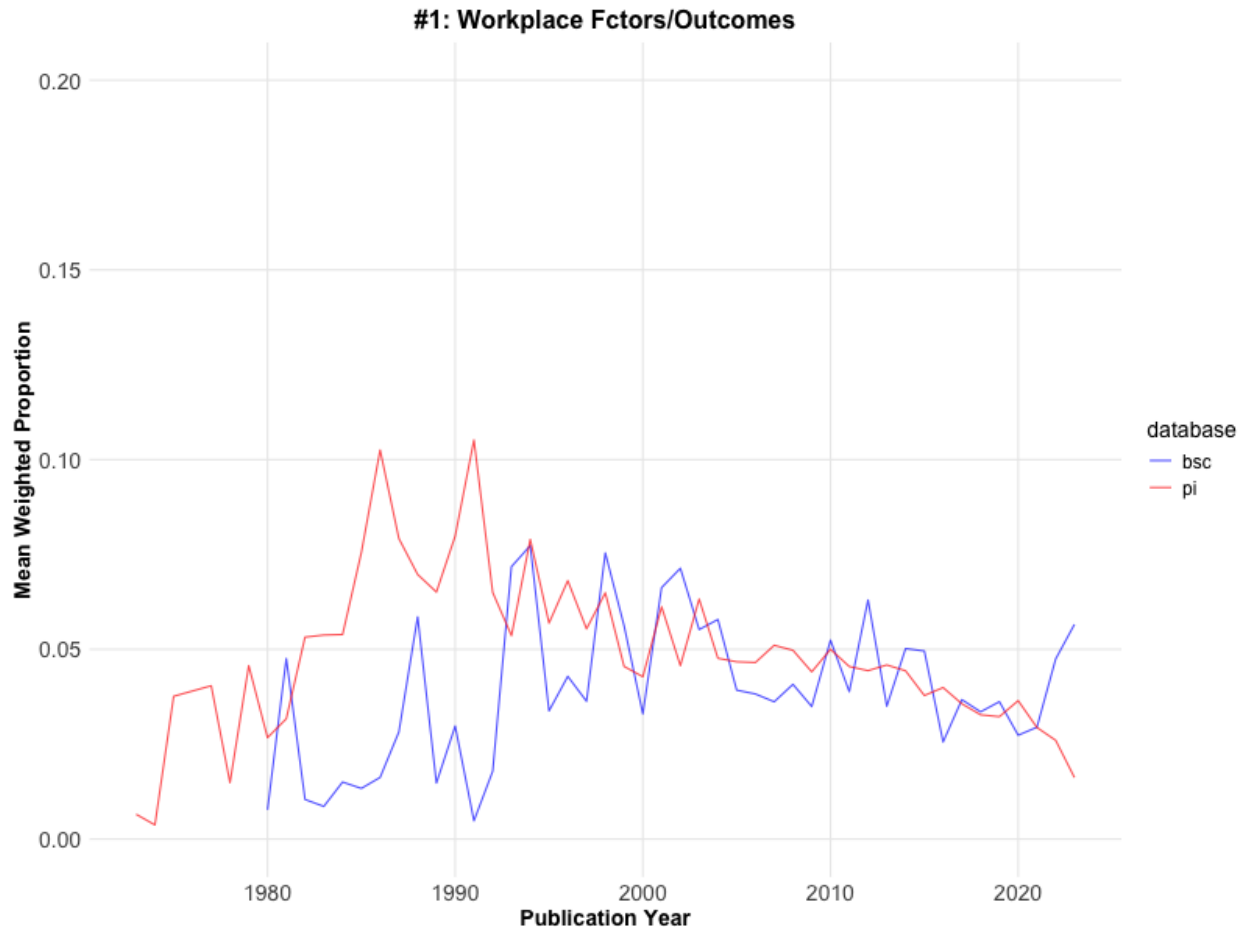
Figure 13: PI/BSC Estimated Topic Proportion for Workplace Factors and Outcomes

Figure 13, depicts the proportions of the topic "workplace factors/outcomes" which includes concerns with conditions like job demands, social support, and control. These topics took up more space in the PI literature before the mid 1990s and the publication of the MBI-GS, but gradually declined over time. On the other hand, topics on employee factors and outcomes (i.e. the role of engagement) and concerns with emotional distress increased over time (see Figure 6).

The tension between the arguments made by burnout experts and the trends in how burnout has been used over time, even in psychology, highlights the difference between the experts and the power of expertise. The MBI became an objectified form of psychological expertise that was designed to focus on the individual. Despite their efforts, the experts who

64

developed it had less control over how it was used and interpreted once it was taken up by other actors.

THE MASLACH BURNOUT INVENTORY: MEANINGS AND MEASUREMENTS

The following section gives an overview of the different components of the Maslach Burnout Inventory that have come to characterize burnout in general. Figure 14 provides a visualization for the prevalence of words associated with the MBI topic over time, specifically the three components of emotional exhaustion, cynicism and depersonalization.

Figure 14: PI/BSC MBI Topic Proportions (1970-2023)

These components were used more often in earlier periods as the MBI was being defined and the different components tested for validity. However, the prevalence of this topic declines

over time within PI as fewer publications reference the different components explicitly. Even as the MBI is named less in abstracts, it is still the most dominant 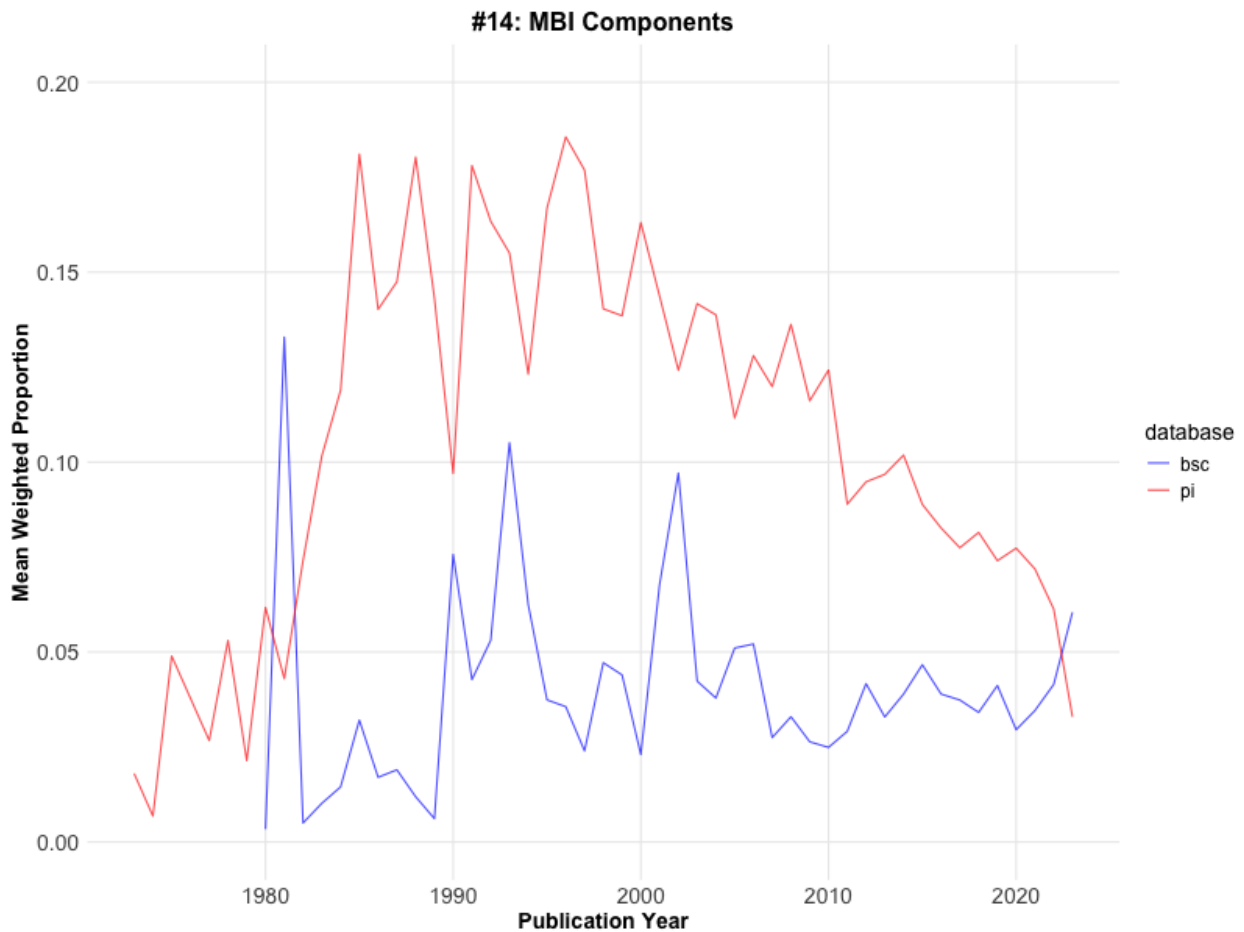measurement tool for burnout. Interestingly, after the first few years of the COVID pandemic, the lines cross. This indicates a possible shift in focus in psychology (i.e. burnout literature is less about defining the three component model and more about developing psychological interventions or concerns with emotional distress), and an increased interest in the characteristics of burnout within management.

Unpacking the Three Components of the MBI

The first component of *exhaustion*, or feelings of energy depletion, refers to the kinds of personal and embodied resources that individuals have at their disposal to "give" to their role or employer. This component emphasizes these as a kind of personal energetic resource that can be "depleted" or "drained." As stated by Maslach and Jackson (1981) "As their emotional resources are depleted, workers feel they are no longer able to give of themselves at a psychological level" (99). The MBI questionnaire asks respondents to answer questions written as statements of personal feelings or attitudes – in many cases, it uses metaphors, such as feeling "emotionally drained from work," "used up at the end of the workday," "burned out from my work," and "at the end of my rope" (Maslach et al. 2018: 15). Most descriptions of feelings are also relational, they are not just about an individual's feeling but feeling related to work.

The ways it is used emphasize emotional exhaustion, but also frame it as a multifaceted exhaustion experience that involves emotional and general fatigue. Discussions of this component of burnout tend to frame it as an issue for emotional/cognitive/physical energy that has the capacity to be used, given, and managed, making it a resource for both individuals and employers. Even though this component is framed as multifaceted, there is an emphasis on

66

emotional exhaustion and emotional resources. The emphasis on emotional exhaustion makes it easier to connect burnout to the kinds of work where emotions are assumed to be the most "used" by workers or most at risk for damage.

The second characteristic, usually termed *depersonalization* or *cynicism*, has its roots in Maslach's early interest in "detached concern." This component is framed as a maladaptive coping strategy to deal with a loss of emotional/cognitive/physical energy. Cynicism deviates from the expectation that those in the "helping professions" care. The expectation to care is also feminized, as gender stereotypes of women assume that women are innately caring and are thus well-suited for the helping professions (Cottingham 2016; Stacy 2011). In this case, cynicism of women in a caring profession is especially deviant. This helps to explain why women have been consistently referenced in the burnout literature compared to men over time.

On the other hand, cynicism in low-wage and low-skill work where there is high turnover may be overlooked because of the assumption that they are not expected to care. Therefore, cynicism may be expected (and not deviant) and does not impact productivity for the employer, as workers are also assumed to be easily replaced. While there is some scholarly interest in low-wage service work (i.e. those in customer service and hospitality), especially as Hochschild's concept of emotional labor travels through psychology and business management in the 2000s, the dominant burnout cases are still those in the skilled helping professions.

The final component of *professional efficacy* or *personal accomplishment* is the most fraught, with the first two characteristics being seen as more central (Demerouti et al. 2001). This is related to negative feelings directed towards the self, which has been discussed as a possible consequence of exhaustion and cynicism. This particular measure is interesting in that it has to do with (professional) identification with or pride in one's own work. It involves "the tendency

67

to evaluate oneself negatively… Workers feel unhappy about themselves and dissatisfied with their accomplishments on the job" (Maslach and Jackson 1981: 99). The questionnaire for this component also includes questions such as "I feel very energetic" and "I feel exhilarated after working closely with my recipients" (Maslach et al. 1896-2018) as qualities of personal accomplishment, implying that to not feel these things means that they are deviating from expectations. Reduced professional efficacy has also become part of conversations to understand whether burnout impacts productivity – connecting confidence and identification with work to actual performance. This component of the MBI blurs the line between one's health for its own sake and productive capacity, which is both a problem for individuals and employers.

With a new quantifiable measurement tool in the MBI, there was also an increase in the use of statistical methods and model testing in the burnout discourse in the 80s. This was an intense period of testing for convergent, divergent, internal, and external validity of the burnout measurement. From the 1990s onward, the contours of burnout solidified around three dimensions (i.e. emotional exhaustion, cynicism, and professional efficacy). This new tool also gave the psychological articulation of burnout more cultural authority, as this tool could be attached to other psychological constructs (i.e. statistical correlations between burnout, anxiety and depression) and applied in different contexts.

The Legitimation of the MBI: Locating the impacts of burnout in the body/mind
The MBI allowed the components of burnout to be analyzed in relation to other kinds of metrics for health. Burnout had always been associated with physiological outcomes, from medical leave for air traffic controllers, to more ambiguous collections of symptoms outlined by Freudenberger:

What are the signs that begin to manifest themselves in burn-out? For one, there is a feeling of exhaustion and fatigue; being unable to shake a cold, feeling physically run down; suffering from frequent headaches and gastro-intestinal disturbances; this may be accompanied by a loss of weight, sleeplessness, depression, and shortness of breath. In short, one becomes psychosomatically involved in one or more ailments. (Freudenberger 1975: 2)

Research on burnout through the 1980s and 90s came to situate these ambiguous and seemingly disparate health complaints into a coherent issue of our physiological stress response, correlated with high levels of cortisol, sleep disturbance, anxiety and depression. In locating burnout as a stress condition that impacts the body and mind, burnout became more legitimate as a collection of distressing feelings that are correlated with unwanted physiological, emotional and cognitive outcomes.
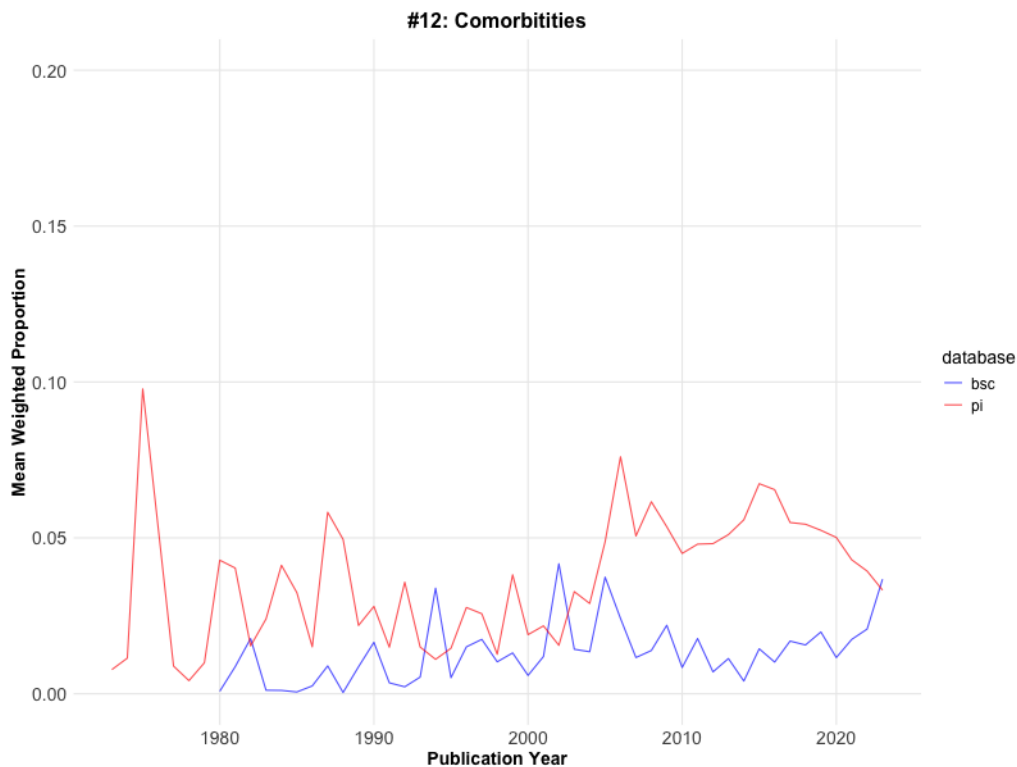
Figure 15: PI/BSC Comorbidities Topic Proportions (1970-2023)

Figure 15 illustrates the prevalence of health comorbidity topics over time, with more emphasis on correlates in the PI corpus related to increases in discussions about mental health such as depression and anxiety. Over time, especially in the 2000s, new ways to measure and quantify biomarkers for stress also change the orientation of burnout research. This emphasis on

69

health correlates makes burnout more legible to medicine, moving it away from the "contested illness" status that belongs somewhat in the purview of medicine and medical intervention, and providing a clear justification for action.

However, rather than looking again to external social factors present in the working environment that cause stress and more "upstream" factors like the national economic climate, there is an intensification of the turn inward to the psychology and physiology of stress and burnout. The interest in the physiological aspects of burnout bring it more into the realm of unambiguous medicalization – if it is a physiological or pharmacological problem, then it can be addressed by medical interventions. The inclusion of physiology and specific impacts on the body extend the problem of burnout beyond the therapeutic or behavioral into a particular way of seeing, modifying, and optimizing human bodies using medical intervention. This trajectory is also bolstered by the ascendance of the pharmaceutical industry (Conrad 2005). It is the potential for physiological harm that makes burnout a problem that needs to be managed (increasingly by individuals) – the language and spread of this will be explored further in the chapter on public adoption of this language to understand what burnout is and how to manage it.

EXPANDING THE BOUNDARIES OF THE MBI

In 1996, the MBI was modified and named the MBI-General Survey (MBI-GS) to allow it to be applied to other contexts beyond the helping professions (i.e. customer service, maintenance, manufacturing, and management) (Demerouti et al. 2001). This expansion helped the MBI remain a useful tool in a time where other kinds of work were emerging and declining, and situated it as a valid and reliable tool to capture a more widespread phenomenon.

As the MBI is used in other contexts over time, moral arguments about who is responsible for maintaining health and preventing or avoiding emotional/cognitive/physical

exhaustion are renegotiated. When situated within the helping professions, the relationship between employees (mostly medical professionals) and organization (mostly hospitals) was made clear by the tension between the moral obligation or duty to provide quality care and new pressures to contain costs. However, with the expansion of the MBI to other contexts and the rapid "restructuring" of work in the 80s and 90s, the justifications for managing burnout were redefined in terms of uneven social exchange and shared interests in reducing burnout.

The expansion of the MBI allowed burnout experts to stay relevant as times changed and exercise more control over the definition of burnout as it was taken up by more kinds of people. Maslach and colleagues continued to promote their "situational analysis" of burnout, offering a new moral framework that characterizes the unequal exchange relationship of contemporary employment bad for health.

> The organizational context is also shaped by larger social, cultural, and economic forces. Recently, this has meant that organizations have undergone a lot of changes, such as downsizing and mergers, that have had significant effects on the lives of their employees. This is perhaps most evident in changes in the psychological contract—i.e. the belief in what the employer is obliged to provide based on perceived promises of reciprocal exchange (Rousseau 1995). Now employees are expected to give more in terms of time, effort, skills, and flexibility, whereas they receive less in terms of career opportunities, lifetime employment, job security, and so on. Violation of the psychological contract is likely to produce burnout because it erodes the notion of reciprocity, which is crucial in maintaining well-being. (Maslach et al. 2001: 413)

The kinds of ideals that organizations *should* adopt to shore up the psychological contract and promote wellbeing are oriented around agreement in such "areas of work life" as workload, control, reward, community, fairness and values (Maslach et al. 2001). However, despite the calls to center aspects of the employment relationship, burnout has been used increasingly in relation to individual-level factors. Interventions, then, are oriented towards changing these attitudes and behaviors by the active development of personal resources (i.e. voluntary training, coping skills, other kinds of therapeutic interventions). Perhaps ironically, the MBI supports this trend as a measurement tool that quantifies individual experience, aggregating feelings of

71

emotional exhaustion, cynicism, and lack of personal accomplishment into numerical values that can be abstracted from their context.

At the same time, the burnout experts were also promoting the ideal mindset of "engagement" as the "positive antipode" of burnout that accompanied the rise of positive psychology in the US.[19] Engagement is characterized as "as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption" (Crawford et al. 2010). Rather than focusing on the dysfunctional feelings, psychologists expanded their gaze to positive attributes of the human experience and how to optimize them. The conversation then shifts from avoiding, reducing, or preventing burnout to "building engagement" (Maslach et al. 2001). As the foil to burnout, engagement highlights a desirable state of mind that also blurs the boundary between self and job performance. Engagement was framed by psychologists as a win-win that links individual well-being and productivity. This aligned with organizational and managerial interests that are more overtly oriented towards economic concerns as "having engaged employees results in higher shareholder return, profitability, productivity, quality, and customer satisfaction as well as lower absenteeism and turnover" (Crawford et al. 2010: 834).

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19 This subfield got its start in the 1950s but grew in prominence in the 1990s with the American Psychological Association electing a positive psychologist as president in 1996 with the task of promoting positive psychology as a legitimate subfield (Hooker 2013).
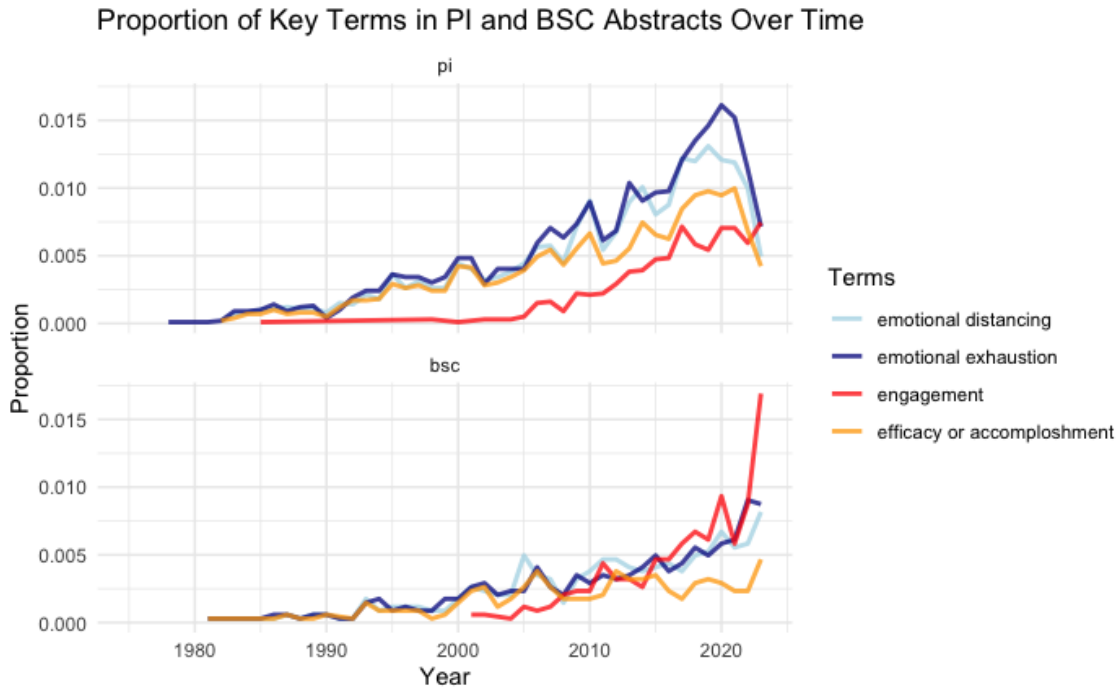
Figure 18: Proportion of PI/BSC Key Terms (1970-2023)

Figure 18 shows the proportion of key terms related the MBI over time alongside the introduction of engagement in the burnout literature. Beginning in the *PsychInfo* (PI) database, engagement begins to appear more often in the mid-2000s but does not surpass the MBI components. Within the *Business Source Complete* (BSC) database, engagement is much more prevalent, especially after the onset of the COVID-19 pandemic.

FROM DEFINITION TO APPLICATION

This chapter outlined the capture of burnout by psychologists and the development of a valid and reliable measurement tool. These burnout experts in psychology actively framed burnout as a particular kind of problem, making moral arguments oriented towards the protection of professional values, health, and a more equal exchange relationship. However, this is only part of the story of burnout. As burnout traveled to different contexts, its use diverged from the frameworks articulated by burnout experts. In the next chapter, I expand my analysis to

managerial discourses and situate discussions of burnout within the framework of changing

managerial paradigms. In doing so, I highlight how psychology and management mutually

influenced the framing of burnout as managers drew on psychological expertise to solve

problems and psychologists responded to the needs of managers. By expanding my analysis to

other spaces, I observe how this psychological concept was shaped by other conversations

beyond psychology and was interpreted and used strategically by other kinds of actors in

different domains.

Chapter 4: Shifting Responsibility for Health and Burnout in Times of Change

In this chapter, I move from the historical development of burnout in psychology to its interpretation and use in management literature. Managerial literature is a useful source of data for sociologists, as it is a space where rules, practices, and strategies that link individuals to the economy through the employment relationship[20] are codified. Writers in this space have also been engaged in framing burnout as a problem. They do so, however, within specific macro-economic contexts and ideological environments. By following burnout from psychology and into management literature, I observe how the flexibility of the concept allowed it to serve different purposes as the dominant management paradigms and trends in economic relationships changed over time.

The situating of burnout in this space also requires a historical view of the field of management and other broad shifts in the American economy and work culture. While an in-depth analysis of the entire field of management and the historical process that have led to the current economic moment is beyond the scope of this project, I draw on insights from the history of managerial studies (Barley and Kunda 1992; Eberhart et al. 2022; Kunda and Ailon 2006) and from sociological work that theorizes the relationship between the economy and social life (Depalma 2020; Fourcade and Healy 2007; Polanyi 1944 [2001]; Zelizer 1978). I use the typology of shifting managerial thought outlined by Barley and Kunda (1992) and expanded on by Kunda and Ailon (2006) to organize my discussion about how burnout is framed within management literature. To understand the moral prescriptions of managers, I turn to the moral markets literature in economic sociology that is concerned with theorizing the relationship

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[20] The employment relationship is broadly constituted by "dynamic social, economic, psychological and political relationships between individual workers and their employers" (Kalleberg 2009: 34).

between markets and "moral orders," or "what a society, or group, defines as good or bad, legitimate or inappropriate" (Fourcaude and Healy 2007: 301).

In the case of burnout, the moral language that surrounds it has changed over time and is increasingly oriented toward the protection of health and employee wellbeing. To understand this trend, I draw on theorizing that conceptualizes health as a "super value" that is a moral good and an end in itself (Crawford 2006). Research in this area has found that "the achievement of health and wellness has become a chief moral imperative as well as an inexhaustible source of normative judgments" (Epstein and Timmermans 2021). Because health is broadly understood to be a moral good, there is an obligation at the individual, organizational, and society level to protect health or at least "do nothing to undermine [it]" (Crawford 2006: 402). Health is one of many kinds of "moral frameworks," against which social action in general and economic practices in particular are judged (Epstein and Timmermans 2021; Gaston 2022). To act in the name of health is morally good and legitimate and to undermine it would mean to lose legitimacy.

The psychologists in Chapter 3 helped to situate burnout as a threat to health by connecting the depletion of embodied emotional/cognitive/physical resources and the presence of unwanted feelings to adverse physiological and psychological outcomes. The protection of these embodied resources both benefits the health of individuals and is strategic for the "health" of organizations to achieve or maintain moral legitimacy and reduce the costs of high turnover for employees that are expensive to replace, absenteeism, and health care expenditures for those who are fully employed. However, as the American economy and employment relationships shifted over time, so too did the weight of responsibility for protecting individual health. I use managerial discourses about burnout as another window to view how it is framed as a problem

that requires more social protection (typically at the organizational level) and/or more individual responsibility for one's own health and productivity. I find that burnout, as quantified by psychologists, became a useful tool for making claims about organizational culture and responsibility for employee health and wellbeing, but has also been used to emphasize the individual self-management of emotions, thoughts, and behaviors as the primary form of intervention.

SHIFTING MANAGEMENT PARADIGMS AND MORAL VALUES

Numerous scholars have outlined the dynamic historical development of management paradigms and have worked to explain how and why paradigms change over time (Barley and Kunda 1992; Bodrozˇic and Adler 2018; Boltanski and Chiapello 2005; Kunda and Ailon 2006). These paradigms are generally concerned with the best way to deal with the problem of control, but have taken different pathways to achieve it. Rather than being a linear march towards the best management scheme, scholars have identified more cyclical or dialectical movements of dominant models of management that are influenced by technological change and moments of crisis and criticism (Barley & Kunda 1992; Kunda & Ailon 2006). These accounts show how management ideology is influenced both by pre-existing ideologies and by changes in material conditions that catalyze a need for an ideological alternative when what came before ceases to be seen as sufficient.

Barley and Kunda (1992) develop a useful typology of managerial discourses that alternate between rational and normative "rhetorics of control," which tend to map on to the

expansion and contraction of the economy.[21] Both of these kinds of rhetorics are moral in nature, as they make claims about how organizations "should" be managed and the kinds of practices that are deemed legitimate (Fourcade & Healy 2007). Shifts in dominant rhetorics are marked by moments of crisis and criticism that make alternatives to the reigning ideologies and practices seem more viable. However, the boundaries of these discourses are not clear-cut, as new paradigms often take pieces of what came before and the dominance of one paradigm does not mean that alternatives are no longer circulating (Barley & Kunda 1992; Bodrozˇic and Adler 2018).

Management texts that lean on "rational rhetorics of control" tend to proliferate in periods of market expansion, where issues in the labor process are seen as technical problems with technical solutions that are spearheaded by technical experts (i.e. scientific managers, engineers, and economists) (Barley and Kunda 1992). The values articulated by this rhetoric are generally oriented towards a "logic of efficiency" that emphasizes the streamlining of the production process, usually as a response to new technologies (Bodrozˇic and Adler 2018) that appeals to the rational self-interest of employees (Barley and Kunda 1992: 364; Fourcade and Healy 2007). These frames tend to conceptualize employees as a collection of individual rational actors and the goal of managers as the efficient regulation of the firm.

Alternatively, management texts that lean on "normative rhetorics of control" tend to gain prominence in periods of economic contraction and insecurity. These managerial ideologies and accompanying practices exercise a subtle form of social control by "winning the hearts and minds" of employees by emphasizing culture and community (Barley and Kunda 1992: 364).

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[21] For a broad historical overview of this historical and dynamic relationship between changing material conditions and managerial ideologies dating back to the late 1800s see (Barley and Kunda 1992; Kunda and Ailon-Souday 2006).

These normative approaches have historically been promoted by psychologists as they entered industrial spaces (i.e. Elton Mayo and Abraham Maslow), and by managers influenced by traditions of the human relations movement of the 1920s-50s. The values articulated by managerial texts in these periods tend emphasize the importance of social connection and the relationship between employees and the organization. This normative framework also blurs the line between the "welfare" of employees and the firm, working to align the interests of both (Barley and Kunda 1992).

These shifting paradigms also share the pattern of the Polanyian "double movement" between phases in which markets "disembed" from social relations (treating employees more like *homo economicus*) and social protectionist counter-movements that attempts to re-embed or recenter social relations (Polanyi 1944 [2001]; Fourcade and Healy 2007). However, within the context of management, the re-embedding of social relations through an emphasis on values of health and emotional commitment are still instrumental, as the ultimate purpose is the "health of the firm" and financial gain (Barley & Kunda 1992: 383). Normative rhetorics in particular can be thought of as providing a moral foundation for current economic arrangements that help to "[justify] people's commitment to capitalism, and [renders] this commitment attractive": what Boltanski and Chiapello (2005) call the "new spirit of capitalism" (162).

In the following sections, I trace the concept of burnout within the shifting management paradigms outlined above. From the time burnout enters managerial texts in the 1980s, different kinds of concepts became associated with it, echoing the patterns of rational and normative rhetorics of control. Some directed attention towards issues of the employment relationship while others shift focus to isolated individuals. While the measurement of burnout is fairly constant over time, its key "traveling companions" change. This dynamic helps to explain why the

responsibility for burnout shifts in emphasis at different points. I will demonstrate below how these key terms followed trends in managerial thought, combining with burnout to both justify and critique changing work relationships. Because burnout became a measurable and unwanted outcome, the kinds of concepts associated with it over time often reflect different kinds of causes, consequences, and solutions.

KEY BURNOUT TRAVELING COMPANIONS

Burnout entered the managerial discourse in the 1980s within ongoing and emergent conversations about how organizations should be managed. The lineage of burnout discourses in the management space are primarily rooted in rhetorics of normative control, emphasizing the relationship between person and the work environment (i.e. impacts of job demands and resources, job satisfaction, and organizational commitment). However, over time, other kinds of concepts emerged that were oriented more toward individual characteristics, desired states, and behaviors (i.e. engagement, organizational citizenship behavior, employee wellbeing, emotional intelligence, human capital, and psychological capital). Figure 16 shows the proportion of these key terms in the BSC and cross-listed corpora that accompany burnout between 1980 and 2023.
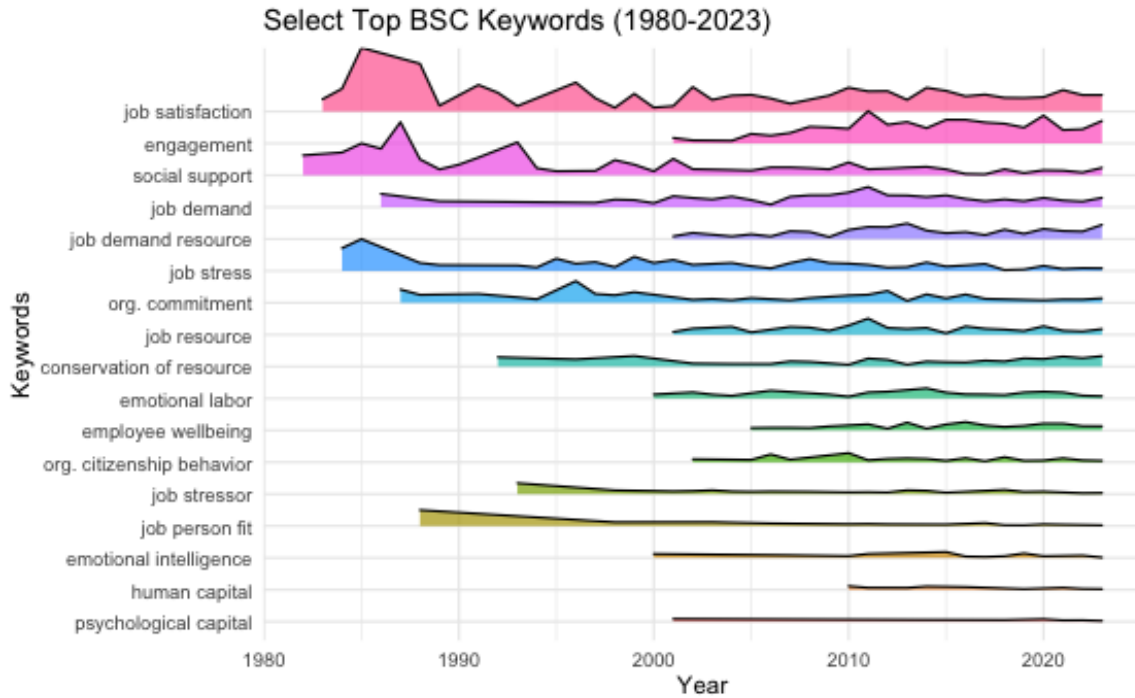
Figure 16: PI/BSC Select Top Keywords Ridgeplot (1970-2023)

Broadly, the managerial literature on burnout tends to frame it as both a personal and organizational issue. Early concerns with job satisfaction, job stress, job demands, social support, and job-person or environment-person fit emphasize the relationship between individuals and their working environment. In the 1990s, the MBI expands to other occupational settings when work became more insecure for white-collar workers who were previously shielded from layoffs and guaranteed long-term employment. In these contexts, explanatory models for burnout such as the "conservation of resources" theory were developed, framing burnout as a rational response to the actual or perceived loss of valued resources such as job security. In the 2000s, the responsibility for managers to balance demands and resources became more prominent. At the same time, personal resources and ideal ways of working began to take up more space with the rise of engagement as the "positive antipode" of burnout and the re-conceptualization of burnout in relation to individual human capital and psychological capital (i.e. skills like emotional intelligence), individual skills and resources that benefit both individuals and organizations. In

81

the late 2000s, there was also an increasing emphasis on employee well-being that drew a more direct connection between the health and well-being of employees and that of the organization. The sections below further outline the historical dynamics of the changing economic and work environment in the US, situating discussions of burnout in these contexts.

1970-90s Organizational Culture and Commitment

In the 1970s and 80s, old employment relationships changed rapidly due to broader changes in the economy. At this time, managers became increasingly concerned with issues of commitment, motivation, loyalty, teamwork, culture, and morale to hold organizations together in a time of uncertainty (Barley & Kunda 1992). This new emphasis on the importance of culture and values marks a turn towards the normative rhetoric of control, what Barley and Kunda (1992) call "organizational culture and quality." This rhetoric highlighted the strategic mobilization of employee values and development of company cultures to maintain or improve economic performance in spite of a "turbulent" economic environment. The assumptions behind this rhetoric are outlined below:

> …[1] Economic performance in turbulent environments requires the commitment of
> employees who make no distinction between their own welfare and the welfare of the firm…
> [2] strong cultures can be consciously designed and manipulated. Enlightened managers were
> said to be capable not only of formulating value systems but of instilling those values in their
> employees. [3] value conformity and emotional commitment would foster financial gain.
> (Barley & Kunda 1992: 382-3)

Burnout does not solidly appear in the BSC corpus until the 1980s, as earlier publications include more cross-listed articles in publications like the *Journal of Occupational Behavior* and *Applied Psychology*. Because burnout was attached to work, psychologists were writing in these interdisciplinary spaces, communicating a new concept and moral framework to managers that could help them address issues of emotional commitment. The dominant key terms of this were

oriented toward the emotional relationship between employee and the organization: job

satisfaction and organizational commitment.

Job satisfaction broadly captures employee feelings and attitudes about their jobs.[22]

Organizational commitment refers to the extent to which an employee identifies with and is

involved in an organization (Leiter and Maslach 1988: 299). People who are more satisfied and

committed are less likely to leave an organization in search of "an alternative job that will satisfy

psychological needs" (Jackson et al. 1987: 342). These attachments are also "believed to be

related to enhanced productivity and better delivery of services" (Leiter and Maslach 1988: 299).

Burnout is a threat to both satisfaction and organizational commitment and runs the risk of

increasing turnover and reducing productivity, ultimately harming the overall health of the

organization. Because burnout was framed as a work-related issue, the responsibility primarily

fell on managers to improve satisfaction and commitment of employees by providing social

support and reducing job demands that cause stress. This responsibility of managers to reduce

burnout is largely situated within the helping professions that still took up much of the focus in

the 1980s. However, it follows the trend in the management literature at this time that aligned the

interests of employee welfare with the welfare of the firm.

1980s-2010s Market Rationalism and New Terms of Exchange

Figure 17 depicts the prevalence of words from the topic on organizational change, which are

prominent in the 1980s and the 90s. This pattern reflects rapid organizational changes across

industries as the US economy began to move toward accumulating profit through financial

activities and drawing increasingly on financial indicators to understand organizational health

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[22] Job satisfaction has a longer history and is affiliated with past rhetorics of normative control such as the Human Relations Movement of the 1920s-50s. These rhetorical movements were spearheaded by applied psychologists like Elton Mayo and Abraham Maslow (Barley & Kunda 1992).

(Davis & Kim 2015; Krippner 2005). This period of financialization was also aided by new

computer technologies (Bodrozˇic and Adler 2018). By the 1990s, the assumption that firms and

managers needed to adopt strategies for increasing shareholder value were dominant (Fligstein

and Shin 2007; Kunda & Ailon 2006).
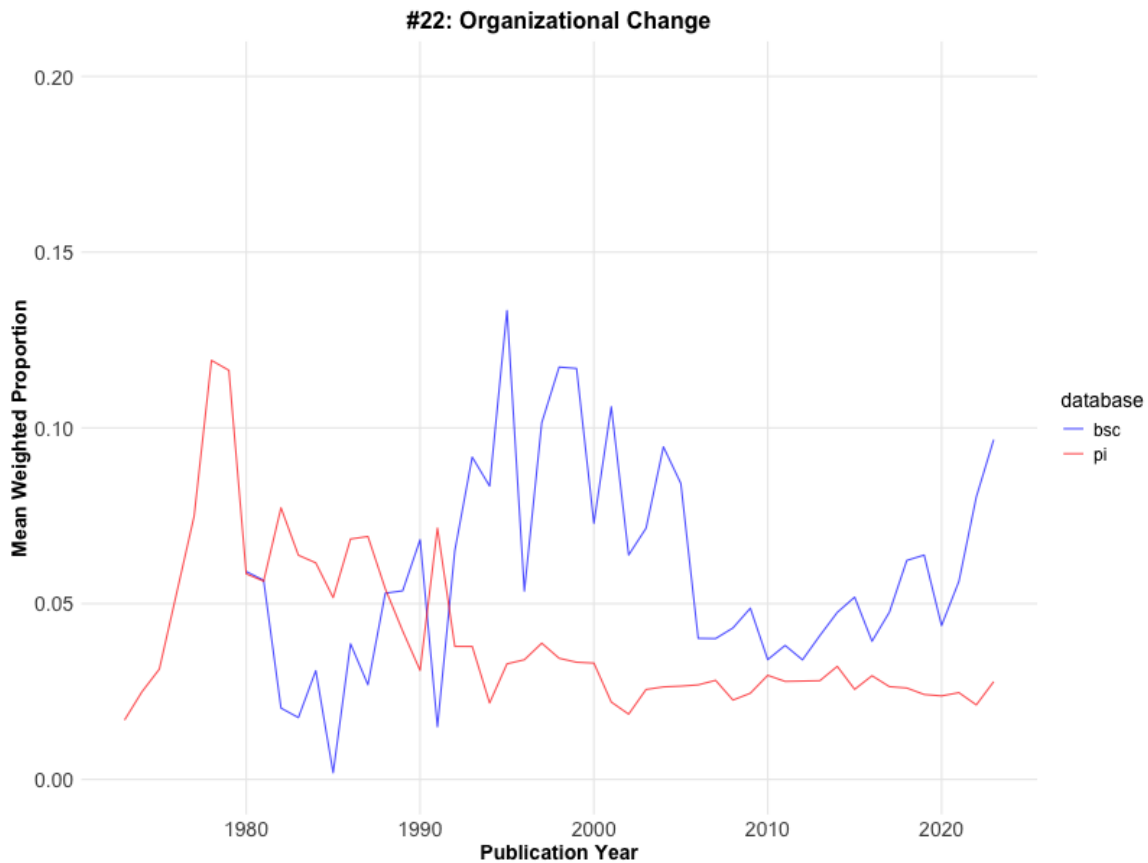
Figure 17: PI/BSC Organizational Change Topic Proportions (1970-2023)

New management practices were oriented around "maximizing shareholder value" to

ensure the survival of the firm in a new financialized environment, departing from previous

commitments to employees as stakeholders (Fligstein & Shin 2007). This new management

paradigm, market rationalism, "uses the root image of the market and of the patterned

relationships between rational market actors to capture, understand and describe corporate

realities and to guide managerial practice" (Kunda & Ailon 2006: 201). Managers prioritized

viewing the firm as a stock analyst might, using market metrics as an indicator for the health of

the firm, and engaged in strategies that were presumed to increase profitability, such as mergers and layoffs (Fligstein and Shin 2007).

The health of the firm now required that the "excess fat" of employees who did not add value be "dieted away" (Kunda & Ailon 2006: 215). In this context, the terms of the employment bargain changed for many white collar workers, who were subject to layoffs, non-standard, and temporary employment in ways they had been shielded from before (Eberhart 2020). The old employment contract of long-term employment was replaced with a new employment contract that, according to Kunda and Ailon (2006:206), "foster[ed] no expectations for job security (and often glorifie[d] the opposite)," in which employers "offer[ed] their employees their trust, but not their commitment." Within this paradigm, the employees who survive downsizing are given the responsibility to manage themselves, with precarity framed as empowerment. This framing, however, had the effect of creating more demands as employees had to take on more managerial responsibilities and were not guaranteed job security (Kunda & Ailon 2006). Employees were re-framed as entrepreneurs entering into an exchange rather than a core part of the organization, departing from the orientation of Organizational Culture (Eberhart et al. 2020). Pugh (2015) highlights how this environment of employment insecurity promoted employee "flexibility," which diminished the expectation that companies would remain loyal to their people, while employees were still obligated to remain loyal or emotionally committed to their employer.

New terms of this exchange were articulated by tech giants like Apple, where employees were expected to "work like hell" for as long as they were affiliated with the company in exchange for experience and a line on their resume that would enhance their employability elsewhere. This was framed as "a good opportunity for both [parties] that is probably finite" (Cappelli [1999] cited in Eberhart et al. 2020: 18). This relationship expected more effort and

commitment from employees with little in return besides developing experience and skills (i.e. human capital) that might make them more employable elsewhere.

Even as the emphasis on work-life balance and wellness increased in the mid-2000s, there was still an intense adherence to the ideal of entrepreneurialism that incentivized and celebrated risk taking (Eberhart et al. 2020). The following is quote from the NYT depicts the culture of overwork and personal sacrifice in Silicon Valley in 2017:

> Silicon Valley prides itself on "thinking different." So maybe it makes sense that just as a lot of industries have begun paying more attention to work-life balance, Silicon Valley is taking the opposite approach -- and branding workaholism as a desirable lifestyle choice. An entire cottage industry has sprung up there, selling an internet-centric prosperity gospel that says that there is no higher calling than to start your own company, and that to succeed you must be willing to give up everything. (Lyons 2017: SR2)

This employment contract was especially prominent in technology and finance, sectors that were seen as epicenters of profit in the new financialized economy. Long hours and high turnover became the standard in these spaces due to the intensity of work and the assumptions that the employment relationship is short term.

> … banks hire in cohorts and fresh blood is already pumping into the organization. From the perspective of the banks, the fact that people leave after seven years isn't a problem. When you have a constant supply of top talent streaming into the company, the argument that people are scarce and we'll lose the investment we made in hiring these people -- that doesn't apply. (Purtill 2021: B1)

While there is still pressure for many to adopt the "new employment bargain," other moral frameworks that emphasize the protection of health have become more prevalent since the 2000s.

Public critique of the new culture of work and durability of individualizing frames

The burnout story of Arriana Huffington offers an example of the shift from one mindset to another. Huffington is a highly successful biographer, columnist, and entrepreneur who has become a prominent public figure whose goal is to end the culture of burnout. Her burnout narrative revolves around learning the importance of rest and sleep "the hard way" after collapsing from exhaustion in 2007, two years after founding the Huffington Post, and waking up

in a "pool of blood with a broken cheekbone" (Tugend 2013). Huffington cites this experience as a turning point and her motivation to speak out against the "Type A delusion that we have to burn out in order to succeed," advocating for a broader cultural shift in the meaning of success.

> The message, one that Ms. Huffington is promoting in her publication and in speeches, is particularly aimed at women. 'The way we define success isn't working,' Ms. Huffington said at the conference. 'More, bigger, better – we can't do that anymore… the overarching thesis is that it is time to rethink common wisdom about how to achieve success: sleep four hours a night, work 20 hours a day, see your family rarely and never admit the need for downtime… That system is wearing us down Ms. Huffington said. In her commencement speech this year at Smith College, she told students, "If we don't redefine success, the personal price we pay will get higher and higher. And as the data shows, the price is even higher for women than for men. Already, women in stressful jobs have nearly 40 percent increased risk of heart disease and 60 percent greater risk for diabetes. "Right now, America's workplace culture is practically fueled by stress, sleep deprivation and burnout," she said. The answer? To create a movement that embraces the idea that physical and spiritual wellness – from mediation to exercise to good nutrition – are integral to, not separate from, a successful life. (Tugend 2013).

Acting on this motivation to change workplace culture and reduce stress, sleep deprivation, and burnout, Huffington launched another company in 2016, Thrive Global. Thrive Global is a digital platform with the stated goal of improving employee wellbeing and "fuel[ing] productivity though behavior change" using "science-backed" and technological methods for modifying individual habits (Barron 2016; Thrive Global 2024). Huffington thus frames burnout as a symptom of a broader culture of overwork but still emphasizes and promotes individual-level lifestyle and habit change to intervene in it. These individualized interventions are also marketed as improving productivity, aligning the health habits of individuals to organizational metrics of success. The next section delves further into the tendency to frame burnout as an issue for individual and organizational health, and the different approaches that have grown to manage it.

ONGOING ALIGNMENT OF HEALTH AND PRODUCTIVITY

In the 2000s, as burnout transcended the boundaries of the helping professions, questions about burnout's "generalizability to industry" emerged alongside concerns about the costs of burnout to

organizations. With this expansion, burnout research took two somewhat overlapping paths towards the alignment of personal and organizational health. One path is more individually oriented and associated more with idealized individual feelings and skills framed as promoting individual health and wellbeing (i.e. engagement). The other centers characteristics of the work environment (i.e. issues of job demands and job resources) as important for reducing stress. This angle emphasizes the relationship between individuals and their social environments. These frames both emphasize the importance of employee health and wellness for productivity and promote the achievement of engagement as an idealized emotional state. While both approaches are oriented towards health, the onus of responsibility differs.

Ideals of engagement in spite of insecurity

This section focuses on the development of a positive emotional state that was defined in opposition to burnout that proliferated rapidly after the 2000s. Figure 18 shows the increasing emphasis on individual employee resources in the BSC and cross-listed corpora compared to the PI corpus. A term that is one of the most prevalent is "engagement," showing the increased interest in management literature in positive emotional states and what they do.

#6: Employee Factors/Outcomes

Figure 18: PI/BSC Employee Resources and Outcomes Topic Proportions (1970-2023)

In the 2000s, burnout was associated with "engagement," described in chapter 3 as the "positive antipode" of burnout. Engagement was initially defined as the ways in which employees "give" themselves in terms of physical, cognitive and emotional energy, and as a matter of discretionary effort (Kahn 1990). Burnout experts modified this by defining engagement as an ideal emotional state and developed a three-component model of engagement that mirrored that of the MBI.

> Engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002b). Vigor refers to high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties. Dedication refers to a sense of significance, enthusiasm, inspiration, pride, and challenge. Vigor and dedication are the direct positive opposites of exhaustion and cynicism, respectively. The third dimension of engagement is called absorption, which… is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. (Bakker et al. 2005: 664)

The qualities outlined here echo the values of the passion paradigm, defined by DePalma (2020) as a new ideological structure of work that is composed of characteristics of attraction, enjoyment, motivation, and perseverance that can be used or articulated in different ways to suit the needs of professionals who adhere to the passion paradigm. Work passion has become a dominant ideological structure of *professional* work that urges individuals to embrace risks in order to "do what you love" even if it is insecure (DePalma 2020). This expectation has been connected with critiques of work in modern capitalism, where the framing of work as something aspirational and life affirming is fairly new compared to the protestant ethic of toil and the denial of enjoyment (Tokumitsu 2015; Weber [1905]1992). These positive emotional states and attachment to work are strategic for individuals to adopt, as they are socially valued and make up for or are worth the experience of insecurity. Discourses of passion and engagement are another kind of normative rhetoric that attempts to keep employees emotionally committed to work in spite of insecurity. They are, however, oriented more towards the psychology of individuals rather than the work environment.

Rather than just being an emotional ideal, engagement serves a purpose for organizations as it reduces costs on various fronts, and it has become common knowledge that:

> Engaged employees are shown to be healthier (Seppälä et al., 2012) and less likely to initiate deviant work behaviors or leave the organization (Shantz, Alfes, & Latham, 2016), whereas burnout is associated with depression (Hakanen, Schaufeli, & Ahola, 2008) and sickness absenteeism (Schaufeli, Bakker, & van Rhenen, 2009). Hence, knowledge of the drivers (i.e., job crafting) and mechanisms (i.e., changes in job demands) of changes in employee well-being is important for HR managers, who seek to optimize the motivation and performance of their workforce. (Harju, Kaltianien, Hakanen 2021: 955).

Engagement also becomes attractive to managers as engaged employees are more willing to step outside of their formally defined jobs and engage in acts of "organizational citizenship behavior" by taking on more responsibilities within the organization (Bakker et al. 2005:667). The expectation that the reserves of energy that an employee has should be given to the organization

in ways that are not "formally defined" can be interpreted as an extractive and exploitative expectation that employees can and should go "above and beyond" what they are being compensated for.

Burnout, then, reduces the capacity of employees in general, but also makes it less likely that they will volunteer their labor. Approaching burnout from this angle illuminates the normative expectations of how work should be felt and performed in a precarious and insecure environment and how deviance from these expectations gets framed as a problem that should be addressed by savvy managers or by the self-disciplined individual.

Unequal Exchange: Emphasizing the employment relationship

While themes that centered individual characteristics grew, the role of environment and job characteristics were still present. Authors of managerial texts still made claims about organizational causes and responsibility, echoing the claims made at the beginning of burnout research, specifically related to the air traffic controllers. The following snippet comes from a cover story in *Fortune* (1994) articulating a continued need for meaning and support in the context of restructuring in the 90s:

> TOP EXECUTIVES also need to spell out which of the company's traditional values will be preserved… Lifetime loyalty to employees is gone. What else is out the window? Will prestigious products be junked if their profit margins erode a bit? "People join companies for more than paychecks," Kraines points out. "You don't want people signing a new psychological contract they can't live with… Constant restructuring has become a fact of business life in this era of change. Well and good, but companies that don't acknowledge the stress that survivors undergo and support those who are in danger of burning out may find that their glistening, reengineered enterprises end up being run by charred wrecks. (Smith and Berlin 1994: 48)

Even as the dominant refrain of good managerial practice in the 1980s and 90s involved aggressive restructuring and optimization of shareholder value, these practices and their consequences were not universally embraced. The quote above highlights the sense of betrayal and an exchange gone bad as employees who survive restructuring must adapt to the new terms

91

of employment. The new employment bargain was generalized to an issue of unequal "social exchange" where employees are expected to do more for their employer while getting less in return. As the MBI was taken up by managerial scientists studying workplaces beyond the helping professions in the 1990s, new employment bargain that was framed as a bad exchange that undermines the health of individuals and thus increases costs for organizations.

By the 2000s, different causal models were also developed and deployed by applied psychologists to explain burnout across occupational settings, oriented around the balance between job demands and job resources. Causal arguments for burnout emerge at this time (i.e. the Conservation of Resources theory and the Job Demand-Resource model) that emphasize the need for balance and reciprocity, and the role of managers to ensure that it is achieved. Productivity of firms is again attached to the well-being of employees as

> Organizations want to maximize productivity by minimizing stress, as increased levels of stress and burnout may have significant implications for organizational performance such as reduced job satisfaction and lowered organizational commitment. (Nagar 2012: 43)

In framing burnout as potentially costly to the organization, it would be irresponsible *not* to invest in employee wellbeing. The linking of employee wellbeing and organizational performance aligns the interests of employees and managers.

CONCLUSION

By following burnout through the various economic and ideological shifts outlined in this chapter, the different ways it used to make claims about how workers ought to be managed become more apparent. Part of the utility of burnout seems to be its flexibility as it links one's personal resources to their productive capacity, the maintenance of which is also of concern to managers. It encapsulates the ephemeral emotional/cognitive/physical energy of individuals into a singular concept with downstream consequences for emotional attachment to one's work

92

(cynicism) and feelings of doing well at work (professional efficacy), which is also sometimes conflated with actual productivity and job performance. The flexibility of this concept allows it to do different kinds of work as the need arises. There is more concern with issues of health, but the intensification of expectations for individual responsibility for health, employability, and personal improvement also have tended to make this an individual rather than social project. As an individual project, it will mostly benefit those who already have the resources to deal with stress.

Burnout has shown itself to be a useful tool in the hands of psychologists and managers trying to address problems that they perceive. It also spills over into everyday use. The next chapter explores the uses of burnout in public discourse, focusing on the ways that reporting on burnout changed after the WHO clarification of 2019 and the COVID pandemic.

Chapter 5: Public Articulations of Burnout in the New York Times

While the concept of burnout originated in more public discourse, it was taken up and "refined" by experts and then returned to public space with a new character. This chapter provides a more exploratory overview of the trends in the NYT data on burnout over time. Documents were largely selected based on their representativeness of a topic (i.e. Hospital Nursing, Medical Professionals, Working Conditions, Personal Narrative, and Advice), and supplemented using knowledge of the NYT sample gained from exploratory computational text analysis (i.e. reporting on the career of Dick Vermeil). The primary documents that I draw on involve personal burnout narratives and discussions that emphasize working conditions.

SURPRISING GENDER DIFFERENCE

Unlike the academic literature on burnout, men are referenced at a higher rate than women (either as speakers or subjects of reporting) early on in public writing. However, after 2019, and with an increase in the number of publications (and words written) about burnout, the trend began to reverse as more feminine pronouns and titles were used. This turning point follows the WHO definition, which is influenced by the academic writing that has historically emphasized women, and by the increased attention to burnout in healthcare as well as new attention to parental burnout with the onset of the COVID pandemic.
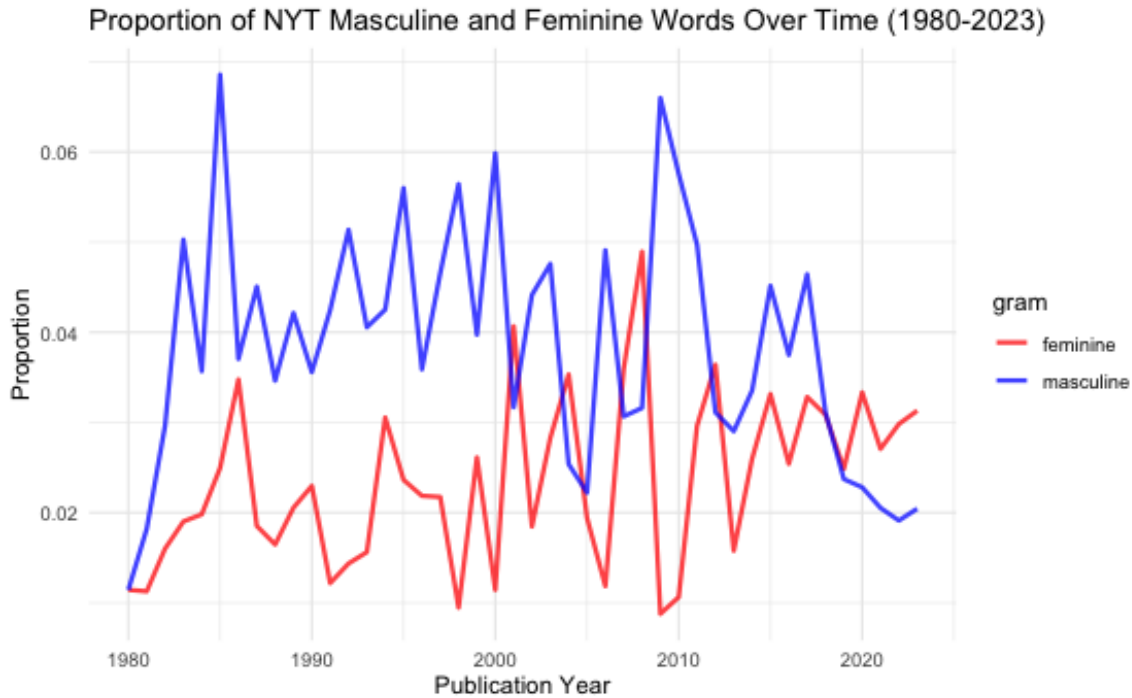
Figure 19: Proportion of NYT Gender Terms (1970-2023)

Figure 19 visualizes gendered pronouns and titles as a proportion of all words. While this visualization helps to illustrate the discussion of gender over time, it does not give much information regarding context. Upon closer inspection and the use of other text analysis techniques, it appears that early reporting on burnout was oriented towards stories of elite athletes and coaches, who tend to be men. Figure 20 below is a ridgeline graph that depicts bi-grams over time based on their proportion in a given year.[23] Proportions of N-grams for the NYT sample show broad trends in reporting, especially around major sporting events (i.e. the super bowl and grand slams). These events have also included more women over time, which may help to explain why there are bumps in feminine words during years that they Olympics take place. The kinds of people that burnout is most associated with in the 80s tend to be high level

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[23] The "X's" in Figure 21 represents bi-grams that briefly appear in the early news cycle related to burnout rather than an ongoing topic of discussion. For example, in 1983, there was an article that discusses Walt Michaels' work ethic (Jets coach for the NFL).

administrators or those with top positions in an industry (i.e. vice president, executive director, chief executive, and head coach) alongside the other groups that are referenced in the academic literature (i.e. social workers, nurses, etc.).
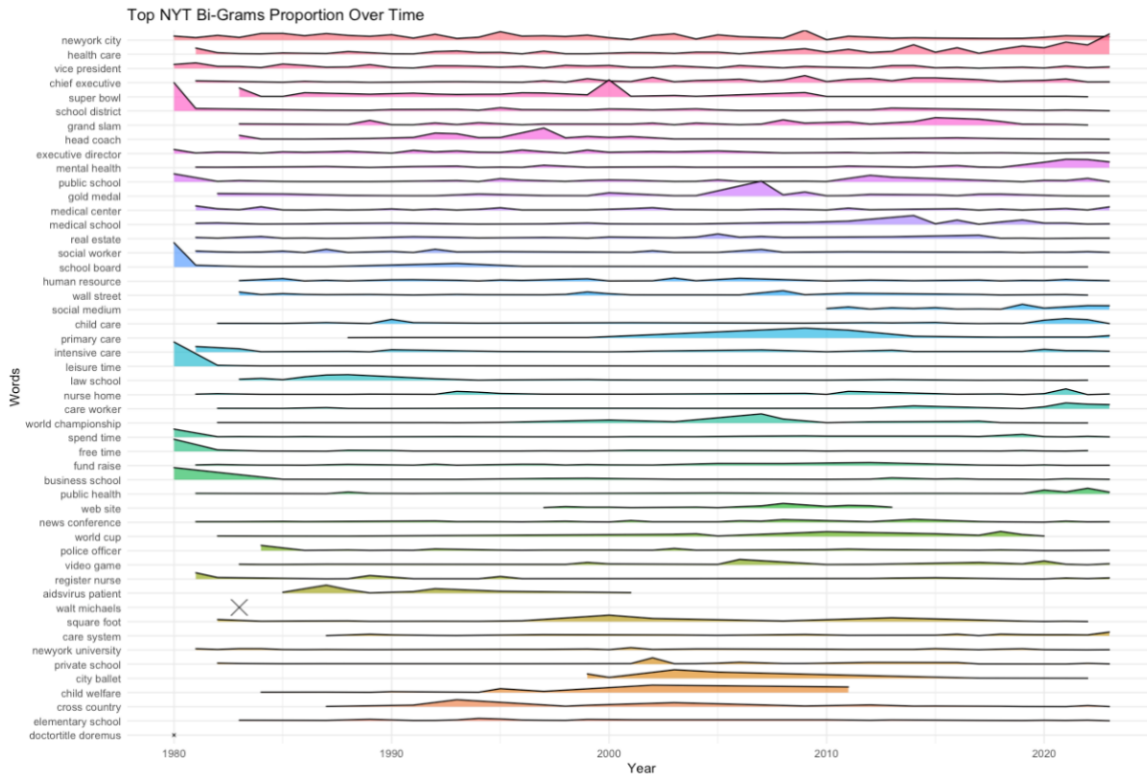
Figure 20: Top NYT Bi-Grams (1970-2023)

These visualizations are useful for broad trends in the proportion of words as they appear in the burnout corpus. In the next section, I discuss the use of structural topic modeling to gain further insight into the patterns of words and topics in the academic and public facing burnout corpora over time.

NYT REPORTING BEFORE AND AFTER 2019

In 2019 the WHO clarification was widely publicized, making it an important year for public reporting on burnout. This event alongside the onset of the COVID pandemic in the next year

mark a period where the press accounts and arguments about burnout change rapidly. Figure 21 shows the topic prevalence before and after 2019.
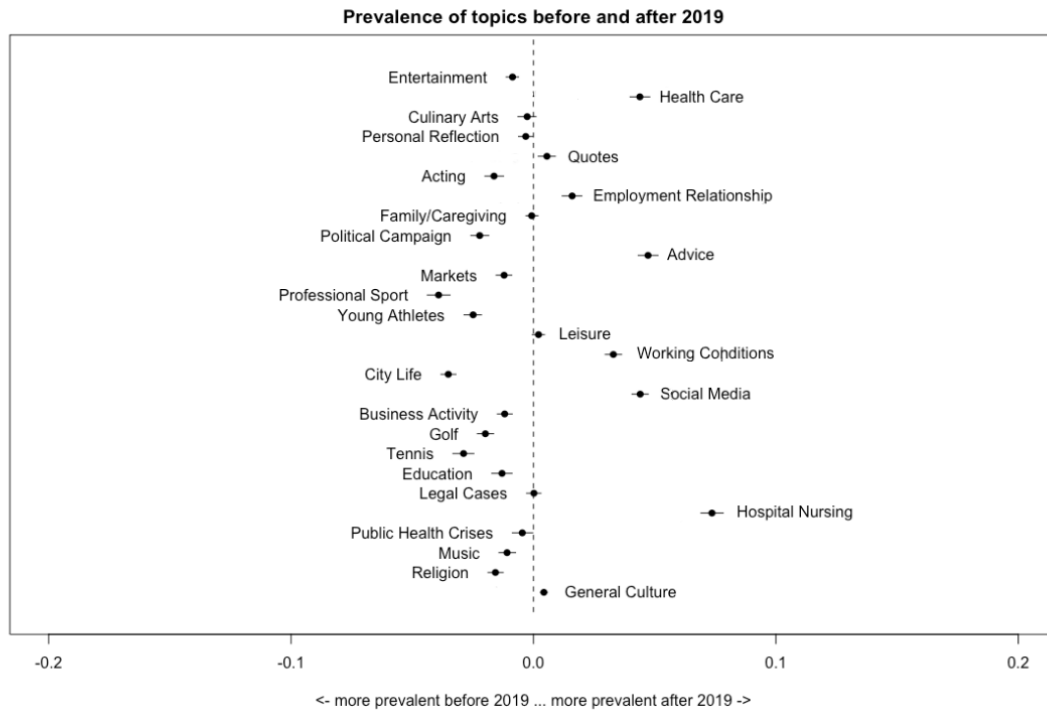
Figure 21: Estimated Effect of 2019 on NYT Topic Prevalence

Topics related to sport, the arts, and politics were more prevalent before 2019, while topics about health care, the employment relationship, advice, working conditions, social media and hospital nursing were generally more prevalent after 2019. I focus on the topics of advice and health care/hospital nursing and working conditions in the sections below. Advice is a useful topic to explore as it is oriented around problem solving and will likely contain more claims about what causes burnout and what should be done. I also focus on care/hospital nursing and working conditions as these both became major topics after 2019.

Trends in Advice: Interventions and Responsibility

Before the onset of the pandemic, news reporting on burnout largely remained focused on workplace environments and individualized causes (i.e. workaholism, perfectionism, etc.) and

solutions (i.e. taking more frequent breaks, journaling, changing your perception of work, etc.) for burnout. Within the NYT sample that emphasized advice, before the pandemic a majority of solutions revolved around individual behaviors (i.e. take a longer lunch break, being idle, finding something else that brings you joy, etc.), all for the purpose of "recharging" and getting back to work. The primary advice that appeared in the advice topic revolved around the personal responsibility of maintaining one's body:

> Your body is designed to repair and restore itself. So when you're feeling the impact of burnout — ongoing exhaustion, detachment from your job and perhaps even weight gain and illness from stress — it's a sign that the demands on your body exceed its ability to keep up. Giving your body what it needs is the foundation of burnout prevention. You can help reduce the energy depletion associated with burnout and facilitate restoration by prioritizing three universal core needs: sleeping, eating and moving. (Saunders 2019: B6)

This body-oriented advice continues to frame the management of burnout as an individual issue of being mindful of your body and giving it what it needs and avoiding wear and tear through vigilance.

The few proposed interventions that did not revolve around individual practices of bodily and emotion management were programs that were framed as therapeutic transitions (i.e. creative workers taking a sabbatical in nature) or "perks" of jobs such as offerings for wellness classes and mindfulness training. Many articles also cite large companies as pioneers in integrating wellness programs, indicating that this is something that should be taken care of by employers but is also optional.

After the onset of the pandemic, the kind of reporting shifted, emphasizing the different areas of life that were put under strain (i.e. the US medical system, schools, and the blurring boundary between work and home for white collar workers in particular). In this context, social causes of burnout became more salient, and more articles offered critique of working conditions and re-evaluations of values for those who were seen as the most exposed to social pressures that

cause burnout. Individual causes and solutions were still prevalent, but specific kinds of people were put into context, making their experiences with burnout more understandable. This potentially has consequences for how workplace and public policy makers understand and respond to burnout.

Health care professions, especially as the pandemic has put enormous strain on the American health care system, are often cited as a key group of people who are at risk of burnout or already experiencing a burnout crisis. Reporting in this area highlights how the pandemic as a disaster in its own right has also exposed the cracks in health care in general as well as the problem of working with extremely limited resources, from adequate personal protective equipment to not having enough doctors or nurses to decrease workloads. Here, individual health professionals are not blamed for their experiences of emotional and physical exhaustion because the circumstances of their work are so severe and so widely understood as part of a crisis that is out of their control.

Professional and creative workers who transitioned to working from home were another group that was cited as being at risk of or experiencing high levels of burnout. These were professionals who were able to work from home, and their burnout was attributed to blurring the lines between home and work and expectations for people to work nonstandard hours while at home. This theme of blurred boundaries was not particularly relevant to front line workers. Other white-collar workers are often cited as well, from office workers generally, to those in finance and tech. The most cited causes of burnout for this group were issues with the work-from-home arrangement such as being available outside of business hours and lacking social support.

While the changing social and economic environment are often acknowledged after the onset of COVID-19, many articles still tend to propose individual-level advice for self-

surveillance and self-regulation for individuals, suggesting small personal changes in one's mindset or habits. Patterns in this kind of writing emphasize the significance of personal ability to cope with stress, making it a problem and responsibility of the individual to manage their own burnout. While imperatives to work on one's body were present, individuals were encouraged to engage in practices that would shift their perspective or mindset (i.e. practicing mindfulness or gratitude) or engage in self-surveillance (i.e. recognizing when you at your limit or noticing what brings you joy and doing more of that thing). While these kinds of interventions may be helpful, they make it the individual's responsibility to react appropriately to stressful situations.

PUBLICIZED WORKPLACE CONFLICT AND CHANGE

Another type of narrative that emerges in reporting about burnout are stories that highlight contentious relationships between employees and employers. These stories tend to follow the activities of labor organizing in medicine and education (helping professionals) and other cases where the practices of employers are perceived as undermining the health of dedicated workers in prestigious jobs (contingent professionals). Compared to academic writing, which tends to be more sanitized, press accounts often illustrate more about the dynamics of contentious employment relationships and contain more explicit moralizing about the protection of health. Two main areas where contentious employment relationships have been reported are in healthcare and finance.

Hospitals and Healthcare Workers

This section highlights the utilization of different moral frames by nurses in relation to hospitals during nursing strikes as well as trends in the discussion of burnout in the medical profession during COVID. In particular, the moral framing of the desire to care for patients that is at odds with the conditions of hospital are relatively consistent over time. This moral

100

framework that emphasizes the caring obligation of nurses appears to borrow from the successful

framing of the Bay Area Nurses Strike of 1974, where nurses were able to moralize their strike

as a defense of patient care from the uncaring market interests of hospitals (Gaston 2022). Issues

of staffing shortages in nursing have been a consistent issue that is framed as undermining the

capacity of nurses to care for patients, conflicting with the training and values of the profession

(Span 1981).

As more nurses were hired in the 70s and 80s to deal with the nursing shortage, hospitals

promised flexible schedules and other benefits to increase the number of nurses. However, rather

than maintaining these work arrangements in the 90s, hospitals were under pressure to cut costs.

Reporting on nurses strikes in the 1990s highlight the changing nature of work, where nurses'

benefits (i.e. flexible shifts) were reduced, and nurses were being laid off in favor of lower-paid

technicians. Hospitals used burnout to justify reducing flexible 12-hour shifts, contending "that

the flexible schedules are costlier and have resulted in greater burnout among nurses and less

attentive care for patients (Hernandez 1995: B1). This framing seeks to position hospital

administrators as concerned about nurse burnout and patient care. However, nurses counter these

arguments by suggesting that they primarily serve the financial objectives of the hospital, as

flexible shifts have helped nurses deal with burnout better and get additional training to improve

patient care.

More recently, during COVID, reporting on the devastating impacts of crisis on

healthcare providers in terms of stress and burnout were constant features of the NYT. One case

in particular, the suicide of Dr. Lorna Breen, sparked a conversation about physician burnout and

suicide and the issues of stigma around mental health:

> The issue of pandemic burnout among physicians came to the forefront in the early months of
> the pandemic following the death of Dr. Lorna M. Breen, who supervised the emergency

department at New York-Presbyterian Allen Hospital in Manhattan. Dr. Breen, who had been sick with Covid but working remotely, was later admitted to a psychiatric ward for 10 days. Fearing the professional repercussions of her mental health treatment, she took her own life in April. (Ellin 2021)

The sacrifices of physicians during times of crisis present another moral framework for the failure of healthcare institutions to care for their caregivers. Jenkins (2024) highlights how doctors act as "shock absorbers" who "routinely [absorb] countless, interconnected structural demands ("shocks") and [convert] them into competent medical care, at significant cost to their mental health" (Jenkins 2024). These costs are increasingly seen as unacceptable, especially in the context of COVID. In this case, rising pressure and publicity to do something to protect the health of healthcare workers resulted in policy change.

The broad understanding that health care professionals were especially vulnerable to burnout given a global health crisis likely made it more feasible for policies to recognize and target this specific group for intervention. On March 18th, 2022, President Biden signed into law the Dr. Lorna Breen Health Care Provider Protection Act. This legislation specifically aims to allocate more resources for research on burnout in the medical field as well as training and education with an emphasis on resiliency (Rep. Wild 2022). Many of the interventions that are proposed by this bill focus on individualized forms of intervention through education and training to teach physicians to take better care of themselves but do little to increase the resources available for care. While it does little to address other ways to reduce the demands that are exacerbated by the organization of healthcare in the US, it brought attention to the strict requirements for medical licensing that have created a chilling effect on the ability of physicians in particular to seek help for mental health issues without professional consequence.

"Dream Jobs" Turned into Nightmares

Other groups have also benefited from association with burnout. However, this has mainly

benefited work arrangements of professional workers who have been the focus of burnout

literature. In particular, contingent professionals in high status jobs, especially in tech/Silicon

Valley and finance/Wall Street also garner attention from the press. These areas are seen as

epicenters of profit in the new financialized economy, cultivating their own mythologies and

work cultures. However, even as industries change in response to rising interest in employee

health and wellness (for the sake of productivity), there is still an intense adherence to the ideal

of entrepreneurialism that incentivizes and celebrates risk taking (Eberhart et al. 2020) with the

popularization of things like "hustle culture." However, rather than being universally lauded,

these expectations and intense working environments are increasingly framed as the cause of

burnout or bad health. For example, in 2021, a group of junior bankers at Goldman Sachs

successfully used a health frame to improve working conditions.

> Burnout on Wall Street became a hot topic of conversation this week after a group of 13
> anonymous first-year analysts at Goldman Sachs circulated a slide deck… that described how
> 100-hour weeks were taking a toll on their mental and physical health. "I'm in a really dark
> place," one wrote. Other junior bankers have since spoken out about their own difficult
> working conditions, and their superiors have reacted with a mix of sympathy, solutions to
> reduce the stress, and scorn, saying that long hours are a generously paid rite of passage. What
> should banks do, if anything ? (Kessler and Hirsch 2021: B6)

In leveraging the health frame, these public discussions also have the capacity to force

change if the practices of organizations are deemed illegitimate or unjust. The efforts of the

junior banker letter writers are cited as a reason for large banks modifying working conditions to

reduce the strain on junior bankers (i.e. by hiring more people and doing more to encourage

people to go home at the end of the work day) (Hirsch 2021).

The publicity of these cases helped to put pressure on organizations to change in the

name of health and to maintain legitimacy. The stories center the employment exchange

relationship as well as justifications for why it is legitimate or not. However, the groups that have access to burnout are still oriented around those that have been historically included in the burnout literature. Specifically, these are helping professionals who cannot deliver care in a sustainable way because of forces external to them, and new contingent employees who are still expected to buy in to the new employment bargain that offers little security and a lot of stress. Other groups that are not as recognizably burned out or that do not have the same power and prestige will likely have a more challenging time making headlines and pressuring employers to change working conditions.

CONCLUSION

The NYT initially differed somewhat from the PI/BSC conceptualizations of burnout in earlier years by emphasizing elite sport. In doing so, burnout subjects tended to be high performing men in sport as well as top executives. This shifted over time as health professionals were increasingly identified as burnout subjects. The COVID pandemic also changed the ways that burnout was discussed in the NYT, as more structural issues were highlighted with a rapid shift towards remote work and online learning (for many but not all) and the impacts of the crisis on health professionals took center stage.

While individualized advice was still given, more articles highlighted contentious work arrangements that presented a threat to health through stress and burnout. This focus of NYT reporting and attention may have had a material impact as organizations were put under pressure to respond to accusations of undermining health. These press accounts, however, are still biased towards those with power, prestige, or recognizable moral authority (i.e. making claims about harm to health that are seen as valid). While solutions generally lean towards lifestyle change

and individual behavior, especially in writing that provides advice, other arguments for the

protection of health through changing working conditions became more common during COVID.

Chapter 6: Conclusion

By tracing burnout over 50 years and across three domains, I outline the process by which

burnout became a flexible sociotechnical object that put boundaries around an ambiguous,

unwanted and embodied condition by giving it a name, shape, and expected strategies of action

to ease the distress. I find that once burnout was quantified by the Maslach Burnout Inventory

(MBI), developed by burnout experts in psychology, it became a measurable outcome that could

easily integrate with other concepts, facilitating its widespread application to other domains.

While the components of burnout remain consistent, the strategies of action to address it have

changed over time.

Despite burnout experts emphasizing the organizational and managerial responsibility for

reducing burnout and promoting employee health, individual strategies of action are the ones that

come to dominate. Within the managerial corpus, specific terms are associated with burnout over

time as managers respond to different economic and ideological shifts. Here, managers strategize

ways to align the interests of organizations and employees in the name of health, but this

alignment can be used to justify extractive relationships. These terms orient discussions of

burnout toward individual and organizational causes and solutions at different rates and are

influenced by the dominant ideologies of the time. The dominant frames for burnout also

traveled to popular reporting. In this space, definitions of burnout experts as well as the dominant

ideologies of work and what constitutes a good exchange between employees and employers are

contested publicly.

Over time, assumptions are made about the kinds of people who are at risk of burnout

(i.e. those who are devoted or passionate about their work), offering different avenues for

complaint, while potentially ignoring the distress of others who do not readily fit within the

framework of the loss of autonomy, dedication, passion, or engagement. These groups tend to revolve around the helping professionals, who have been associated with the concept since its inception, and new groups of contingent professionals who emerge out of the economic and organizational restructuring of the 1980s and 90s. As the dominant groups represented in academic burnout literature, they are more likely to be recognized as distressed in popular articulations of the issues of burnout as well. Finally, in spite of strategies of action to deal with burnout being primarily related to individual level interventions, there is an increasing emphasis on broader organizational, industry-wide and structural causes of burnout that have the potential to improve working conditions for more kinds of people besides those recognized as typically burnout-prone.

LIMITATIONS AND DIRECTIONS FOR FUTURE WORK

This project is limited by the data I work with and the geographic and linguistic boundaries. Because I emphasize particular text data over others, this is not a study of how burnout is conceptualized and used universally. Rather, it is bounded by English language academic writing in two broad areas and the attention of journalists for an influential but not totally representative news outlet. Future research could expand on this trajectory of burnout by incorporating a more comprehensive collection of texts in the computational text analysis. This may include full text academic articles, a broader sample of news media, and spaces where more kinds of people are able to engage with the concept (i.e. social media platforms). Additionally, voices of the producers of knowledge and the development of burnout could be included beyond the written word by including interviews to develop a more comprehensive intellectual history of the concept.

This project focuses on particular social actors and groups within the US. However, the use of burnout transcends national borders. More comparative work on the framing of burnout and how it may be influenced by different national and institutional histories and the development of different professions that are prone to burnout are needed to increase our understanding of how these factors shape the framing of an ambiguous feeling with implications for how attention and resources are distributed. These kinds of large multi-lingual and multi-national projects may become more feasible with the development of new and sophisticated computational methods.

The findings from this project highlight how the historical context and moral framing of burnout make it easier to understand it as a problem for particular kinds of people. Specifically, professional workers are more legible as burnout-prone. This has implications for worsening forms of inequality as attention and resources are more accessible to these groups than others, and the attempts by non-professional workers to claim burnout is another direction for future research.

Finally, this project demonstrates the utility of combining computational and qualitative methods to understand the trajectory of an emotional experience as it is defined over time and used across contexts. Tracing burnout over time offered broader insights that highlight the dynamic and often conflicting moral logics of health and the market logics of productivity and profit.

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APPENDIX: METHODS OUTPUT

Figure 1: Estimated Effect of year on PI/BSC topic prevalence (Y-axis set to 0.5)
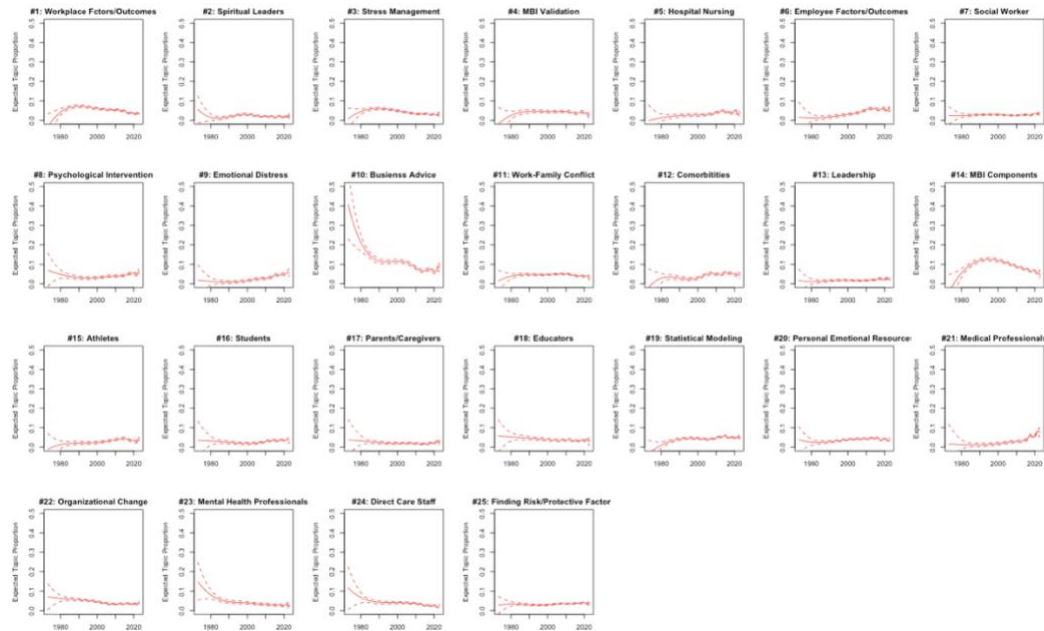

Figure 2: PI/BSC *LabelTopics* Output for STM with 25 topics

Topic 1 Top Words:
    Highest Prob: job, satisfaction, support, role, demand, social, control
    FREX: ambiguity, job, satisfaction, strain, correctional, overload, demand
    Lift: jdi, jdcs, exertion, quiz, spurn, hoonakker, investor
    Score: job, satisfaction, support, social, ambiguity, role, conflict
Topic 2 Top Words:
    Highest Prob: faculty, spiritual, pastor, clergy, ministry, church, experience
    FREX: pastor, clergy, ministry, church, music, pastoral, miniseter
    Lift: anglican, bible, church, cochran, doolittle, dunbar, episcopal
    Score: pastor, clergy, faculty, church, spiritual, ministry, music
Topic 3 Top Words:
    Highest Prob: stress, cope, strategy, stressor, level, relate, perceive
    FREX: cope, stress, stressor, stressful, firefighter, strategy, conscience
    Lift: fighter, firefighting, genotype, graham, reinterpretation, rs, slca
    Score: stress, cope, stressor, strategy, firefighter, conscience, stressful
Topic 4 Top Words:
    Highest Prob: scale, factor, measure, item, mbi, construct, validity
    FREX: validity, confirmatory, reliability, factorial, consistency, property, convergent
    Lift: ann, bifactor, bpq, cfa, cfas, dimensionality, kmo
    Score: validity, item, reliability, mbi, confirmatory, psychometric, scale
Topic 5 Top Words:
    Highest Prob: nurse, hospital, care, quality, patient, environment, leave
    FREX: nurse, hospital, oncology, unit, register, intent, icu
    Lift: aacn, bedside, joanna, knafl, magnet, ngns, nurs
    Score: nurse, hospital, patient, care, letter, oncology, unit
Topic 6 Top Words:
    Highest Prob: employee, resource, engagement, job, turnover, performance, demand
    FREX: employee, originality, incivility, insecurity, craft, psycap, capital
    Lift: guanxi, inoculate, kpk, hrm, psm, cpo, deluxe
    Score: employee, engagement, intention, job, resource, turnover, customer
Topic 7 Top Words:
    Highest Prob: health, worker, mental, social, wellbeing, physical, service
    FREX: worker, mental, hiv, health, aid, soc, stigma
    Lift: humanitarian, laura, miechv, township, aod, soc, plwh
    Score: health, worker, mental, social, hiv, stigma, psychiatrist
Topic 8 Top Words:
    Highest Prob: intervention, group, program, train, mindfulness, participant, control
    FREX: mindfulness, intervention, officer, police, session, trial, randomize
    Lift: acceptability, cbt, cmt, drum, endline, ensemble, fortnightly
    Score: mindfulness, intervention, officer, police, program, trial, train
Topic 9 Top Words:

Highest Prob: compassion, self, fatigue, care, professional, traumatic, life
FREX: compassion, vicarious, proqol, traumatic, trauma, st, fatigue
Lift: bride, calhoun, chaplaincy, coder, compartmentalization, compassion, dissociative
Score: compassion, trauma, traumatic, fatigue, care, empathy, secondary

Topic 10 Top Words:
Highest Prob: focus, issue, good, approach, process, cause, help
FREX: salesperson, sale, business, say, topic, tip, example
Lift: annotate, bibliometric, biography, bob, circuit, coworking, destroy
Score: salesperson, business, sale, project, career, tip, market

Topic 11 Top Words:
Highest Prob: work, life, relate, woman, conflict, time, family
FREX: work, wfc, hour, balance, sickness, absence, imbalance
Lift: eri, fwc, compress, flextime, hwi, jew, ovc
Score: work, conflict, family, life, woman, wfc, hour

Topic 12 Top Words:
Highest Prob: depression, symptom, anxiety, associate, disorder, sleep, high
FREX: depressive, depression, cortisol, sleep, alexithymia, anxiety, phq
Lift: hpa, acid, adhd, adrenocortical, alexithymia, anabolic, analog
Score: depression, depressive, sleep, anxiety, symptom, cortisol, disorder

Topic 13 Top Words:
Highest Prob: leadership, leader, style, principal, team, culture, member
FREX: leadership, transformational, follower, style, servant, lmx, principal
Lift: alq, avolio, guest, inspirational, isn, leaderhip, lmx
Score: leaderhip, leader, principal, style, transformational, team, follower

Topic 14 Top Words:
Highest Prob: exhaustion, emotional, level, personal, significant, depersonalization, accomplishment
FREX: depersonalization, accomplishment, personality, demographic, exhaustion, personal, variable
Lift: crnas, kobasa, machiavellianism, matthews, psychoticism, caruso, umi
Score: depersonalization, accomplishment, exhaustion, mbi, emotional, score, subscale

Topic 15 Top Words:
Highest Prob: athlete, motivation, profile, coach, sport, high, perfectionism
FREX: athlete, sport, perfectionism, athletic, coach, player, profile
Lift: athletic, raedeke, amotivation, aoc, bogus, championship, coakley
Score: athlete, sport, perfectionism, coach, profile, motivation, player

Topic 16 Top Words:
Highest Prob: student, school, academic, high, year, university, learn
FREX: student, academic, undergraduate, university, college, learn, pupil
Lift: kiuru, nurmi, buoyancy, ras, semester, toeic, breath
Score: student, school, academic, college, adolescent, university, grade

Topic 17 Top Words:
Highest Prob: child, family, parental, parent, caregiver, mother, parenting
FREX: parental, mother, parenting, child, father, partner, cp
Lift: childrearing, chronotypes, iipb, jetlag, togo, zarit, coparenting
Score: parental, child, parent, parenting, caregiver, mother, family

Topic 18 Top Words:
Highest Prob: teacher, school, education, teach, educator, experience, special
FREX: teacher, educator, district, teach, special, classroom, elementary
Lift: locale, seidman, spa, stone, wel, zager, preservice
Score: teacher, school, classroom, educator, teach, special, elementary

Topic 19 Top Words:
Highest Prob: model, effect, relationship, mediate, psychological, test, structural
FREX: equation, structural, indirect, mediate, mediation, model, path
Lift: ashforth, bu, covariants, everly, golembiewski, thibaut, transnational
Score: model, mediate, equation, structural, mediation, indirect, relationship

Topic 20 Top Words:
Highest Prob: self, emotional, behavior, efficacy, negative, emotion, relationship
FREX: labor, emotion, justice, surface, intelligence, bully, esteem
Lift: colquitt, excuse, outward, retaliatory, cwb, distributive, individualist
Score: emotion, labor, behavior, efficacy, self, emotional, commitment

Topic 21 Top Words:
Highest Prob: physician, medical, healthcare, covid, pandemic, resident, patient
FREX: covid, pandemic, physician, hcws, doctor, medicine, medical
Lift: outbreak, acgme, acp, apic, bernat, bma, busis
Score: physician, covid, medical, pandemic, resident, healthcare, patient

Topic 22 Top Words:
Highest Prob: organizational, organization, service, change, human, make, individual
FREX: technology, volunteer, decision, organization, communication, human, organizational
Lift: consultancy, icts, invasion, reinvention, seriousness, technostress, volunteerism
Score: organizational, organization, technology, service, volunteer, decision, communication

Topic 23 Top Words:
Highest Prob: counselor, client, therapist, psychologist, supervision, practice, clinical
FREX: counselor, therapist, psychologist, client, supervision, counsel, rehabilitation
Lift: asca, bpd, dbt, abuser, alto, beneficence, crowley
Score: counselor, therapist, client, psychologist, supervision, counsel, clinician

Topic 24 Top Words:
Highest Prob: staff, care, patient, violence, attitude, psychiatric, home
FREX: residential, aggression, hospice, staff, palliative, facility, dementia
Lift: adl, detain, idd, leeds, mindedness, pbs, perpetrate
Score: staff, care, patient, violence, psychiatric, dementia, palliative

Topic 25 Top Words:
Highest Prob: factor, professional, risk, occupational, identify, high, associate

FREX: occupational, risk, psychosocial, personnel, syndrome, factor, protective
Lift: inspector, drone, muni, passenger, wpv, inspection, sensor
Score: occupational, risk, factor, professional, syndrome, psychosocial, prevalence

Figure 3: NYT *LabelTopics* output for the structural topic model with 27 topics.

Topic 1 Top Words:
    Highest Prob: show, news, television, mister, network, series, tv
    FREX: fox, cbs, nbc, tv, television, podcasts, broadcast
    Lift: pavone, accessibly, adebayo, arnault, bower, bruegger, campside
    Score: show, television, producer, network, viewer, cbs, nbc
Topic 2 Top Words:
    Highest Prob: health, doctortitle, care, doctor, medical, patient, much
    FREX: physician, walensky, scribe, medicine, researcher, health, provider
    Lift: abridge, adaira, agencywide, annals, apa, arbaje, aspinall
    Score: health, doctortitle, physician, medical, doctor, patient, care
Topic 3 Top Words:
    Highest Prob: food, restaurant, cook, much, table, chef, kitchen
    FREX: chef, cook, culinary, baroo, mushroom, basquiat, butter
    Lift: adriane, appetizer, beet, chego, cheim, cigare, corbusier
    Score: chef, restaurant, cook, food, kitchen, sauce, dish
Topic 4 Top Words:
    Highest Prob: woman, write, book, man, story, read, tell
    FREX: thacker, vizzini, bonenberger, bowlin, memoir, babitz, platoon
    Lift: thacker, alligator, anolik, antipersonnel, antosca, berglas, bleier
    Score: book, gilbert, write, woman, jim, editor, author
Topic 5 Top Words:
    Highest Prob: go, good, think, make, want, know, people
    FREX: want, think, really, thing, know, lot, go
    Lift: bekira, koogle, omero, walke, regenerate, justifiably, selina
    Score: think, thing, want, go, really, people, know
Topic 6 Top Words:
    Highest Prob: play, mister, film, theater, movie, character, game
    FREX: wolkoff, ansari, faze, hare, clan, actor, character
    Lift: abril, affleck, apatow, banderas, biennale, brenton, cale
    Score: theater, film, movie, character, actor, faze, playwright
Topic 7 Top Words:
    Highest Prob: worker, employee, percent, much, service, pay, agency
    FREX: labor, union, agency, wage, worker, employee, employment
    Lift: amazonians, avendaño, benvenuti, besh, branham, castleton, chloride
    Score: employee, worker, percent, union, agency, survey, labor
Topic 8 Top Words:
    Highest Prob: child, miss, family, parent, mother, life, kid
    FREX: mother, mom, husband, wife, son, child, nanny
    Lift: accessorized, addi, andersen, arquette, audre, backseat, brune
    Score: child, mother, parent, family, father, daughter, husband
Topic 9 Top Words:
    Highest Prob: mister, president, campaign, republican, trump, state, former
    FREX: democrat, senator, senate, emanuel, presidency, trump, republican
    Lift: benton, bettencourt, blankfein, buckley, cartwright, chaleff, congressman
    Score: mister, republican, democrat, president, trump, election, whitehouse
Topic 10 Top Words:
    Highest Prob: much, feel, may, stress, time, help, people
    FREX: stress, anxiety, feeling, emotional, exhaustion, depression, psychologist
    Lift: blessing, busyness, cholerics, codependent, dani, dattilo, dattner
    Score: stress, doctortitle, feel, anxiety, psychologist, symptom, parenting
Topic 11 Top Words:
    Highest Prob: company, market, unite, much, trade, billion, american
    FREX: nynex, billion, merc, market, corporation, trade, stock
    Lift: airstrike, alcan, aviion, bestdeeal, beutel, bratt, carbide
    Score: company, market, billion, oil, nynex, corporation, merc
Topic 12 Top Words:
    Highest Prob: coach, team, game, season, player, play, league
    FREX: vermeil, ram, parcells, quarterback, shula, ers, dolphin
    Lift: adubato, albeck, arthroscopic, auerbach, auriemma, birdsong, bodo
    Score: coach, player, game, league, vermeil, season, football
Topic 13 Top Words:
    Highest Prob: sport, age, run, train, olympic, young, athlete
    FREX: gymnastic, ledecka, olympic, triathlon, marathon, gymnast, kenyan
    Lift: gymnastic, mulvihill, spooner, kisii, nagasu, snowboarding, thorpe
    Score: sport, olympic, athlete, runner, medal, girl, meter
Topic 14 Top Words:
    Highest Prob: back, home, time, room, night, around, spend
    FREX: morning, walk, sit, back, phone, door, trip
    Lift: airtag, alaba, archaeology, bartusis, chronobiologists, condiment, cordes
    Score: back, home, night, room, morning, walk, bed
Topic 15 Top Words:
    Highest Prob: work, job, time, hour, much, company, office
    FREX: work, job, boss, vacation, productivity, hour, consult
    Lift: accoutremented, adachi, albemarle, aol, apte, badden, bdo
    Score: work, job, employee, company, hour, productivity, office

Topic 16 Top Words:

    Highest Prob: city, newyork, mister, street, art, manhattan, center
    FREX: ballet, wheeldon, museum, undercover, homeless, lamont, manhattan
    Lift: murrah, neuberger, acucaa, apprehend, arsdale, augello, ballas
    Score: city, ballet, museum, police, newyork, art, dance

Topic 17 Top Words:

    Highest Prob: miss, post, medium, online, video, social, much
    FREX: tiktok, instagram, linkedin, twitter, mx, platform, content
    Lift: grigolo, mx, adopter, altimeter, alzate, anthropy, antiwork
    Score: tiktok, online, instagram, creator, video, youtube, twitter

Topic 18 Top Words:

    Highest Prob: business, money, million, much, sell, pay, company
    FREX: sale, money, store, sell, business, expense, grocery
    Lift: amon, bodnar, dataquest, embryo, heger, hutton, kaye
    Score: business, sale, money, sell, company, store, customer

Topic 19 Top Words:

    Highest Prob: win, play, finish, golf, tour, good, th
    FREX: golf, wie, pga, hole, putt, daly, finish
    Lift: andretti, axley, bettye, bogey, breaststroker, bulle, caddie
    Score: golf, championship, wie, tournament, daly, win, tour

Topic 20 Top Words:

    Highest Prob: tennis, play, open, match, player, win, tournament
    FREX: wimbledon, navratilova, serena, capriati, henin, venus, hingis
    Lift: delpotro, martina, mcenroe, steffi, venus, wta, abramowicz
    Score: tennis, tournament, wimbledon, navratilova, player, serena, hingis

Topic 21 Top Words:

    Highest Prob: school, student, teacher, college, program, high, university
    FREX: student, teacher, classroom, education, graduate, teach, school
    Lift: arsenie, barba, blauvelt, bortner, cardarelli, clymore, dworkin
    Score: school, student, teacher, education, college, teach, classroom

Topic 22 Top Words:

    Highest Prob: law, case, right, lawyer, state, issue, judge
    FREX: law, judge, lawyer, civil, legal, justice, immigration
    Lift: absolutist, abubakr, appellate, arkhangelsk, basti, bigoted, bouazizi
    Score: law, judge, lawyer, gay, court, justice, legal

Topic 23 Top Words:

    Highest Prob: nurse, hospital, care, patient, pandemic, covid, staff
    FREX: nurse, vaccinate, omicron, vaccine, coronavirus, covid, hospital
    Lift: ambulatory, anderegg, asymptomatic, avasure, berrios, christiana, cohens
    Score: nurse, hospital, patient, covid, pandemic, emergency, vaccine

Topic 24 Top Words:

    Highest Prob: aidsvirus, drug, doctortitle, much, patient, treatment, use
    FREX: overdose, heroin, addiction, methadone, drug, opioid, cancer
    Lift: amniocentesis, avenel, bruera, cancerous, ceyrolles, colding, curran
    Score: aidsvirus, patient, drug, treatment, doctortitle, disease, addiction

Topic 25 Top Words:

    Highest Prob: music, band, record, song, rock, play, dance
    FREX: dylan, cliburn, inn, innkeeper, piano, band, muldrow
    Lift: ainsworth, alden, anthem, ballad, bandmaster, chesler, clarinetist
    Score: music, song, album, band, concert, rock, sing

Topic 26 Top Words:

    Highest Prob: mister, man, take, church, eye, black, wear
    FREX: clergy, staver, rabbi, congregation, bishop, hersey, pastor
    Lift: absconder, anchorman, anjaria, astacio, benediction, bilbao, billow
    Score: mister, church, priest, rabbi, mansoor, twomey, bishop

Topic 27 Top Words:

    Highest Prob: world, live, decade, note, toward, culture, bring
    FREX: toward, decade, deep, cultural, note, culture, reflect
    Lift: cutthroat, elemental, friedlander, grieg, kalajian, monáe, santino
    Score: culture, decade, toward, cultural, world, live, note