# Emotional Load: A New Perspective for Understanding Workload

Research Thesis

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The author of this thesis states that the research, including the collection, processing, and presentation of data, addressing, and comparing to previous research, etc., was done entirely in an honest way, as expected from scientific research that is conducted according to the ethical standards of the academic world. Also, reporting the research and its results in this thesis was done in an honest and complete manner, according to the same standards.

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## Table of Contents

## Table of Contents (continued)

## Tables and Figures

## Abstract

This research defines and measures emotional load in healthcare work, addressing the lack of standardized definitions and measurements in existing literature, which until now mostly relies on subjective self-reports. We establish a multifaceted definition of emotional load and a measurement process that can allow integrating emotional workload into operational planning in healthcare settings. Our work begins with a use of facet analysis to systematically define aspects of emotional load in healthcare work events. Then, Study 1 employs qualitative methods examining 262 healthcare work events to pinpoint features within these facets. Study 2 explores the distinction between emotional load and operational load, and tests the mediating role of emotional labor in the relationship between event features and emotional load. Our study identified five facets and twenty-three features of emotional healthcare work events, with some facets contributing more to emotional load explanation than others. Our findings show that emotional load is a distinct construct from emotional labor and operational load and that emotional labor mediates the relationship between event facets and the emotional load a healthcare work event imposes. This research establishes emotional load as a distinct construct that can be quantified, suggesting pathways for future objective measurements and challenging previous assumptions of its subjectivity. Our approach to emotional load enables integration of this type of load, along with operational and cognitive load, into organizational planning, routing, and staffing considerations in healthcare settings. The implications and challenges identified pave the way for further exploration and understanding of emotional workload.



**Keywords.** Emotional Load, Workload, Affective Events Theory, Healthcare

Article classification. Research paper

## Introduction

Healthcare employees deal with a wide range of emotional demands in their daily work. Over time, repeated emotional demands can impact employees' well-being, cause emotional exhaustion and burnout (Jackson, Schwab & Schuler, 1986; Felton, 1998; Mazzetti, Guglielmi & Tupa, 2020), and affect performance (Lemonaki et al., 2021). Elfering et al. (2017), for example, argue that emotional demands on surgical nurses heightened cognitive stress symptoms creating problems in concentration, decision-making, memory, and risks to patient safety. Yet, this study separated between emotional demands of the work and emotional abuse of the nurses, raising a question of whether and how the two constructs relate to the construct of "emotional load" of healthcare work. Some previous research mentions the concept of "emotional load" (Myrtek et al., 1994; Marin, 1995; Arts et el., 1999; Wittels et al., 2002; Rothmann, Mostert, & Strydom, 2006; Carayon & Alvarado, 2007; Lukavský, 2010; Peräkylä et al., 2015; Drach-Zahavy et al., 2017; Voutilainen et al., 2018; Ivziku et al., 2022; Heilala et al., 2022), but the concept has received very limited research attention. Our goal in this study is to define and measure emotional load in the context of healthcare. In particular, we address the following research questions:

(1) What facets of work events evoke emotional load in healthcare work?

(2) To what extent do different features of the facets of work events evoke emotional load in healthcare work?

(3) What is the relationship (difference) between emotional load and operational load?

(4) What is the relationship (difference) between emotional load and emotional labor?

More broadly, our goal in this research is to develop foundations for integrating emotional workload with the operational research agenda of planning, routing and staffing (Hall, 1991). Available analyses of operational load do not consider work situations that impose emotional demands as a source of workload for employees. We challenge this

approach, suggesting that emotional demands should be considered as an element of employee workload. Such integration of emotional load would allow for considerations of emotional load in operational planning.

Prior studies on emotional load were scarce, typically measuring it subjectively (e.g., Van Veldhoven & Meijman, 1994; Rothmann, Mostert, & Strydom, 2006; Heilala et al., 2022). We propose the need for considerations of emotional load in operational planning, and hence a need for objective indicators of the emotional load imposed by various work events. Hence, our approach in this study focuses on the inherent job demands themselves rather than employee responses to them, as traditionally assessed.

Our work is grounded in the Affective Event Theory (AET; Weiss and Cropanzano, 1996) from Organizational Behavior, which asserts that emotions arising from work events accumulate over time, exerting a substantial impact on job performance. Utilizing AET, we take an event-based approach pioneered by Weiss and Cropanzano in 1996, wherein we propose a broad definition of emotional workload that (a) considers various facets and features of job demands, (b) acknowledges that various demands may vary in their level of emotional load, and (c) defines emotional workload as an objectively measurable construct.

We extend Altman's (2021) work which identified and defined emotionally demanding work events in healthcare. Our work utilizes facet analysis to define emotional work events. We begin by identifying facets using established models on stress in organizational settings and emotional intensity. Then, Study 1 employs qualitative methods (Strauss & Corbin, 1990; Glazer, 1998) examining 262 healthcare work events to pinpoint features within these facets. This two-step process sets the theoretical foundation for a crowdsourcing study reported as Study 2. Participants in Study 2 were active healthcare employees and they were asked to classify events based on identified facets and features and rate the emotional labor, and emotional load for each event. Study 2 thus offers quantification of the impact of event

features and facets on emotional load. It also differentiates it from operational load, and explores the mediating role of emotional labor in the relationship of event's features and emotional load.

Our comprehensive analyses offer a multi-dimensional contribution to existing research. First, by distinguishing emotional load as a distinct construct from operational load, we challenge conventional paradigms and introduce a novel perspective to operational planning. Second, our work defines and categorizes the specific work demands that intricately contribute to emotional load, building a foundational understanding crucial for the effective management and well-being of healthcare employees. Third, by advocating for the measurement of implicit demands embedded in emotionally loaded events, our work transcends the traditional focus on explicit work demands, providing a more comprehensive understanding of the emotional challenges encountered by healthcare professionals in their daily responsibilities.

# Literature Review

## Workload

Within the realm of work environment research, the concept of workload has undergone extensive examination, revealing its intricate connections with various aspects of professional life. The repercussions of excessive workload are far-reaching, impacting performance, inducing burnout, shaping employee behavior, and influencing overall well-being (van den Berg, 1997; Ilies et al., 2007; Nirel et al., 2008; Ilies et al., 2010; Bruggen, 2015; Pace et al., 2021). As such, comprehending the origins of workload is indispensable for effective managerial oversight of staff.

While previous studies have diligently explored operational and cognitive dimensions of workload, this paper seeks to introduce a novel perspective by delving into the relatively underexplored territory of emotional load. Through this exploration, we aspire to provide a more comprehensive understanding of the factors contributing to workload, thereby offering valuable insights for managerial practices in optimizing workforce performance and well-being.

Workload, a multifaceted construct, involves various dimensions influenced by diverse factors (Hart & Hauser, 1987). The definitions of different workload types highlight the dynamic interplay between demands and resources. These resources can be physical (e.g. time), mental, or sensory (Webb et al., 2010). Resources are generally defined as anything perceived by individuals to help attain their goals, encompassing objects, personal characteristics, conditions, or energies valued either intrinsically or as means to protect other valued resources (Halbesleben et al., 2014; Hobfoll, 2002). Three types of resources have been identified: physical, cognitive, and emotional, all necessary for effective functioning at work (Frone & Tidwell, 2015).

Emotional resources are defined as emotional energies that can be invested or mobilized for goal attainment, enabling individuals to provide emotional support or cope with adverse events (Ilies et al., 2020). Organizational research has largely focused on resource depletion, evidenced by studies on burnout (Maslach, Schaufeli, & Leiter, 2001) and fatigue (Frone & Tidwell, 2015; Ilies et al., 2015). For example, the Conservation of Resources (COR) theory suggests that individuals strive to obtain and maintain valued resources, with the loss or potential loss of these resources leading to stress (Hobfoll, 1988, 1989, 1998). The Job Demands-Resources (JD-R) Model, established in 2006, posits that high job demands coupled with low job resources increase stress and burnout. Possessing emotional resources provides individuals with the emotional capacity to handle demanding situations. These models underscore the notion that emotional resources are finite, and their depletion can significantly impact well-being and performance.

In the field of operational research, operational load is defined as the rate of events arriving in a system per unit of time and the amount of work time each event demands from an employee (Hall, 1991). This definition focuses on the extent a situation requires an employee's time. Similarly, cognitive research defines cognitive load as the level of attentional resources required to meet the task demands (Karwowski, 2006, p. 507). In this spirit, we build on research conceptualizing people as having a limited set of emotional resources, and hence we define emotional load as **the extent an event requires one's emotional resources**.

As an integral aspect of their responsibilities, employees are expected not only to fulfill explicit task requirements but also to attend to additional demands that may accompany the work. One set of additional demands is emotional demands stemming from events and interpersonal situations that employees encounter in their work. We attempt to both identify,

categorize and quantify such demands and the emotional load they impose in the healthcare domain.

**Emotional Load**

Some previous research mentions the concept of "emotional load" (Myrtek et al., 1994; Marin, 1995; Arts et el., 1999; Wittels et al., 2002; Rothmann, Mostert, & Strydom, 2006; Carayon & Alvarado, 2007; Lukavský, 2010; Clausen & Borg, 2011; Peräkylä et al., 2015; Drach-Zahavy et al., 2017; Voutilainen et al., 2018; Ivziku et al., 2022; Heilala et al., 2022), but the concept has received very limited research attention. Reviewing available research, we found inconsistent definitions of emotional load, and some instances where research claiming to study emotional load did not explicitly define the concept (Myrtek et el., 1994; Arts et el., 1999; Wittels et al., 2002; Rothmann, Mostert, & Strydom, 2006; Lukavský, 2010; Peräkylä et al., 2015; Voutilainen et al., 2018). Some offered definitions are remote from what we construe as emotional load. To illustrate, Marin (1995), focusing on human-computer interaction, refers to mental stressors as emotional load, without offering a formal operationalization of mental stressors or of the concept of emotional load. Other studies emphasized interpersonal communication and emotional expressions (or restraint from expression) as the core of emotional load (Drach-Zahavy et al., 2017; Heilala et al., 2022) raising a question of whether the construct of emotional load is what is defined elsewhere as emotional labor (Sutton & Rafaeli, 1988; Rafaeli & Sutton, 1987). In the specific context of healthcare, Carayon & Alvarado (2007, p. 122) defined emotional load as "dealing with emotional issues, such as patient death, end-of-life care, and family demands". This definition focuses on the type of event an employee encounters as a precursor or cause of emotional load, implicitly presuming that only such events create emotional load. In contrast, Ivziku et al. (2022, p. 4388) defined emotional load as "a result of emotionally demanding relations with patients or work situations" (Bakker & Demerouti, 2017), a definition that aligns with

our conceptualization of emotional load but also overlaps with definitions of emotional labor (Brotheridge & Lee, 2003; Grandey, 2000). However, the (Bakker & Demerouti, 2017) study gauged a broad, overall emotional load. Our goal here is to delve into the nuanced assessment of emotional load within specific events and situations.

Tools used to measure emotional load are also inconsistent, and—perhaps because of the inconsistent definitions – sometimes measure different concepts or different aspects of work under the umbrella and abstract notion of "emotional load". For instance, Heilala et al. (2022) measured emotional load with the Frankfurt Emotional Work Scale, which was designed by Zapf et al., (1999) to measure emotional labor. Other studies employed a six-item survey of job demands (Veldhoven & Meijman, 1994; Ivziku et al., 2022), while Myrtek (1994) used a neurological approach, referring to emotional load as an “emotional heart rate increase” (p. 1196). Lukavský (2010) manipulated emotional load using stimuli protocol with words of various emotional valence levels. Wittels et al. (2002) manipulated emotional load using a task that is known to be emotionally stressful.

One theme that does emerge from the current research literature, however, is that certain job demands can create emotional load (e.g. Van Veldhoven & Meijman, 1994; Wittels et al., 2002; Rothmann, Mostert, & Strydom, 2006; Heilala et al., 2022; Ivziku et al., 2022). Job demands are defined as

“physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort” (Schaufeli & Bakker, 2004, p. 296).

In this definition job demands appear to be at the core of emotional load. A second theme that arises is that emotional load is typically measured using general self-report questions (e.g., “Does your job demand a lot from you emotionally?”) (e.g., Van Veldhoven & Meijman, 1994; Rothmann, Mostert, & Strydom, 2006; Clausen & Borg, 2011, Heilala et

al., 2022). This theme implicitly presumes that emotional demands are subjective. We propose that there are emotional demands that have a common effect on multiple people, which operationally means that there are events and situations where people have similar emotional reactions. In this context, our goal here is threefold: (1) to identify situations in medical healthcare work where people agree about the emotional load the event creates, (2) to separate out situations that fit into the mold of "emotional load" from situations that create "emotional labor" (3) to scale the extent of emotional load that each of these agreed upon events create.

Considering the differences in defining and measuring emotional load, we adopted a quantitative approach to address these goals. We identify the types of circumstances evoking what might be construed as emotional load, then separate out situations evoking emotional load from events that fit other, related constructs of operational load and emotional labor, and then scale the relative emotional load imposed by each of the events. Thus, our study expands upon previously offered definitions, presuming that emotional load can be created by a multitude of demands, including interpersonal aggression (Altman, 2021), patient incivility (Lewis & Malecha, 2011), unrealistic expectations (Donabedian, 1988), and abusive supervision (Pradhan & Jena, 2018), as well as role conflict, overload, and ambiguity (Dasgupta, 2012). These types of demands have been previously studied in separate streams of research, such as research on stress in organizations, which we review below. However, as we note below, they have not been examined in connection with emotional load. We wish to expand the current understanding of emotional load, and clarify the work and situational demands that create emotional demand.

**Stress in Organizations**

Organizational stress has been defined in multiple ways, with a basic stem of a perceived imbalance between job demands and an individual's capacity to effectively cope

with or meet those demands (Lazarus, 1990). According to Lazarus (1990), stress is best understood as a phenomenological process that emerges from the interaction between an individual and their environment. It occurs when individuals perceive the demands placed upon them as surpassing their available resources, thereby threatening their well-being (Cooper et al., 2001; Lazarus, 1991). This interactive process, known as stress, involves stressors as the stimuli encountered by individuals, and strain as their psychological response to these stressors (Cooper et al., 2001).

In our study, we focus on the stimulus encountered by healthcare employees in their daily work, which we refer to as events, and the emotional demands inherent in these events. Our definition of emotional load seeks to capture and quantify the emotional demands that healthcare employees contend with daily. Specifically, we center our attention on the emotional demands faced by employees, which we conceptualize as objective environmental circumstances. These emotional demands interact with individuals and contribute to stress. Therefore, we consider emotional load as a distinct type of stressor within this framework.

Organizational behavior research extensively examines stressors, with one prominent group being role stressors. Kahn, Wolfe, Quinn, and Snoek (1964) define role stressors as pressure resulting from organizational and job-specific demands and constraints. Among these stressors are role conflict, role ambiguity, and role overload (and underload), consistently linked to stress (Rosse & Rosse, 1981; Um & Harrison, 1988; Örtqvist & Wincent, 2006). The closest parallel to our definition of emotional load is role overload, defined as having too much to do in too little time, with emphasis on others' expectations (Kahn et al., 1964). However, existing definitions primarily focus on operational resources, such as the time needed to meet demands, and fail to account for emotional demands. Similarly, operationalizations of role overload lack emphasis on emotional demands, focusing instead on feelings of rush (e.g., "I can't ever seem to get caught up," "I don’t have time to

finish my job"; Reily, 1982; Bacharach et al., 1990). Thus, our contribution to stress research lies in proposing a definition and operationalization of emotional load as a stressor that can be objectively quantified.

While role overload is closely aligned with the concept of emotional load, the critical aspect of role conflict also plays a significant role in contributing to the emotional challenges faced by healthcare professionals. Role conflict has been a focal point in the study of organizational stress, reflecting its pervasive impact across various sectors, including healthcare. Defined as the tension arising from incompatible demands within an individual's job roles (Kahn et al., 1964), role conflict encompasses a spectrum of stressful experiences, from intra-sender conflicts, where contradictory expectations emanate from a single source, to inter-sender conflicts involving conflicting demands from multiple sources. Research has consistently linked role conflict to adverse outcomes such as job dissatisfaction, reduced organizational commitment, and heightened psychological strain (Kahn et al., 1964; Lazarus, 1991). Healthcare professionals often navigate the complex interplay of expectations from patients, their families, colleagues, and management. These expectations can sometimes be in direct conflict, placing employees in a continual state of negotiation and prioritization. It is important to consider the social interactions and the diverse expectations that healthcare professionals face, which contribute to their emotional load. This perspective aligns with the broader understanding of stress and its sources within organizational settings, particularly in high-stakes and emotionally charged environments like healthcare.

Sutton & Kahn (1987) introduced the concept of stress antidotes, emphasizing prediction, understanding, and control as crucial elements for reducing workplace stress. They distinguish between the ability to anticipate the occurrence, duration, and timing of work-related events (prediction), understanding the reasons behind organizational dynamics (understanding), and having the capability to influence events or processes at work (control).

Their model suggests that higher levels of these factors can mitigate work stress. This was further supported by Tetrick and LaRocco (1987), who found a correlation between these variables and lower levels of role stress.

Within the field of organizational stress, the element of predictability is recognized as a crucial variable. Frequent or continual experiences are perceived as chronic and therefore more predictable aspects of the job (Sutton & Kahn, 1987). This predictability is suggested to alleviate some of the detrimental effects commonly associated with stressful work situations (Tetrick & LaRocco, 1987; Jimmieson & Terry, 1993; Mellers et al., 2013). In line with this, Mohr and Wolfram's (2010) research found that predictable tasks are less likely to cause irritation than unpredictable ones, thereby supporting the idea that the capacity to foresee job demands can serve as a buffer against stress. These examples emphasize how the temporal characteristics of events, serving as indicators of their predictability, play a pivotal role in shaping emotional responses in the workplace.

The idea that the effect of events that are more frequent is smaller aligns with previous findings about repeated exposure. Literature suggests that the more we are exposed to something, the less it impacts us emotionally. For example, Matthews and Ritter (2019) found that workplace incivility, although linked to negative outcomes, becomes less impactful over time as employees adapt to these experiences. This adaptation is supported by their empirical evidence showing that incivility’s impact on well-being indices diminishes with repeated exposure. Similarly, research by Grégoire et al. (2017) showed that repeated exposure to others' pain can lead to a diminished estimation of pain intensity, suggesting a desensitization effect in healthcare professionals. Finally, Ferrari et al. (2011) found that repeated exposure to emotional stimuli reduces the late positive potential, indicating decreased emotional response with repetition. These findings collectively underscore how repeated exposure can mitigate

emotional impact, aligning with adaptation theory and the concept of habituation. Therefore, the frequency with which employees encounter an event in their daily work is highly relevant.

**Emotional Labor**

Emotional labor refers to the requirements set by organizations regarding the emotions employees should display during interactions with others (Brotheridge & Lee, 2003; Grandey, 2000). These display rules may be explicitly stated by the organization, or known by the observation of coworkers (Grandey, 2000). The attempt to meet the display rules does not only include the display of unexperienced emotions (i.e., surface acting), but also the effort of changing ones emotional state to conform to the displayed emotion (i.e. deep acting).

Previous studies have operationalized emotional labor in various ways. Wharton (1993) gauged emotional labor by the frequency of interactions with customers. Best et al. (1998) assessed employees' perception of the requirement to exhibit positive emotions and suppress negative ones. Kruml and Geddes (1998) defined emotional labor in terms of emotional effort and emotional dissonance. Mann (1998) introduced a questionnaire focusing on emotion suppression and perceived expectations of others (display rules). However, the most commonly used tool to measure emotional labor is the emotional labor scale developed by Brotheridge and Lee (1998). This scale comprises 15 items across 6 subscales: duration, frequency, intensity, variety, surface acting, and deep acting.

The existing body of research suggests that both emotional labor and emotional workload (as it has been studied thus far), result in similar outcomes such as exhaustion, burnout, and diminished wellbeing and job performance (Jackson, Schwab & Schuler, 1986; Felton, 1998; Erickson & Ritter, 2001; Goodwin, Groth & Frenkel, 2011; Hülsheger & Schewe, 2011; Mazzetti, Guglielmi & Topa, 2020). This extensive literature prompts a critical inquiry into whether these two concepts truly represent distinct constructs.

Emotional labor, as extensively discussed in the literature, involves the regulation and expression of emotions to meet the specific demands of job roles. This process requires individuals to deliberately align their emotional expressions with the expectations and norms of their professional environments. However, this concept captures only a segment of the emotional dynamics within the workplace. Emotional load, on the other hand, represents the broader spectrum of emotional experiences and challenges that employees encounter, extending beyond the scope of expected emotional displays. As we conceptualize it, emotional load encompasses both the direct efforts related to emotional labor and additional emotional challenges that arise in the workplace, which are not strictly tied to emotional display rules. This distinction highlights that emotional load includes not only the emotional labor associated with managing and displaying specific emotions as part of one's work but also the overall emotional strain from various sources, whether from navigating complex interpersonal dynamics or coping with emotionally charged situations that may not be directly related to job responsibilities. Understanding that emotional labor primarily concerns the regulation and expression of emotions to meet job requirements, whereas emotional load encompasses the broader spectrum of emotional experiences and challenges that arise in the workplace, including those not directly linked to job roles, sheds light on the diverse emotional dimensions of work.

**Emotional Intensity**

Emotional intensity measures the degree of intensity in which an emotion is experienced, encompassing both the subjective perception and physiological responses such as variations in heart rate, blood pressure, and other physical reactions. This comprehensive understanding is critical for exploring the full spectrum of emotional experiences at work (Argaman, 2009; Goto & Schaefer, 2020). Theoretical models define emotional intensity as multi-dimensional, typically focusing on two primary aspects: the magnitude and the duration

of the emotion experienced (Russell, 1980; Reisenzein, 1994; Sonnemans & Frijda, 1994), addressing questions such as how strongly and for how long the emotion is felt.

However, the intensity of an emotional experience also hinges on our evaluation of an event's significance before the actual emotional response (Roseman & Smith, 2001; Scherer et al., 2001). Importantly, emotional intensity by definition pertains to the emotional response to an event, not to the emotional demands the event imposes. Research on emotional intensity primarily examines variables that influence the level of intensity, focusing on the resultant emotional response.

Our study conceptualizes emotional load differently by emphasizing the demands that arise from the event itself. This includes the interaction with the environment and the expectations placed on the employee. In contrast to emotional intensity, which measures the individual's response to an event, we focus on the situational factors that create these emotional demands. While emotional intensity pertains to how strongly and for how long emotions are felt as a reaction, our aim is to identify the variables that characterize the event's inherent emotional demands, regardless of individual differences. By examining these situational circumstances, we seek to understand what defines an emotionally demanding work event. Although we do not measure emotional intensity directly, we draw upon its research insights to inform our conceptualization of emotional load.

***Variables of Emotional Intensity.*** In the literature on emotional intensity, two primary categories of variables are identified: those related to the event's impact—including strength, reality, and relevance—and those linked to background circumstances, encompassing accountability, readiness, and deservingness (see Sonnemans & Fridja, 1995). While we will not cover all variables associated with emotional intensity, we will discuss insights from the literature that have been integrated into our work.

*Relevance.* The personal relevance of an event significantly shapes the emotional experience (Frijda, 1988; Ortony et al., 1988; Frijda et al., 1992). The concept of psychological distance, which measures how close or distant an event feels to an individual, strongly influences emotional reactions (Ortony, Clore & Collins, 1988; Ben Ze'ev, 1996). Events that are perceived as important or intimately linked to an individual's personal life usually provoke stronger emotional responses. There is well-documented evidence that proximity to an event correlates directly with emotional intensity. For example, Wong and Bagozzi (2005) demonstrated that reduced psychological distance leads to increased emotional intensity. Conversely, Williams et al. (2014) found that greater psychological distance can lessen the emotional response to positive events and reduce the severity of negative emotions. This idea also pertains to the concept of self-extension described by Lancaster and Foddy (1988), where an individual's self-concept expands to include others like family members, significant others, or co-workers, making their experiences emotionally significant as though they were one's own (James et al., 1980). Thus, the emotional impact of an event is influenced not only by one's direct experiences but also by the experiences of those closely connected to us.

*Accountability.* Accountability refers to the entity responsible for an emotional event. Accountability encompasses controllability, effort, and intention. Controllability may be personal, where the individual has direct influence over outcomes, or external, where control lies with others (Weiner, 1985). Effort relates to the degree of personal involvement in creating an emotion; the more effort invested, the greater the significance and resulting emotional intensity (Deci & Ryan, 1985). Intention reflects the depth of our engagement in a situation; deeper involvement typically heightens emotional intensity (Sonnemans & Fridja, 1995).

The cognitive appraisal theory of emotion posits that emotions emerge from specific combinations of cognitive appraisals that lead to various emotional responses (Smith & Ellsworth, 1985). In the context of responsibility and control, this theory offers three possibilities: responsibility and control may rest with the individual, another person, or be determined by impersonal, situational factors.

A strong perception of control, particularly situational control, is a protective factor for both physical and mental health. Individuals who feel they have control over their immediate environment tend to experience better health outcomes and improved emotional well-being (Taylor & Brown, 1988; Ell et al., 1989). Conversely, a lack of situational control is associated with poorer health, higher mortality rates, and increased risk of mood disorders like depression (Alloy & Abramson, 1979; Lundberg et al., 2007; Infurna et al., 2011).

Research suggests that distressful physical symptoms are caused by a sense of lack of control over the immediate environment, leading to excessive worry and feelings of hopelessness, which are linked to coronary heart disease and sudden death (Geer et al., 1970; Pennebaker et el., 1977). The provision of a sense of control, even when illusory, helps reduce distressing symptoms (Langer & Rodin, 1976; Stern et al., 1980). In work context, lower situational control is linked to lower job satisfaction, higher turnover intention, and greater anxiety and depression (Siu & Cooper, 1998). For instance, clinical nurses with low situational control report lower job satisfaction, affecting the quality of nursing services (Rostami et al., 2021). Additionally, job control acts as a psychological intermediary between work pressure and job burnout, indicating that high work pressure combined with low job control leads to job burnout (Portoghese et al., 2014).

*Unexpectedness.* Since emotions are triggered by changes in circumstances, the anticipation of such changes also plays a crucial role in shaping the emotional experience. Typically, unexpectedness is positively correlated with emotional intensity, meaning that

more surprising changes tend to provoke stronger emotional reactions. Recent findings indicate that when events surpass a certain unexpectedness threshold, they initiate a critical demand on cognitive resources due to the element of surprise (Reichardt et al., 2020). This surprise interruption in routine mental processes compels a redirection of these resources towards evaluating the unforeseen event (Foster & Keane, 2015). Such cognitive engagement extends beyond mere reaction, encompassing a reassessment and possible modification of one's existing expectations or beliefs (Meyer et al., 1997). Therefore, the significant cognitive effort triggered by unexpected events is directly tied to the emotional responses they elicit, highlighting their substantial role in contributing to emotional load. This linkage underscores the importance of unexpectedness as a profound influencer of emotional load, particularly in its capacity to modify cognitive and emotional landscapes in response to new or surprising stimuli.

**Affective Events Theory (AET)**

AET (Weiss & Cropanzano, 1996) serves as a comprehensive framework for studying emotions in the workplace, positing that emotionally charged events can induce affective changes in employees. AET posits that emotions caused by work events accumulate over time, significantly impacting employee's emotional responses (Weiss & Beal, 2005). These responses, termed emotional proximities of events, are believed to exert an immediate and time-bound influence on employees. Our work is firmly rooted in the AET. We leverage the AET framework to explore how work events in healthcare settings contribute to the emotional demands faced by employees.

**What defines an event?**

Diverse definitions of events exist, with different perspectives across different disciplines. According to the Affective Events Theory (AET), an event is characterized as "a change in what one is currently experiencing" (Weiss & Cropanzano, 1996, p. 31). Zacks &

Tversky (2001) provide another viewpoint, defining an event as "a segment of time at a given location conceived by an observer as having a beginning and an end" (p. 17). Shipley (2008) focuses on the interaction between objects, emphasizing event boundaries as a reflection of the statistical structure experienced by an individual. From a probabilistic perspective, an event represents the set of potential outcomes from an experiment (Leon-Garcia, 1994). In computer science, an event is delineated in manners of time and change (Obeid & Rao, 2010). In physics, Eddington (1921) defines an event as a point in time and space. In service operations two of the above definitions exist: event may be a change in the system at a specific point in time, e.g., a customer arriving to the system (Adan & Resing, 2002) or sending a message to an agent (Daw et al., 2024); but event may also have duration and hence a start and an end, e.g. a task a service provider needs to preform (Valls et al., 2009).

Commonalities emerge from these definitions: first, an event involves a *change* in circumstances. This change can manifest internally, such as thoughts, emotions, experience or memories, and externally, through interactions with the environment. Second, an event occurs (or starts) at a specific point in *time* and *space*.

In synthesizing these varied definitions, our study operationalizes the concept of an event within the workplace as:

a discrete occurrence that marks a significant deviation from the routine or expected flow of work, embodying both the change in external circumstances and the internal cognitive or emotional shifts it precipitates.

This operational definition borrows from the essence of the perspectives presented: the temporal-spatial specificity from Zacks & Tversky (2001) and Eddington (1921), the emphasis on change and interaction from Weiss & Cropanzano (1996) and Shipley (2008), and the notion of discernible beginnings and ends (Valls et al., 2009). By adopting this definition, we recognize events not only as physical occurrences but as experiences that

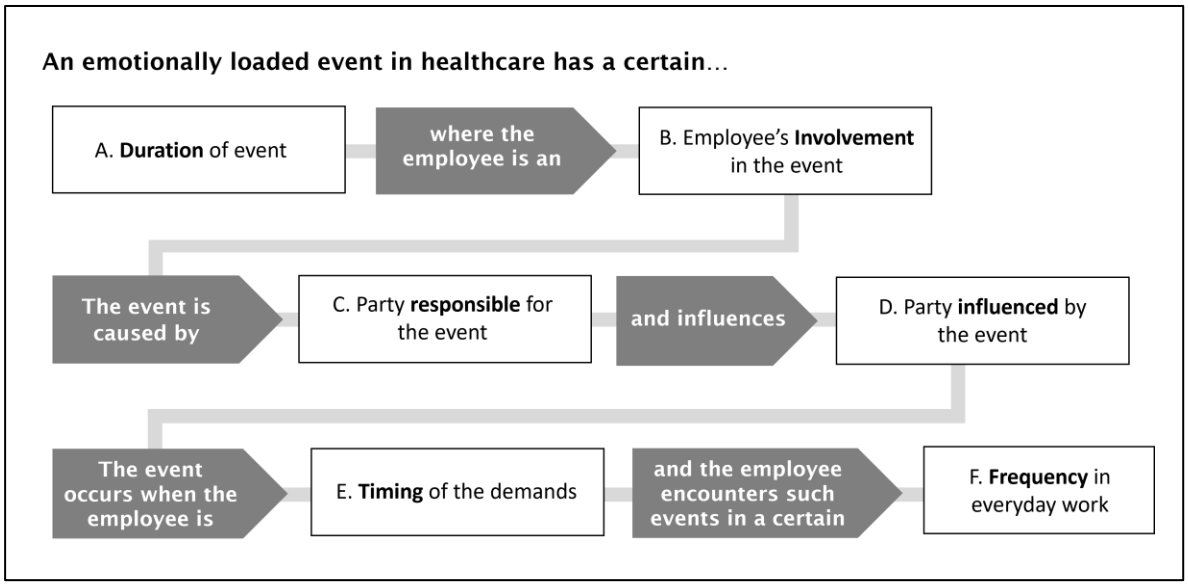
encapsulate shifts in the psychological and emotional landscape of employees. This approach enables us to explore how specific workplace events—ranging from sudden organizational changes to interpersonal dynamics—serve as catalysts for emotional responses, thereby imposing varying degrees of emotional demands on individuals. In framing our investigation around this nuanced understanding of events, we aim to illuminate the complex interplay between work events and the emotional load they generate, providing deeper insights into the mechanisms by which workplace dynamics influence emotional well-being.

## Theoretical Facets of Emotional Load

To comprehend how various events impact emotional load, we lay the groundwork within our theoretical framework using facet analysis to map the dimensions of healthcare work events. Our work aims to create a definitional mapping sentence that consists of several facets, each representing a key dimension of the conceptual domain being defined (see Guttman & Shye, 1978). Our work begins by identifying facets defining emotional work events in healthcare. Drawing from established models on stress in organizational settings and emotional intensity, we extracted elements of existing models on stress in organizational settings and emotional intensity to construct an overarching framework of aspects of work events. In an iterative process of recurring revisions, we identified what we presume to be key facets of emotionally loaded work events.

We identified six key facets, namely “Duration of event”, “Employee’s involvement”, “Responsibility for the event”, “Influenced by the event”, “Timing of the event” and "Frequency", which map out the characteristics of an emotional work event (See Figure 1). As visualized in Figure 1, an emotionally loaded event has (a) a certain DURATION in which an employee is (b) INVOLVED in a specific way. Someone in the organization is (c) RESPONSIBLE for the event, which (d) INFLUENCES certain people. The event (e) occurs at a particular TIMING when the employee is engaged in a certain activity, and the employee encounters such events with a certain (f) FREQUENCY in their daily work.

**Figure 1.** *Facets of emotional work events*




***Facet A: Duration of the Event.*** The initial defining facet is the temporal aspect of work event (see Frijda et al., 1992), which distinguishes between an event that is episodic or an ongoing condition. Episodic events, typically being less expected than ongoing conditions, demand more attention and consequently generate a more intense emotional response (Roseman, 1984; Smith & Ellsworth, 1985). This distinction aligns with the literature on the emotional impact of unexpected versus expected events, where unexpected events are more likely to disrupt routine mental processes and require significant cognitive engagement (Reichardt et al., 2020; Foster & Keane, 2015). Therefore, understanding whether an event is episodic or ongoing is crucial for studying emotional load, as it helps to predict the intensity of the emotional response elicited by the event.

***Facet B: Employee's Involvement.*** This facet details the nature of the employee's participation in the event, referring to the personal significance the event holds for the employee (Frijda, 1988; Ortony et al., 1988; Frijda et al., 1992). It is theoretically grounded in the concept of psychological distance—the perceived closeness or remoteness of the event to

the employee, as discussed by Trope & Liberman (2010). Psychological distance significantly affects the emotional response to the event (Moran & Eyal, 2022; Wong & Bagozzi, 2005) and influences the perceived difficulty of tasks (Thomas & Tsai, 2011). Therefore, the extent and nature of an employee's involvement are critical in determining the emotional load associated with an event.

***Facet C: Responsibility for the Event.*** This facet explores who initiates an event—whether it's the employee or another party such as a coworker or management. Responsibility implies control, which significantly influences how individuals cope with and emotionally respond to stressful events (Karasek, 1979; Mayes & Ganster, 1988; Jimmieson & Terry, 1993). However, determining responsibility extends beyond identifying whether the employee or someone else is accountable. The emotional impact of events also resonates through the experiences of others, which vary based on the extent to which we psychologically integrate these individuals into our sense of self (James et al., 1980; Lancaster & Foddy, 1988). This impact varies based on the nature of the relationship—whether an event occurs to a coworker who is an ingroup member, a patient under care in one's unit even if not under one's own care, or other connections—underscoring the importance of relational dynamics in assessing emotional load. Understanding these dynamics is crucial for recognizing how events not directly involving the employee can still profoundly affect them.

***Facet D: Influenced by the Event.*** This facet represents the relevance of an event's impact to the employee (Frijda, 1988; Ortony et al., 1988; Frijda et al., 1992). It distinguishes between events that directly affect the employee and those impacting others, with an emphasis on the specific individuals affected. For example, effects on a team member might influence the employee through self-extension, where the emotional experiences of closely connected individuals impact them personally. Conversely, effects on a patient under the employee's care could influence their professional performance, potentially affecting their self-image.

This differentiation helps clarify the varied emotional consequences stemming from the relational dynamics within the workplace.

***Facet E: Timing of the Event.*** This facet explores the timing of events, distinguishing between those that occur randomly and those that are integral to ongoing tasks or specific segments of an employee's daily routine. It refers to the interplay between workload and the contextual environment, emphasizing how events are positioned within the temporal and spatial dimensions of the workplace. This aspect is critical for defining events, as it stresses the need to consider not just the nature of the changes but also the specific moments and locations where emotionally demanding events occur. Additionally, since workload involves the interaction between demands and resources, understanding emotional load requires an examination of the surrounding demands that could cumulatively affect the emotional strain on an employee. This approach integrates both the immediate and broader operational contexts, considering whether the employee expected the event or was surprised by it, which can significantly influence emotional responses and resource allocation.

***Facet F: Frequency.*** This facet assesses how often a healthcare employee encounters an event in their daily work. It provides insights into the predictability of the event. An event that occurs more frequently tends to be viewed as a chronic condition and is thus more predictable (Shirom, 1982). Predictable events often lead to lower adverse effects due to reduced surprise and disruption (Sutton & Kahn, 1987; Tetrick & LaRocco, 1987; Jimmieson & Terry, 1993; Mellers et al., 2013). Conversely, a less frequent event can cause greater disruption, demanding significant attention due to the element of surprise it introduces (Foster & Keane, 2015).

These facets each have different features, and the profile of these facets and their features is what defines an event. Features of an event refer to the specific characteristics

within each facet that describe the nature of the event. For example, within the facet "Responsibility for the Event", features can include 'employee', 'manager', 'coworker', etc.

Building on this theoretical facet framework, we next outline the research questions that directed our exploratory studies. Our study addresses the following research questions:

(1) Which facets of events contribute to the emotional load an event creates?

(2) What is the contribution of features of an event to the emotional load the event creates?

(3) Is there a difference between operational load and emotional load?

(4) What is the relationship between emotional labor and emotional load? This comprises three sub-questions:

(4.1) Is emotional load different from emotional labor?

(4.2) What features of events explain emotional labor?

(4.3) Does emotional labor play a mediating role in the relationship between the features of events and emotional load?

We address these questions in two studies, building on a database of events that was identified by Altman (2021) as events evoking emotional load: Study 1 aims to identify and define features within facets defining healthcare work events that are presumed to carry some emotional load. Subsequently, Study 2 aims to quantify the impact of these features and of the six facets on emotional load and emotional labor, and to examine the mediating role of emotional labor in the relationship between the features and emotional load.

## Study 1 - Identifying Features Within Facets of Emotional Work Events in Healthcare

The goal of Study 1 was to identify and define features of each of the facets suggested by our literature review as potentially defining the emotional load of work events. Study 1 builds on a database of events identified by Altman (2021) as evoking emotional load. We used qualitative methods to identify these features.

### Method

We systematically examined and deconstructed 262 healthcare work events identified by Altman (2021) as events that bring about workload (see Appendix A for the full list of events). Our method relied on an inductive process of going back and forth between events and the theoretically presumed list of facets (Figure 1) and respective features of each facet (see Figure 2) to precisely define the features within each facet (Strauss & Corbin, 1990; Glazer, 1998).

#### *Data Analysis*

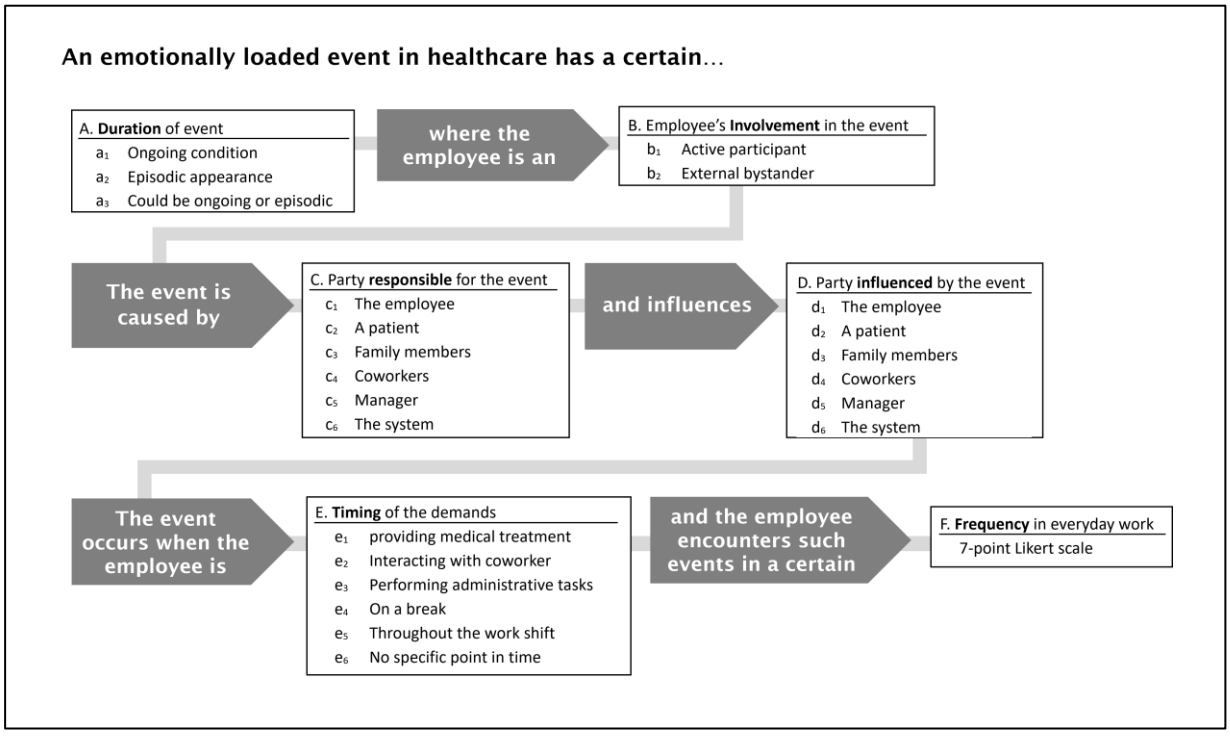
We began our data analysis by reading the full list of events and constructing memos (i.e., theorizing write-up of ideas; Glazer, 1998; Lempert, 2007), and discussing insights emerging from the initial reading. Next we initiated an open coding phase, in which we systematically examined each event and generated features for each of the five facets. To illustrate, for facets such as "responsible for the event" and "influenced by the event", two “features” emerged: "employee" and "the patient". During this stage we also created a succinct title for each event, which comprises a brief description of what happened (e.g., "complex professional situation" or "physical threat or aggression"). This step was taken once we realized that there seem to be recurring types of events in the data, hence these titles were created to facilitate later categorization of events into “categories of events” within the healthcare sector.

In an iterative process, we systematically reached a more focused identification of features within each facet. We repeated this iterative process until we reached a point where no new features were deemed necessary to be added to capture all the events, and all the events of the data could be categorized, ensuring a comprehensive analysis.

## Results

We identified 23 features across the 6 facets of emotional healthcare work events (see Figure 2). These features were identified and defined through a systematic examination and deconstruction of 262 healthcare work events identified by Altman (2021). The examples provided for each feature include events from the data and interpretations made while reviewing this data.

**Figure 2.** *Mapping sentence defining emotional work event in healthcare*




***Facet A: Duration of the Event***. There are three types of event duration: ongoing conditions, episodic appearances, and events that could be either ongoing or episodic.

Ongoing conditions are events without a specified beginning or end (e.g., an employee's behavior restricted by too many guidelines). Episodic appearances are events that occur at a specific point in time and last for a defined duration (e.g., the unexpected death of a patient). However, some events can be either episodic or ongoing, depending on how an employee perceives them or on a specific manifestation.

***Facet B: Employee's Involvement.*** Employees can be actively involved in a given event or can be an external bystander. Active involvement means the employee is directly engaged in the event (e.g., in a conflict with a coworker). Conversely, an employee can be an external bystander, where the employee observes the event without direct participation (e.g., witnessing a coworker in a conflict with a patient).

***Facet C: Responsibility for the Event.*** Six distinct individuals or entities can be responsible for healthcare work events: the employee (self), a patient, patient's family members, coworkers, a manager, and the organization. We note that there may also be simultaneous relevance of multiple responsibilities within the same event. For instance, in an event where the employee doesn't have enough time to complete a task, both the manager and the employee are responsible. Another example is when a patient accuses the employee of lying to them; both the patient and the employee share responsibility. The patient is responsible for understanding the information provided, and the employee is responsible for communicating clearly and effectively.

***Facet D: Influenced by the Event.*** The same six distinct individuals or entities as in Facet C can be influenced by healthcare work events: : the employee (self), a patient, patient's family members, coworkers, a manager, and the organization. Here as well, multiple features can also be simultaneously relevant. For example, when an employee's shift is understaffed, it affects both the employee and their coworkers due to increased workload and stress. Another

example is during an event where an employee must give CPR for an extended period; both the patient and the employee are significantly affected.

***Facet E: Timing of the Event.*** Emotional work events in healthcare can take place in different parts of an employee's work: during execution of medical care tasks, performance of administrative tasks, break time, interactions with coworkers, throughout a work shift, or at no specific point in time.

***Facet F: Frequency.*** Events can also vary in their frequency, which is a continuous variable.

We further identified the 13 types of events in terms of the content of the work situation encountered, or as we colloquially refer to it, "what happened?" (See Altman, 2021), as detailed in Table 1. This refers to "Types of events" and is not a facet. We note that three types of content are in the realm of operational load, where workload is defined as the interplay between demands and resources. Operational overload manifests in unbalanced situations where demands outstrip available resources. This includes (1) overload or multitasking, highlighting the abundance of tasks and the resultant workload, (2) time pressure, emphasizing the mismatch between the time required to meet demands, and (3) denied or limited resources, representing a scarcity of the physical equipment essential for task fulfillment.

**Table 1.** *Types of content of work events that create workload for healthcare work employees*

| Types of events | Examples |
|---|---|
| Deterioration of medical condition | – *A CPR procedure that employee is giving fails*<br>– *Employee must deliver bad news to family members of a patient* |
| Complex professional situation | – *Employee has multiple managers*<br>– *A patient is mistreated by a coworker* |
| Complex medical situation | – *A patient needs to be treated by multiple professionals*<br>– *Employee gives a terminally ill patient a treatment that might harm them* |

| **Types of events** | **Examples** |
|---|---|
| Medical Error | – *Employee makes a mistake in a diagnosis*<br>– *Someone gives a patient the wrong medicine* |
| Physical threat or aggression | – *A family member physically attacks the employee*<br>– *A coworker physically attacks another coworker* |
| Psychological challenge, threat or aggression | – *A patient implicitly threatens to sue the employee*<br>– *The manager yells at the employee* |
| Interpersonal Issues | – *A patient specifically refuses to see the employee*<br>– *Employee witnesses a family conflict* |
| Communication Problems | – *A family member asks the employee a lot of questions*<br>– *Employee warns managers about a problem but they ignore* |
| Discomfort in Public | – *A patient complains about the employee in front of other people*<br>– *A coworker undermines the employee in front of patients* |
| Death | – *Employee provides treatment to someone who will soon die anyway*<br>– *People crowd around a dying patient* |
| Time pressure | – *Employee must treat a patient who does not arrive on time*<br>– *Employee arrives to work at the last minute and must immediately start to work* |
| Denied or limited resources | – *Employee needs a medical device that was not properly maintained*<br>– *Employee must move a patient to a treatment room which is occupied* |
| Overload of multiple tasks | – *Employee feels that splitting attention between multiple wards leads to a poor job*<br>– *Employee tasks are spread in distant locations* |

## Study 2 – Quantifying the Effect of Features and Facets of Events on Emotional Load

### Overview

Our next goal, in Study 2 is twofold: to quantify the effect of features and facets of events on emotional load, and to assess the extent to which the features and facets can predict emotional load and emotional labor. To address these goals we first classify the emotional work events in healthcare identified by Altman (2021) based on the facets and features identified in Study 1. We recruited 1,059 healthcare employees through Prolific and asked them to classify the 262 events into the facets and features, types of healthcare work events as identified in Study 1, and also to rate emotional load and emotional labor. We then used these data to test the predicting of the ratings of emotional load by the features of the events, as classified by participants. We conducted the following analyses:

1. Predicting Emotional Load at the Employee Level: We first used hierarchical regression to assess the relative contribution of each facet to emotional load. Next, we employed multiple linear regression to analyze how specific features within each facet influence emotional load. We also examined the impact of operational load characteristics on emotional load by testing the types of events, to determine if these constructs are similar or different. Finally, we explored the relationship between emotional load and emotional labor through factor analysis to distinguish between the two constructs, and mediation analysis to understand how emotional labor mediates the relationship between event features and emotional load.
2. Predicting Emotional Load at the Event Level: We examined the consensus about the features of events and their emotional load using event-level data.
3. Eliminating Effects of Same Source Bias: We gathered new ratings of emotional load from a separate sample to test the mediating influence of emotional labor and verify our findings without the bias of same-source ratings.

By analyzing data at different levels—employee level and event level—we provide a comprehensive understanding of emotional load. The employee-level analysis captures individual healthcare workers' subjective evaluations, while the event-level analysis focuses on objective assessments, reflecting general consensus among healthcare workers. This multi-level approach enhances the robustness and applicability of our findings in operational planning and staffing in healthcare settings.

## Method

### *Participants*

We used Prolific (http://www.prolific.com/) to recruit 1,324 participants who identified themselves on the platform as currently employed in healthcare and fluent in English. Participants were rewarded with £1.88 for participation, and they spent an average of 13.7 minutes completing the questionnaire. We excluded 265 participants (20%) from the analyses due to failing attention checks (n=55) or invalid inputs (i.e. selecting more than 50% of the possible answer options, which we interpreted as an indication of random or inattentive answering; n=210). The final sample comprised 1,059 participants (74.1% females, 20.8% nurses, 16.4% medical support staff, 14.5% administrative staff, 12.2% physicians, 36.1% other healthcare positions, e.g., therapists, technicians, radiographers, medical students and pharmacists). Roughly half the participants were working in hospitals (52.2%), others were working in HMOs (17.9%), General Practices (9.3%), Mental Health centers (5.5%), and other organizations (15.1%), such as ambulatory surgical centers, Imaging and Radiology, nursing homes, and birth centers. The largest sub-group of participants had a tenure of over ten years (34.8%). Others had tenures of 1-3 years (27.7%), 4-6 years (19.6%), 7-9 years (9.7%), or less than one year (8.1%).

***Procedure and Tools***

After signing a consent form, participants performed three separate tasks regarding a subsample of five to seven of the 262 events: defining the events by the types of events identified in Study 1, classifying the events by facets and features including ratings of the frequency associated with the event, and rating the level of emotional load and emotional labor of the event. To filter out inattentive respondents and improve data quality, participants were asked to answer attention checks at random points while performing the tasks. These attention checks were embedded in the survey for each event and included items with an obvious correct response (see Appendix B for the full list and more details; Gummer et al., 2021).

To establish inter-rater reliability, each event was viewed, classified and rated by 30 participants. Each participant was asked about five to seven events that were randomly selected from the 262 events identified by Alman (2021). The number of events a participant saw was revised as the study progressed since the time it took participants to complete was quicker than anticipated. The events, as presented in Appendix A, were shown in the third person from the perspective of a healthcare employee named "Francis," a gender-neutral name. The following instructions were given:

> *"Imagine Francis, a healthcare employee for whom the following situation occurs:*
>
> *EVENT Text*
>
> *Having read this event description, please mark the answer that describes this situation. In some questions, you can mark more than one if necessary."*

Demographic information was collected after the ratings of the events.

**Types of events**. Participants were asked, "What best describes the situation?" and could select any of the 13 types of events identified in Study 1. They were allowed to check more than one option if they deemed it necessary.

**Facet and features of events.** Participants were asked to classify each event based on the facets and features identified in Study 1 (all events are listed in Appendix A). They were instructed to check the most relevant feature within each facet for each event. For the facets "who is responsible" and "who is influenced," participants were allowed to check more than one option if relevant.

Since the frequency facet requires participants to recall their own experience with similar events, we asked about frequency separately from all the facets and last. If they reflect on their personal experiences first, they might respond in a way that is consistent with those experiences, rather than objectively evaluating the event. Table 2 details the complete set of questions about the features and facets as presented to the participants in the survey.

**Table 2.** *Survey of Facets and Features Classifying Events in Healthcare*

| Facets | Features |
|---|---|
| *What is the duration of the situation?* | Episodic, it occurred at a specific point of time<br>Continuous, ongoing, no particular point of time<br>Could be episodic (one time) or ongoing |
| *How involved was Francis in the situation?* | Actively involved<br>External bystander |
| *Who is accountable for what happened in the situation?** | Francis<br>A patient<br>Family members<br>Co-workers<br>Manager<br>The system |
| *Who was influenced by the situation?** | Francis<br>A patient<br>Family members<br>Co-workers<br>Manager<br>The system |
| *When did the situation happen?* | While Francis provided medical treatment<br>During Francis' interaction with other medical care staff<br>While Francis was performing administrative tasks<br>Throughout Francis' work shift<br>While Francis was on a break<br>Could be any of these times |

| Facets | Features |
|---|---|
| *Frequency (1-7)* | *How often do you estimate a typical person in healthcare experiences such an event?*<br>Never<br>Less than once a year<br>Once or twice a year<br>Once or twice a month<br>Once or twice a week<br>Almost every day<br><br>*How often do you experience such an event at your work?*<br>I have never experienced such an event<br>Less than once a year<br>Once or twice a year<br>Once or twice a month<br>Once or twice a week<br>Almost every day |

*Note.* Questions with multiple choices are indicated by an asterisk (*) symbol.

After identifying facets and features participants rated two additional aspects of the events: the extent of emotional load it creates, and the extent of emotional labor it requires using the following scales:

**Emotional load.** We used five items adapted by Altman (2021) to measure perceptions of emotional load of each of the events:

(1) "This situation is emotionally demanding"

(2) "This situation is emotionally upsetting"

(3) "This situation has emotional impact on Francis"

(4) "This situation is emotionally threatening"

(5) "This situation involve emotional difficulty”

Responses were on a 7-point scale, from 1 (“not at all”) to 7 (“to a great extent”). Cronbach's Alpha was 0.94.

**Emotional labor.** We adapted a three-item scale of the surface acting part of emotional labor, (Brotheridge & Lee, 2003), to a scale that included the following items:

(1) "This situation requires Francis to resist expressing true feelings"

(2) "This situation requires Francis to show emotions they don't really feel”

(3) "This situation requires Francis to hide true feelings”

Responses were on a 7-point Likert scale, from 1 (“not at all”) to 7 (“to a great extent”). Cronbach's Alpha was 0.87.

**Frequency.** We measured frequency as a continuous variable using two items:

(1) “How often do you experience such a situation in your work?”

(2) "How often do you estimate a typical person in healthcare experiences such an event?"

Responses were coded on a 7-point Likert scale, from 1 (“never”) to 7 (“almost every day”). The specific response options presented to participants are detailed in Table 2. Cronbach's Alpha for the frequency measures was 0.78.

## Results

For descriptive statistics of each event see Appendix A.

### *Data Coding and Screening*

**Employee Level Data.** Participant responses for categorical features and facets were coded as binary variables, meaning that for each participant, we created a vector of values, in which "1" indicated the association of feature $i$ of facet $j$ with event $x$, and "0" to denote no association. Types of events were coded similarly, assigning "1" to indicate the association of type $j$ with event $x$.

Our data showed that 23.5% of the ratings were provided by individuals who did not encounter the event they were rating, and this might have biased their responses. To eliminate this potential bias, we examined whether there were differences in the emotional load ratings between participants who had experienced a particular event and those who had not. A two-sided independent samples t-test for each event showed significant differences in ratings for 22 of the 262 events (see Appendix C for full results). To eliminate this bias we removed responses of participants who had not encountered events, hence removal of additional 149

responses. Importantly, this exclusion did not lead to the complete removal of any participant, maintaining a final sample size of 1059 participants.

**Event Level Data.** First, we filtered the data based on the level of consensus among different healthcare workers regarding the emotional load elicited by an event (James, Demaree, & Wolf, 1984). We continued the analysis only with events with an inter-rater agreement of rwg(j) = 0.5 or higher (see Appendix D for agreement scores), reducing the effective sample of events we analyze to 153 events. These events are construed as instances where healthcare employees generally agree about the emotional load they create.

Next, we sought to measure the effect of the objective situational features within facets of events on emotional load. For each event, we computed the mean level of emotional load and emotional labor. We then developed a score representing the extent of relevance of each feature to each event. These scores, ranging from 0 to 1, were calculated as the percentage of raters endorsing feature $i$ from facet $j$ as relevant to event $x$. This approach allowed us to categorize events within the facets and provided a distribution for each event across the five facets, offering insights into the degree to which each event is associated with each feature.

Then, to ensure that the features of the facets objectively describe the events, we calculated agreement for each feature in each event. Agreement is defined as consensus on whether an event is related to a specific feature or not. Assuming that when the percentage of raters indicating the relevance of feature $i$ of facet $j$ to event $x$ is closer to 100% or 0%, it reflects higher agreement, we formulated the following agreement metric:

$$Agreement_{ij}(x) = |Percentage_{ij}(x) - 0.5| \times 2$$

Afterward, we excluded any feature within each event that obtained an agreement score below 0.5, changing its score to 0 (see Appendix D). This process ended up with the removal of 977 features from the data.

## *Data Analysis and Results*

### *1. Predicting Emotional Load at the Employee Level*

#### *1.1. Which Facets of Events Contribute to the Emotional Load an Event Creates? (RQ 1)*

We used Stepwise Hierarchical Regression to test the relative contribution of each facet to the variance in emotional load. At each step, we added another set of features (that together comprise a facet). Since each facet is a vector of features, the facets were added manually based on the adjusted $R^2$. This manual addition was necessary because the program could not group the variables together appropriately and would calculate at the feature level rather than the facet level.

As a first step, the facet “frequency” was selected, producing a significant model ($p<.001$), with $R^2=.04$. Next, facets were entered into the model step by step, with each addition based on the most significant contribution to the explained variance of the model. The facets were selected and entered to the model in the following order: (1) “who is influenced?” ($R^2$ change=.01, $p<.001$), (2) “when did it happen?” ($R^2$ change=.008, $p<.001$), (3) “how is employee involved?” ($R^2$ change=.014, $p<.001$), (4) "who is responsible?" ($R^2$ change=.01, $p<.001$), and (5) “duration of the event” ($R^2$ change=.001, $p<.13$). Since the duration of the event did not significantly contribute to explaining the variance in emotional load, it was removed from the final analyses. The resulting model explained 8% of the variance ($R^2=.08$, $F(19, 5578)=28.28$, $p<.001$) (see Table 3 for the full results). Despite the relatively low $R^2$, Table 3 shows that each of the remaining five facets adds a statistically significant contribution to explaining the variation in emotional load. Therefore, the next question is which features within each of the facets influence the extent of emotional load an event creates.

**Table 3.** *Hierarchical Regression Predicting Emotional Load*

| Variables | Model 1 | | | Model 2 | | | Model 3 | | | Model 4 | | | Model 5 | | | Model 6 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | SE | β | B | SE | β | B | SE | β | B | SE | β | B | SE | β | B | SE | β |
| Constant | 5.33 | .06 | | 5.09 | .08 | | 5.15 | .08 | | 4.89 | .09 | | 4.81 | .09 | | 4.86 | .10 | |
| ***Frequency*** | -.24*** | .02 | -.20 | -.23*** | .02 | -.19 | -.22*** | .02 | -.19 | -.23*** | .02 | -.19 | -.23*** | .02 | -.19 | -.23*** | .02 | -.19 |
| ***Who is influenced?*** | | | | | | | | | | | | | | | | | | |
| Employee | | | | .23*** | .05 | .06 | .37*** | .05 | .06 | .10 | .06 | .02 | .09 | .06 | .02 | .09 | .06 | .02 |
| Patient | | | | -.01 | .05 | .00 | -.03 | .05 | -.01 | -.01 | .05 | .00 | -.02 | .05 | -.01 | -.02 | .05 | -.01 |
| Family members | | | | .4*** | .06 | .09 | .4*** | .06 | .09 | .41*** | .06 | .09 | .43*** | .06 | .10 | .43*** | .06 | .10 |
| Coworkers | | | | | | | | | | | | | | | | | | |
| Manager | | | | | | | -.04 | .06 | -.01 | -.13* | .06 | -.03 | -.10 | .06 | -.02 | -.09 | .06 | -.02 |
| The system | | | | | | | .01 | .13 | .00 | -.07 | .13 | -.01 | -.07 | .13 | -.01 | -.06 | .13 | -.01 |
| ***When did it happen?*** | | | | | | | -.81*** | .15 | -.07 | -.9*** | .15 | -.08 | -.86*** | .15 | -.08 | -.85*** | .15 | -.07 |
| Providing medical treatment | | | | | | | -.25*** | .06 | -.06 | -.3*** | .06 | -.07 | -.28*** | .06 | -.07 | -.28*** | .06 | -.07 |
| Interacting with coworker | | | | | | | -.44* | .18 | -.03 | -.42* | .18 | -.03 | -.43* | .18 | -.03 | -.42* | .18 | -.03 |
| Performing administrative tasks | | | | | | | | | | | | | | | | | | |
| Throughout the work shift | | | | | | | | | | .51*** | .06 | .12 | .61*** | .06 | .15 | .6*** | .06 | .15 |
| On a break | | | | | | | | | | | | | | | | | | |
| ***How is employee involved?*** | | | | | | | | | | | | | -.23*** | .05 | -.07 | -.23*** | .05 | -.07 |
| Active participant | | | | | | | | | | | | | .24*** | .05 | .06 | .25*** | .05 | .06 |
| ***Who is responsible?*** | | | | | | | | | | | | | .04 | .07 | .01 | .04 | .07 | .01 |
| Employee | | | | | | | | | | | | | .11 | .06 | .03 | .11 | .06 | .03 |
| Patient | | | | | | | | | | | | | .14* | .06 | .04 | .14* | .06 | .04 |
| Family members | | | | | | | | | | | | | -.07 | .05 | -.02 | -.07 | .05 | -.02 |
| Coworkers | | | | | | | | | | | | | | | | | | |
| Manager | | | | | | | | | | | | | | | | -.08 | .05 | -.02 |
| The system | | | | | | | | | | | | | | | | -.10 | .06 | -.02 |
| ***Duration*** | | | | | | | | | | | | | | | | | | |
| Episodic appearance | | | | | | | | | | | | | | | | | | |
| Ongoing condition | | | | | | | | | | | | | | | | | | |
| Adjusted R2 | .04 | | | .05 | | | .06 | | | .07 | | | .08 | | | .08 | | |
| R2 change | .04*** | | | .01*** | | | .008*** | | | .014*** | | | .01*** | | | .001 | | |

*Note*. B is the non-standardized regression coefficient; SE is the standard error; β is the standardized regression coefficient.
262 events, N=5598
***p <.001, **p <.01, *p <.05

*1.2. Contribution of Features of an Event to the Emotional Load the Event Creates (RQ 2)*

To address RQ2 we used multiple linear regression, in which we predict emotional load using the binary coding of event features provided by participants, and ratings of frequency facet. The fitted regression model was:

$$EmotionalLoad = \beta_0 + \bar{\beta}_1 \cdot FEATURE + \epsilon_1, \quad (1)$$

where FEATURE is a binary vector indicating whether the event was categorized to specific feature, $\bar{\beta}_1$ is a vector of coefficients (one for each feature), and $\epsilon_1$is the error term.

The fitted regression model showed a statistically significant effect ($R^2$ = .09, F(19, 5578) = 28.28, $p$ <.001), confirming the model's ability to explain a significant portion of the variance in emotional load, supporting the relevance of the features of events as predictors of the level of emotional load an event creates. Based on this analysis we offer the following insights regarding the specific effects of the features within each facet on the emotional load an event creates.

1. Active involvement significantly predicted higher emotional load ($\beta$ =.15, $p$ <.001) compared to holding the role of a bystander. This suggests that individuals actively engaged in situations experience a distinct and significant increase in emotional load compared to external bystanders.
2. Being responsible for a situation is associated with a lower emotional workload ($\beta$ = -.07, $p$ <.001) compared to an event for which someone else is responsible. This suggests that individuals experience a lower emotional load when they have a sense of control or responsibility, consistent with research on the effects of the sense of control (e.g., Siu & Cooper, 1998; Rostami et al., 2021; Lundberg et al., 2007; Infurna et al., 2011).
3. Managerial positions significantly shape emotional experiences within the healthcare sector. Managers impact emotional load both when they are responsible for the event (β = .04, p < .05) and when they are influenced by the event ($\beta$ = .04, $p$ <.001).

4. Patient responsibility increases the emotional load of an event ($\beta$ = .06, $p$ <.001); patients being influenced by the event has no effect on the emotional load; influence on family members significantly adds to the emotional load ($\beta$ = .1, $p$ <.001); influence on a co-worker decreases the emotional load ($\beta$ = -.06, $p$ <.001).
5. Events that occur when an employee is performing administrative tasks negatively affects the emotional load ($\beta$ = -.08, $p$ <.001), as do events that occur when an employee is on a break ($\beta$ = -.03, $p$ <.05), or when something happens throughout a specific work shift ($\beta$ = -.03, p <.05). But in other events, where the employee is providing medical treatment or interacting with a coworker, the timing of the event does not affect the emotional load.
6. Frequency was negatively associated with emotional load ($\beta$ = -.19, $p$ <.001), meaning that events that happen more frequently demand less emotional resources to handle.

For detailed coefficients and significance levels of all the features, see Model 1 in Table 7.

*1.3. Is there a difference between Operational Load and Emotional Load? (RQ3)*

We used multiple linear regression to see if content of event predicts its emotional load (i.e., responses to the question of "what happened in the event?"). We incorporated characteristics of operational load – "Time pressure", "Denied or limited resources" and "Overload of multiple tasks" – (Hall, 1991) as separate independent variables in the model predicting emotional load. The results of this analysis are summarized in Table 4. The fitted regression model was:

$$EmotionalLoad = \delta_0 + \bar{\delta_1} \cdot TYPE + \epsilon_2,$$

where $TYPE$ is a binary vector indicating whether the event was categorized to specific type, $\bar{\delta_1}$ is a vector of coefficients (one for each feature), and $\epsilon_2$ is the error term.

The regression was statistically significant ($R^2$ = .13, F(13, 5584) = 64.99, $p$ <.001), and yielded two significant findings. First, it shows that the three operational load

characteristics - denied or limited resources, time pressure and overload or multiple tasks - do not show a statistically significant impact on emotional load ($p > .05$). This supports our conceptualization of emotional load as a distinct type of load, with separate and distinct effects of the known concept of operational load.

Second, it shows distinct effects of different event types on emotional load. To illustrate, physical threat or aggression ($\beta = .18$, $p < .001$), psychological threat of aggression ($\beta = .17$, $p < .001$) and death of a patient ($\beta = .15$, $p < .001$) evoke higher emotional load compared to events characterized by complex professional situations ($\beta = .07$, $p < .001$), medical error ($\beta = .07$, $p < .001$) and complex medical situation ($\beta = .03$, $p < .05$) (see Table 4 for detailed coefficients and significance levels). These findings offer useful insights regarding the conceptual composition of emotional load.

**Table 4.** *Multiple Linear Regression Predicting Emotional Load by Types of Events in Healthcare*

| Variables | B | SE | β |
|---|---|---|---|
| Constant | 3.87 | .04 | |
| Deterioration in patient's medical condition | .52*** | .07 | .10 |
| Complex medical situation | .12* | .05 | .03 |
| Complex professional situation | .26*** | .05 | .07 |
| Medical error | .44*** | .07 | .07 |
| Physical threat or aggression | 1.02*** | .07 | .18 |
| Psychological threat or aggression | .77*** | .06 | .17 |
| Death | 1.15*** | .10 | .15 |
| Inter-personal issues | .34*** | .05 | .09 |
| Communication problems | -.05 | .05 | -.01 |
| Discomfort in public | .12 | .07 | .02 |
| Denied, inappropriate or limited resources | .09 | .06 | .02 |
| Time pressure | -.11 | .06 | -.03 |
| Overload or multiple tasks | .00 | .06 | .00 |
| R2 | .13 | | |
| Adjusted R2 | .13 | | |

*Note.* B is the non-standardized regression coefficient; SE is the standard error;
β is the standardized regression coefficient.
262 events, N=5598
***p <.001, **p <.01, *p <.05

*1.4.What is the Relationship between Emotional Labor and Emotional Load? (RQ4)*

Research Question 4 comprises three sub-questions: First, (RQ4.1) it asks whether emotional load can be empirically distinguished from emotional labor, a question that we address using factor analysis. Second it asks (RQ4.2) what features of events explain emotional labor versus emotional load. We address this question by predicting emotional labor with the features of events. Third, it asks (RQ4.3) whether emotional labor plays a mediating role in the relationship between the features of events and emotional load.

*1.4.1. Is Emotional Load Different from Emotional Labor?*

We conducted an exploratory factor analysis using principal axis factoring (PAF) with oblique rotation (direct oblimin) on 5 items measuring emotional load and 3 items measuring emotional labor. We chose principal axis factoring (PAF) to identify underlying constructs, focusing on shared variance among items. Oblique rotation (direct oblimin) was used as we expected the factors to be correlated, allowing for more realistic and interpretable results, given the potential interrelationship between emotional load and emotional labor. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis (KMO =.91). Bartlett's test of sphericity was significant ($p<.001$) indicating that correlation structure is adequate for factor analyses. Applying PAF with the criterion of eigenvalues greater than 1 yielded a two-factor solution as the best fit for the data, accounting for 81.16% of the variance.

The results of the factor analysis offer two noteworthy findings: First, we see distinct items associated with emotional load versus emotional labor (see Table 5). For example, the items "This event is emotionally demanding" and "This event is emotionally upsetting" clearly load on a factor of emotional load while the items "This event requires the employee to resist expressing true feelings" and "This event requires the employee to show emotions they don't really feel" clearly load on a factor of emotional labor. This affirms the unique and

distinct contribution of each concept. Second, the results show a correlation of 0.65 between emotional load and emotional labor, which suggests that, although distinct, these factors are related.

**Table 5.** *Two-Factor Solution for Emotional Load and Emotional Labor Items*

| Item | Factor loading | |
|---|---|---|
| | 1 | 2 |
| ***Factor 1: Emotional Load*** | | |
| This event is emotionally demanding | **.92** | |
| This event is emotionally upseting | **.92** | |
| This event has an emotional impact on the employee | **.91** | |
| This event is emotionally threatening | **.88** | |
| This event involves emotional difficulty | **.77** | |
| ***Factor 2: Emotional Labor*** | | |
| The employee is required to resist expressing true feelings | | **.91** |
| The employee is required to show emotions they don't really feel | | **.87** |
| The employee is required to hide true feelings | | **.72** |
| Eigenvalue | 5.31 | 1.19 |
| % of Variance | 66.34 | 14.83 |
| Cumulative % | 66.34 | 81.16 |

*Note.* N = 5598. The extraction method was principal axis factoring with an oblique rotation (direct oblimin). Factor loadings below .30 are not shown in this table.

*1.4.2. Contribution of Features of Events to Emotional Labor.*

We explore the unique contribution of features to emotional labor using multiple linear regression, in which we predict emotional labor using the features of events. The fitted regression model was:

$$EmotionalLabor = \gamma_0 + \bar{\gamma}_1 \cdot FEATURE + \epsilon_3. \quad (2)$$

As before $FEATURE$ is a binary vector indicating whether the event was categorized to specific feature, $\bar{\gamma}_1$ is a vector of coefficients (one for each feature), and $\epsilon_3$ is the error term.

Comparing this model with the model predicting emotional load, we first see that some features exclusively affect emotional load, some solely impact emotional labor, and others influence both emotional load and emotional labor. A summary of these three sets of features is presented in Table 6. For instance, active involvement of the employee in the event

increases both emotional load and emotional labor. Similar trends are observed across features describing the responsible party for the event (i.e., the employee, a patient, the manager), with the exception of a family member of a patient, whose responsibility evokes emotional labor but not emotional load. These findings underscore that emotional load and emotional labor are shaped by a combination of distinct and shared features, aligning with our earlier observations from the factor analysis (see Model 2 in Table 7 for detailed coefficients and significance levels).

**Table 6.** *Summary of Features Effects on Emotional Labor and Emotional Load*

| Facets | Features | Emotional Load | Emotional Labor |
|---|---|---|---|
| *How is employee involved?* | Active participant | ✕ | ✕ |
| *Who is responsible?* | Employee | ✕ | ✕ |
| | Patient | ✕ | ✕ |
| | Family members | | ✕ |
| | Coworkers | | |
| | Manager | ✕ | ✕ |
| | The system | | |
| *Who is influenced?* | Employee | | ✕ |
| | Patient | | |
| | Family members | ✕ | ✕ |
| | Coworkers | ✕ | ✕ |
| | Manager | ✕ | |
| | The system | | |
| *When did it happen?* | Providing medical treatment | | |
| | Interacting with coworker | | |
| | Performing administrative tasks | ✕ | ✕ |
| | Throughout the work shift | ✕ | |
| | On a break | ✕ | |
| *Frequency* | | ✕ | ✕ |

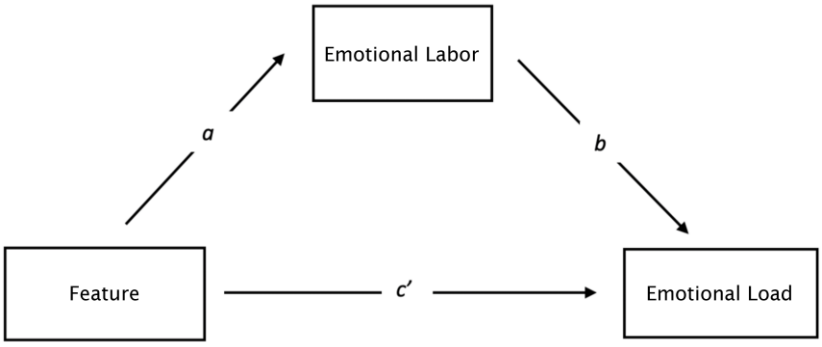
*Note*. ✕ represents a significant effect of the feature. Detailed coefficients and significance levels are presented in Table 7.

### *1.4.3. The Mediating Role of Emotional Labor.*

We explore the mediating role of emotional labor in the relationship between event features and emotional load. This analysis follows the steps outlined by Baron and Kenny (1986). We first examined the direct effect of event features on emotional load (path c) and found a significant prediction ($R^2 = .09$, $F(19, 5578) = 28.28$, $p < .001$). As illustrated in

Figure 3, we also assessed the effect of event features on emotional labor (path a), which also showed significant prediction ($R^2 = .04$, $F(19, 5578) = 11.91$, $p < .001$), when addressing Research Question 4.2.

Next, to test the mediation, we predicted emotional load using both the features of events and emotional labor. This allowed us to examine path b (the effect of emotional labor on emotional load, controlling for event features) and path c' (the direct effect of event features on emotional load, controlling for emotional labor). The fitted regression model was:




$$EmotionalLoad = \alpha_0 + \bar{\alpha}_1 \cdot FEATURE + \alpha_2 \cdot EmotionalLabor + \epsilon_4; \quad (3)$$

$FEATURE$ is a binary vector indicating whether the event was categorized to specific feature, $\bar{\alpha}_1$ is a vector of coefficients (one for each feature), $\alpha_2$ is the coefficient for emotional labor, and $\epsilon_4$ is the error term.

The regression model incorporating both event features and emotional labor was statistically significant ($R^2 = .41$, $F(20, 5577) = 193.01$, $p < .001$). The findings demonstrated that emotional labor is a significant predictor of emotional load ($\beta = .58$, $p < .001$) (see Table 7 for detailed coefficients and significance levels). Moreover, after accounting for emotional labor, several event features continued to have a direct effect on emotional load, including those that showed partial mediation and those with no mediation effect. These results confirm that emotional labor partially mediates the relationship between event features and emotional load. Emotional labor thus serves as an important intermediary factor, indicating that while

event features directly affect emotional load, some features also influence emotional load indirectly through emotional labor.

In summary, our analysis demonstrates the partial role of emotional labor in mediating the relationship between event features and emotional load, showing both direct and indirect pathways of the impact of work-related events on emotional load of healthcare employees.

**Figure 3.** *Mediation Model of the Relationship Between Event Features, Emotional Labor, and Emotional Load With Standardized Coefficients*

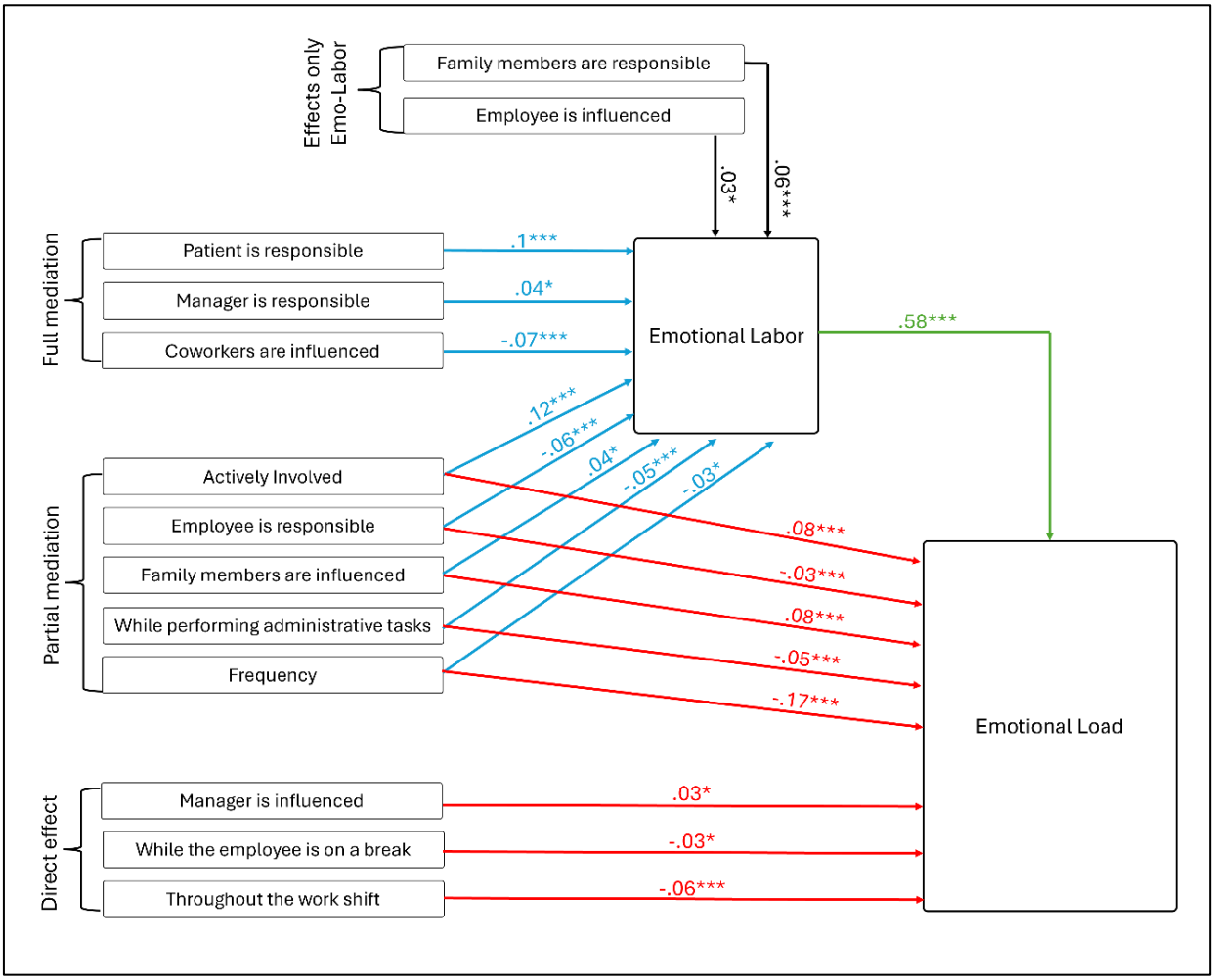


**Table 7.** *Mediation Analysis of Facets and Features (X), Emotional Labor (M) and Emotional Load (Y)*

| | Model 1 Emotional Load | | | Model 2 Emotional Labor | | | Model 3 Emotional Load | | |
|---|---|---|---|---|---|---|---|---|---|
| | B | SE | β | B | SE | β | B | SE | β |
| Constant | 4.81 | .09 | | 3.52 | .09 | | 2.75 | .08 | |
| *Employee's involvement* | | | | | | | | | |
| Active participant | .61*** | .06 | .15 | .5*** | .06 | .12 | .32*** | .05 | .08 |
| *Who is responsible?* | | | | | | | | | |
| Employee | -.23*** | .05 | -.07 | -.2*** | .05 | -.06 | -.12*** | .04 | -.03 |
| Patient | .25*** | .05 | .06 | .38*** | .05 | .10 | .03 | .04 | .01 |
| Family members | .04 | .07 | .01 | .3*** | .07 | .06 | -.13* | .06 | -.03 |
| Coworkers | .11 | .06 | .03 | .03 | .06 | .01 | .09 | .05 | .02 |
| Manager | .15* | .06 | .04 | .14* | .06 | .04 | .06 | .05 | .02 |
| The system | -.07 | .05 | -.02 | -.03 | .05 | -.01 | -.05 | .04 | -.01 |
| *Who is influenced?* | | | | | | | | | |
| Employee | .09 | .06 | .02 | .12* | .06 | .03 | .02 | .05 | .01 |
| Patient | -.02 | .05 | -.01 | -.09 | .05 | -.03 | .03 | .04 | .01 |
| Family members | .43*** | .06 | .10 | .15* | .06 | .04 | .34*** | .05 | .08 |
| Coworkers | -.23*** | .06 | -.06 | -.24*** | .06 | -.07 | -.09 | .05 | -.02 |
| Manager | .22* | .08 | .04 | .10 | .08 | .02 | .17* | .06 | .03 |
| The system | .07 | .07 | .02 | .04 | .07 | .01 | .05 | .06 | .01 |
| *Timing of event* | | | | | | | | | |
| Providing medical treatment | -.10 | .06 | -.02 | -.07 | .06 | -.02 | -.06 | .05 | -.01 |
| Interacting with coworker | -.07 | .13 | -.01 | -.09 | .13 | -.01 | -.01 | .10 | .00 |
| Performing administrative tasks | -.86*** | .15 | -.08 | -.51*** | .15 | -.05 | .56*** | .12 | -.05 |
| Throughout the work shift | -.29*** | .06 | -.07 | -.09 | .06 | -.02 | -.23*** | .04 | -.06 |
| On a break | -.42* | .18 | -.03 | -.09 | .18 | -.01 | -.38* | .14 | -.03 |
| *Frequency* | -.23*** | .02 | -.19 | -.03* | .02 | -.03 | -.21*** | .01 | -.17 |
| Emotional Labor | | | | | | | .58*** | .01 | .58 |
| R2 | .09 | | | .04 | | | .41 | | |
| Adjusted R2 | .08 | | | .04 | | | .41 | | |

*Note*. B is the non-standardized regression coefficient; SE is the standard error; β is the standardized regression coefficient.
262 events, N=5598
***p <.001, **p <.01, *p <.05

### *2. Predicting Emotional Load at the Event Level*

To develop foundations for integrating emotional workload with the operational research agenda of planning, routing and staffing (Hall, 1991), we next examined the consensus about the features of events and the emotional load they evoke. The consensus about the features of events and the emotional load they evoke was determined using event-level data. The data coding and filtering process for this analysis is discussed in the method section.

We conducted a mediation analysis with the new set of data to investigate the mediating role of emotional labor in the association between event features and emotional load at the event level, rather than employee level. We used the using the following regression models:

$$EmotionalLoad = \upsilon_0 + \bar{\upsilon}_1 \cdot FEATURE + \epsilon_5 \quad (1)$$

$$EmotionalLabor = \eta_0 + \bar{\eta}_1 \cdot FEATURE + \epsilon_6 \quad (2)$$

$$EmotionalLoad = \rho_0 + \bar{\rho}_1 \cdot FEATURE + \rho_2 \cdot EmotionalLabor + \epsilon_7 \quad (3)$$

In these models, $FEATURE$ is a binary vector indicating whether the event was categorized to specific feature. $\bar{\upsilon}_1$, $\bar{\eta}_1$, and $\bar{\rho}_1$ are vectors of coefficients (one for each feature). $\rho_3$ is the coefficient for emotional labor, and $\epsilon_5$, $\epsilon_6$, and $\epsilon_7$ are the error terms for each respective model.

This analysis revealed that active involvement in an event directly impacts emotional load, and emotional labor does not mediate this relationship at the event level. This is a notable difference from the employee-level analysis, where active involvement was partially mediated by emotional labor. Notably, some effects align with our prior employee-level analysis: the frequency of events in healthcare work showed partial mediation by emotional labor. Events where patients are responsible are fully mediated by emotional labor, whereas events involving a patient's family member show an exclusive effect on emotional labor. Additionally, when the employee is influenced, it only affects emotional labor and not emotional load, similar to findings at the employee level. For detailed coefficients and significance levels, see Table 8. For a summarized comparison of the effects found at the employee level and the event level, see Table 11.

**Table 8.** *Mediation Analysis of Facets and Frequency (X), Emotional Labor (M) and Emotional Load (Y) Using Event Level Data*

| | Model 1 Emotional Load | | | Model 2 Emotional Labor | | | Model 3 Emotional Load | | |
|---|---|---|---|---|---|---|---|---|---|
| | B | SE | β | B | SE | β | B | SE | β |
| Constant | 7.37 | .95 | | 4.46 | .45 | | 2.69 | 1.38 | |
| *Employee's involvement* | | | | | | | | | |
| Active participant | .73 | .42 | .19 | .34 | .20 | .19 | .37 | .37 | .10 |
| *Who is responsible?* | | | | | | | | | |
| Employee | 1.23* | .54 | -.25 | -.66* | .25 | -.28 | -.53 | .50 | -.11 |
| Patient | .80 | .62 | .13 | .66* | .29 | .22 | .11 | .57 | .02 |
| Family members | 2.01* | .98 | .23 | 1.21* | .46 | .29 | .75 | .91 | .09 |
| Coworkers | .57 | .67 | .11 | -.16 | .31 | -.07 | .74 | .59 | .15 |
| Manager | 1.57* | .66 | .27 | .89* | .31 | .31 | .64 | .62 | .11 |
| The system | -.72 | .59 | -.12 | .21 | .28 | .07 | -.94 | .52 | -.16 |
| *Who is influenced?* | | | | | | | | | |
| Employee | .01 | .45 | .00 | .11 | .21 | .06 | -.11 | .39 | -.03 |
| Patient | -.24 | .48 | -.06 | .19 | .23 | .09 | -.44 | .42 | -.10 |
| Family members | 1.46 | 1.20 | .12 | 1.99*** | .57 | .33 | -.63 | 1.17 | -.05 |
| Coworkers | -.03 | .92 | .00 | .69 | .43 | .21 | -.75 | .82 | -.11 |
| Manager | 1.87 | 2.48 | .08 | 1.51 | 1.17 | .13 | .28 | 2.21 | .01 |
| The system | -2.04 | 2.26 | -.10 | .54 | 1.06 | .05 | -2.61 | 1.99 | -.13 |
| *Timing of event* | | | | | | | | | |
| Providing medical treatment | -1.14 | 1.03 | -.11 | -.71 | .49 | -.14 | -.40 | .92 | -.04 |
| Interacting with coworker | -4.80 | 3.39 | -.15 | -.24 | 1.60 | -.02 | -4.54 | 2.98 | -.14 |
| Performing administrative tasks | 2.19 | 4.46 | .05 | 1.95 | 2.10 | .10 | .14 | 3.94 | .00 |
| Throughout the work shift | 1.18 | 2.10 | .06 | -.19 | .99 | -.02 | 1.37 | 1.85 | .07 |
| On a break | -1.28 | 1.35 | -.10 | -.74 | .64 | -.12 | -.51 | 1.20 | -.04 |
| *Frequency* | -.97*** | .21 | -.48 | -.4*** | .10 | -.41 | -.55* | .21 | -.27 |
| Emotional Labor | | | | | | | 1.05*** | .249 | .511 |
| R2 | .54 | | | .57 | | | .65 | | |
| Adjusted R2 | .38 | | | .42 | | | .52 | | |

*Note*. B is the non-standardized regression coefficient; SE is the standard error; β is the standardized regression coefficient.
76 events, N=76
***p <.001, **p <.01, *p <.05

### *3. Eliminating Effects of Same Source Bias*

As a final analysis, we sought to attenuate potential same-source bias in our previous analysis. Specifically, since the same participants recorded both the emotional labor and emotional load for each event, there may be a same-source effect on these ratings. The high correlation between emotional load and emotional labor ($r = .59$, $p < .001$) in our findings might be due to this bias. Therefore, we gathered new ratings of emotional load for each event, from a separate sample of participants, and combined them with the ratings described above of features, facets, and emotional labor.

Utilizing the Prolific platform (https://www.prolific.com), we recruited 126 new healthcare employees (78.2% women, mean age 41.39 (SD = 11.96). Detailed demographic information is provided in Table 9. Participants received £1.25 as compensation and spent an average of 8 minutes completing the study. Each participant was asked to evaluate the level of emotional load and the frequency of 10 randomly presented events. We excluded ratings from participants who had never experienced the event (396), resulting in the removal of 31 events with fewer than 3 ratings (our set minimum). The final dataset comprised 736 valid ratings for 229 events, ensuring a minimum of 3 different ratings per event (M_raters = 3.21, SD_raters = 0.41). After applying a filter for events with an inter-rater agreement of rwg(j) = 0.5 or higher, our refined sample consisted of 76 events.

**Table 9.** *Detailed Demographic Information of Participants*

| Demographic | Percentage |
|---|---|
| Gender | |
| Women | 78.2% |
| Profession | |
| Nurses | 55.6% |
| Doctors | 14.5% |
| Medical support staff | 8.9% |
| Administration workers | 7.3% |
| Other healthcare workers (radiographers, therapists, technicians) | 13.7% |
| Organization | |
| Hospitals | 69.4% |
| HMO's | 8.9% |
| Clinics and general practices | 8.9% |
| Mental health centers | 6.5% |
| Other organizations (care homes, hospices) | 6.5% |
| Tenure | |
| > 10 years | 60.5% |
| 7-9 years | 9.7% |
| 4-6 years | 18.5% |
| ≤ 3 years | 5.6% |
| Mean age (SD) | 41.39 (11.9) |

*Note.* N=126

We then used the summarized event-level data (features, facets, and emotional labor) reported in the first sample, to predict emotional load reported by the new sample, testing

also the mediating influence of emotional labor in the relationship between event features and emotional load. The fitted regression models were:

$$EmotionalLoad = \varphi_0 + \bar{\varphi}_1 \cdot FEATURE + \epsilon_8 \quad (1)$$

$$EmotionalLabor = \omega_0 + \bar{\omega}_1 \cdot FEATURE + \epsilon_9 \quad (2)$$

$$EmotionalLoad = \lambda_0 + \bar{\lambda}_1 \cdot FEATURE + \lambda_2 \cdot EmotionalLabor + \epsilon_{10} \quad (3)$$

In these models, $FEATURE$ is a binary vector indicating whether the event was categorized to specific feature. $\bar{\varphi}_1$, $\bar{\omega}_1$, and $\bar{\lambda}_1$ are vectors of coefficients (one for each feature). $\lambda_2$ is the coefficient for emotional labor, and $\epsilon_8$, $\epsilon_9$, and $\epsilon_{10}$ are the error terms for each respective model.

Our results reveal the partial mediation of emotional labor on the relationship between frequency on emotional load as consistent across all three analyses (i.e. employee-level, event-level, and new sample without same-source bias) ($\beta$ =-.33, $p$ <.001).

Comparing these results with the employee-level and event-level analyses affected by same-source bias shows notable differences and similarities. In terms of differences: First, active participation did not show any effect in this analysis, unlike in the employee-level and event-level analyses where active involvement had a partial mediation and direct effect respectively. Second, findings reveal full mediation when events are attributed to employees or patients' family members, unlike the event-level analyses with the same source bias, where we found no relationship with emotional load and an effect of family members on emotional labor only. Third, a patient's responsibility affects only emotional labor and not emotional load, unlike the two previous models that showed full mediation by emotional labor

Conversely, the results show a striking similarity to the employee-level analysis in that we see full mediation when the responsibility lies with the manager. Moreover, frequency of events shows a stable effect across all three mediation analyses, indicating its direct and indirect influence on emotional load (indirectly through emotional labor). The consistent

effect of event frequency underscores its importance in influencing emotional load. For detailed coefficients and significance levels, see Table 10. For a summarized comparison of the effects found at the employee level and the event level, see Table 11.

**Table 10.** *Mediation Analysis of Facets and Frequency (X), Emotional Labor (M) and Emotional Load (Y) Using New Ratings for Emotional Load*

| | Model 1 Emotional Load | | | Model 2 Emotional Labor | | | Model 3 Emotional Load | | |
|---|---|---|---|---|---|---|---|---|---|
| | B | SE | β | B | SE | β | B | SE | β |
| Constant | 6.77 | .50 | | 3.97 | .40 | | 3.11 | .45 | |
| *Employee's involvement* | | | | | | | | | |
| Active participant | .65*** | .22 | .25 | .27 | .18 | .14 | .39* | .15 | .15 |
| *Who is responsible?* | | | | | | | | | |
| Employee | -.41 | .25 | -.14 | -.21 | .20 | -.09 | -.22 | .17 | -.07 |
| Patient | .78* | .29 | .21 | .79*** | .23 | .30 | .05 | .21 | .01 |
| Family members | .39 | .33 | .09 | .62* | .26 | .21 | -.18 | .23 | -.04 |
| Coworkers | .08 | .34 | .02 | -.18 | .27 | -.07 | .25 | .23 | .07 |
| Manager | .50 | .34 | .12 | .35 | .27 | .11 | .18 | .23 | .04 |
| The system | .49 | .40 | .09 | .43 | .32 | .11 | .08 | .27 | .01 |
| *Who is influenced?* | | | | | | | | | |
| Employee | .15 | .23 | .05 | .44* | .18 | .22 | -.26 | .16 | -.09 |
| Patient | .19 | .24 | .07 | .13 | .19 | .06 | .07 | .16 | .02 |
| Family members | .80 | .45 | .13 | .68 | .36 | .15 | .17 | .31 | .03 |
| Coworkers | .30 | .40 | .06 | .33 | .32 | .09 | -.01 | .27 | .00 |
| Manager | 1.35 | .94 | .10 | .01 | .75 | .00 | 1.34* | .64 | .10 |
| The system | 1.60 | 1.24 | .10 | 1.07 | .99 | .09 | .61 | .84 | .04 |
| *Timing of event* | | | | | | | | | |
| Providing medical treatment | .05 | .51 | .01 | -.43 | .41 | -.08 | .44 | .35 | .06 |
| Interacting with coworker | -1.31 | 1.82 | -.06 | -.06 | 1.45 | .00 | -1.26 | 1.24 | -.06 |
| Performing administrative tasks | -1.21 | 2.82 | -.03 | -1.07 | 2.25 | -.04 | -.22 | 1.92 | -.01 |
| Throughout the work shift | -.07 | .94 | -.01 | .18 | .75 | .02 | -.24 | .64 | -.02 |
| On a break | .99 | 2.80 | .03 | 1.21 | 2.23 | .04 | -.13 | 1.90 | .00 |
| *Frequency* | -.85*** | .11 | -.58 | -.23* | .09 | -.22 | -.64*** | .08 | -.43 |
| Emotional Labor | | | | | | | .92*** | .07 | .67 |
| R2 | .41 | | | .28 | | | .73 | | |
| Adjusted R2 | .32 | | | .18 | | | .69 | | |

*Note*. B is the non-standardized regression coefficient; SE is the standard error; β is the standardized regression coefficient.
76 events, N=76
***p <.001, **p <.01, *p <.05

**Table 11.** *Summarized Comparison of Mediation Effects: Subject Level, Event Level, and Event Level Without Same-Source Bias*

| *Facets* | *Features* | **Subject-level** | **Event-level** | **Event level without same-source bias** |
|---|---|---|---|---|
| *How is employee involved?* | *Active participant* | Partial Mediation | Direct effect | |
| *Who is responsible?* | *Employee* | Partial Mediation | | Full Mediation |
| | *Patient* | Full Mediation | Full Mediation | Effects only emotional labor |
| | *Family members* | Effects only emotional labor | Effects only emotional labor | Full Mediation |
| | *Coworkers* | | | |
| | *Manager* | Full Mediation | | Full Mediation |
| | *The system* | | | |
| *Who is influenced?* | *Employee* | Effects only emotional labor | Effects only emotional labor | |
| | *Patient* | | | |
| | *Family members* | Partial Mediation | | Effects only emotional labor |
| | *Coworkers* | Full Mediation | | |
| | *Manager* | Direct effect | | |
| | *The system* | | | |
| *When did it happen?* | *Providing medical treatment* | | | |
| | *Interacting with coworker* | | | |
| | *Performing administrative tasks* | Partial Mediation | | |
| | *Throughout the work shift* | Direct effect | | |
| | *On a break* | Direct effect | | |
| *Frequency* | | Partial Mediation | Partial Mediation | Partial Mediation |

## Discussion

Using qualitative methods, we identified six facets and 23 features that characterize emotionally demanding events in healthcare work. A key contribution of our work is mapping the complex notion of emotional load and its varied aspects. This comprehensive understanding laid the foundation for our subsequent analyses. We then used hierarchical regression to identify which facets predict emotional load. This analysis pinpointed the specific facets contributing to emotional load. Next, we conducted linear regression to determine which specific features within the facets contribute to emotional load.

We then explored whether emotional load is a distinct concept compared to other closely related theoretical constructs. We applied regression analysis to predict emotional load using types of healthcare work events, including characteristics of operational load. Our findings demonstrated that operational load is not related to emotional load, indicating that emotional load is a distinct construct from operational load. This distinction highlights the unique emotional demands faced by healthcare employees, which are not captured by traditional measures of workload. We then employed factor analysis to differentiate between emotional load and emotional labor, revealing that, although highly correlated, they are distinct constructs.

Finally, we performed mediation analysis, which revealed emotional labor as a mediating factor in the relationship between event features and emotional load. This suggests that emotional labor itself can be seen as a form of emotional demand, integral to understanding the full scope of emotional load. This conceptualization is reasonable as emotional labor involves employees exerting effort to comply with organizational emotional display norms, which often require significant cognitive and emotional resources.

## Significant Facets and Features of Emotionally Demanding Events in Healthcare

### *Employee's Involvement and Emotional Load*

A key facet of our qualitative analysis is the nature of the employee's participation in the event. Our findings suggests that active involvement in events significantly increases the emotional load they create, compared to taking a bystander role. This result aligns with existing research highlighting the impact of personal involvement on emotional experiences. For instance, Frijda (1988) and Ortony et al. (1988) proposed that events with higher personal relevance trigger stronger emotional responses. Additionally, studies on psychological distance suggest that decreased psychological distance intensifies emotional responses (Wong & Bagozzi, 2005), reduces the severity of negative emotions (Galguera, 2014), and affects the perceived difficulty of tasks (Thomas & Tsai, 2011). The partial mediation of personal involvement through emotional labor supports the conceptualization of emotional labor as a component of emotional load. When employees are directly involved in an event, they must manage their emotional displays more intensively than when they are merely bystanders, highlighting the increased cognitive and emotional demands associated with direct involvement.

### *Responsibility and Emotional Load*

Work events can be initiated by different parties. This responsibility, whether it lies with the employee or others, influences the level of emotional load evoked by the event. The emotional demands also vary based on relationships with those involved, and therefore our analysis includes several options for other parties responsible. We identified four possible responsible parties that significantly contributed to emotional load:

**Employee responsibility**. Our findings also suggest that employee responsibility over an event reduces emotional load. This aligns with previous studies such as Siu & Cooper (1998) and Rostami et al. (2021) suggesting that a sense of control over one's environment

can mitigate stress. When employees feel responsible, they may also feel more in control, which could lower the emotional load. This suggests that responsibility, when paired with control, can buffer against emotional strain. This supports the Stress Antidote Model (Sutton & Kahn, 1986), which posits that prediction, understanding, and control are crucial in reducing workplace stress.

Employee responsibility also reduces emotional load through emotional labor, indicating a negative correlation between responsibility and emotional labor. This aligns with literature on the relationship between job autonomy and emotional labor, which suggests that employees who have less autonomy over their behavior experience more emotive dissonance, which likely leads them to fake feelings (surface acting; Morris and Feldman, 1996, 1997). However, job autonomy typically conceptualizes the broader context of general autonomy in one's job, rather than specific events (Breaugh, 1985; Hackman & Oldham, 1976; Oldham & Fried, 2016). Our findings suggest that situational control should be taken into consideration in future studies of emotional labor, as having control over specific situations may reduce the need for emotional labor and thus lessen emotional load.

**Patient responsibility.** Our findings suggest that when the patient is responsible for an emotionally demanding event, it significantly increases the emotional load experienced by healthcare employees. This effect is fully mediated through emotional labor, which aligns with existing literature on the role of emotional labor in healthcare settings. This indicates that the emotional labor required to manage these interactions is a key factor contributing to the overall emotional load.

Working with patients inherently involves a substantial amount of emotional labor due to the nature of healthcare work (Henderson, 2001). This labor is essential for making patients feel safe and comfortable, maintaining bonds with them, and reducing their anxiety during unpleasant procedures (Gray, 2010). However, when a patient is directly responsible for an

emotionally demanding event, it creates a unique strain on healthcare professionals. The need to balance professionalism with genuine care, while managing their own emotional responses, adds to the emotional load. Our results suggest that when a patient is responsible for an emotionally demanding event, healthcare professionals need to engage in surface acting. This involves hiding true feelings, such as frustration or anger towards patients, and displaying emotions that are not genuinely felt to maintain professionalism and ensure patient comfort. For example, a nurse might need to suppress feelings of frustration when dealing with a non-compliant patient and instead show patience and understanding.

**Family member responsibility.** When family members are responsible for an emotionally demanding event, it seems to significantly increase emotional labor but not emotional load for healthcare employees. One possible explanation is that interactions with family members, while requiring significant emotional regulation, are viewed as routine and transient aspects of the job and therefore might not have lasting impacts on emotional load. Healthcare employees are trained to handle them as part of their expected duties. Thus, while emotional labor is required to manage these interactions, it doesn't necessarily translate into a broader, sustained emotional load.

This raises the question why patient responsibility does affect emotional load, despite also being routine work. We suggest that this may be because patient-related events may carry more immediate and serious consequences for their health and outcomes. This direct impact can lead to a greater sense of responsibility, stress, and emotional involvement, contributing significantly to emotional load. This deeper engagement and higher stakes might explain the amplified emotional load compared to interactions with family members (Kahn, 1990). However, these are all hypotheses that require further research.

**Manager responsibility.** Our findings indicate that when the manager is responsible for an emotionally demanding event, it significantly increases the emotional load experienced

by healthcare employees. In our findings this effect was fully mediated through emotional labor, suggesting that interactions involving managerial responsibility are particularly taxing in terms of emotional regulation. For instance, if a manager is responsible for an emotionally demanding event, such as implementing a difficult policy or making a controversial decision, employees may need to engage in surface acting. Managers create emotional load when employee interactions with a manager require that they hide their true feelings, such as frustration or anger towards the manager, and require displays of emotions that are not genuinely felt to manage impressions toward the manager.

The literature on emotional labor has predominantly focused on service and teaching professions, where emotional display rules are crucial for maintaining client satisfaction or facilitating educational processes (e.g. Ashforth & Humphrey, 1993; Leidner, 1999; Schutz & Lee, 2014; Totterdell & Holman, 2003; Yin et al., 2019; Zhang & Zhu, 2008). However, when it comes to authority relations, most research has examined the emotional display requirements placed on managers themselves (e.g. Arnold et al., 2015; Gardner et al., 2009; Humphrey et al., 2012). Our findings highlight the necessity for research addressing the emotional display rules imposed on employees when communicating with their managers. This includes understanding how employees manage their emotions to navigate hierarchical relationships, particularly in situations where they might feel unable to express true feelings towards those in positions of authority.

### *Influence of Event and Emotional Load*

Work events can impact various individuals. This facet examines whether an event's effects are directly on the employee or on others, influencing the employee's emotional load. The emotional demands differ based on who is impacted, such as team members or patients, and their relationship to the employee. In our analysis, we identified four key categories that significantly contribute to emotional load:

**Influence on Employees.** Our findings indicate that when healthcare employees are influenced by an emotionally demanding event, it significantly increases emotional labor but not emotional load. An interesting finding is that when employees are responsible for an event, it affects only emotional load, while being influenced by an event affects only emotional labor. This finding aligns with the transactional model of stress and coping (Folkman, 1984; Lazarus & Folkman, 1987), suggesting that generalized beliefs about control and control appraisals are cognitive factors that influence the appraisal of threat or challenge in a particular event and determine the coping strategy individuals use. Specifically, when employees are responsible for an event, they may have a greater sense of control, leading to problem-focused coping. Conversely, when employees are influenced by an event, they might experience a lower sense of control and therefore use emotion-focused coping (Folkman & Lazarus, 1980). This finding further highlights and affirms a distinction between the concepts of emotional labor and emotional load.

**Influence on Family members.** Our findings further suggest that when events influence patients' family members, it increases the emotional load on healthcare employees, partially mediated through emotional labor. This finding affirms that the need for healthcare employees to deal with family members is emotionally taxing. Moreover, the need to handle the emotions of both the family members and the patient can create conflicting expectations, resulting in role conflict and possibly role overload. These interactions demand different reactions and behaviors from the staff member. For example, when the employee must ask family members to leave a patient's room, it requires balancing empathy and firmness, contrasting with the clinical focus required for patient care. The bottom line here is that the primary goal of a healthcare staff member is to take care of patients, but the emotional load it imposes includes other expectations and interactions, making their role more complex and demanding.

**Influence on Coworkers.** Our findings suggest that the influence of an event on coworkers decreases emotional load through emotional labor. This is a surprising finding, that does not align with the concept of self-extension. This concept suggests that experiences of others included in one's self-concept are emotionally significant as though they were one's own (James et al., 1980). Related findings on emotion contagion (e.g. Petitta et al., 2017), team member dynamics (e.g. Homan et al., 2016) and empathy (e.g. Clark et al., 2019) would also suggest that employees would tend to share some of the emotional reactions to an emotional experience of a colleague.

It may be that events affecting coworkers may diffuse emotional impact through the sense of shared experiences and support systems. When events impact coworkers, healthcare employees may share the emotional burden, leading to a sense of camaraderie and mutual support. This aligns with Halbesleben & Wheeler (2015) suggestions that the interpersonal dynamics of coworkers can lead to positive gain cycles of support and helping behavior. When employees invest effort in supporting their coworkers, those coworkers reciprocate with support, creating a reciprocal relationship that can buffer against emotional load, because employees are not facing the emotional demands alone. This highlights the role of social support in the workplace, which can buffer against individual emotional load.

**Influence on a Manager.** Finally, our findings suggest that an influence of an event on managers directly increases the emotional load on healthcare employees. This is a novel finding that deserves further research attention. When a manager is involved, employees may be more conscious of their actions and the possible consequences of their own behavior vis a vis the manager, which might add an additional layer of stress. The need to maintain professionalism and the fear of negative outcomes or evaluations by the manager can amplify the emotional burden in these situations. The precise nature of the event in general and the nature of managerial involvement are clearly worthy of further research.

### *Timing of Event and Emotional Load*

Work events can occur at different points of time in the course of employees' work, and a final facet that our qualitative analysis identified is the timing of events. We identified three possible time points that significantly contributed to emotional load:

**While performing administrative tasks.** Our findings suggest that the occurrence of an event happens while the employee is performing administrative tasks decreases emotional load, partially mediated through emotional labor. This could be because administrative tasks are likely to require less emotional engagement compared to direct patient care, allowing employees to manage their emotions more effectively. Administrative tasks are generally less emotionally intense compared to direct patient care.

**While the employee is on a break.** Events that happen while the employee is on a break also lead to lower emotional load. This can be explained by the fact that breaks offer employees time for rest and recovery, so the employee has more resources to cope and overcome the event. It may also be, however, that events occurring during breaks are less critical and have less immediate or critical implications, which would reduce their emotional impact. This finding affirms the importance of breaks for stress recovery and emotional regulation (Fritz, Ellis, Demsky, Lin, & Guros, 2013).

**Throughout the work shift.** Interestingly, events that happen throughout the work shift also directly generates lower emotional load. Continual experiences are perceived as chronic and, therefore, more predictable aspects of the job (Sutton & Kahn, 1987). Predictability is crucial to organizational stress. Predictability alleviates some of the detrimental effects commonly associated with stressful work situations (Tetrick & LaRocco, 1987; Jimmieson & Terry, 1993; Mellers et al., 2013). Research by Mohr and Wolfram (2010) supports this by showing that predictable tasks are less likely to cause irritation than unpredictable ones. Therefore, when events are spread throughout the work shift, they likely

become part of the anticipated workload, allowing employees to manage their emotional responses more effectively.

### *Frequency and Emotional Load*

While employees face certain events every day, others are rarely experienced. A final facet that our qualitative analysis identified evaluates how often events occur in the daily work of healthcare employees. Work events vary in their emotional load based on their frequency, as previous works suggested that frequent events tend to be more predictable and less disruptive (Sutton & Kahn, 1987; Tetrick & LaRocco, 1987; Jimmieson & Terry, 1993; Mellers et al., 2013). Our findings indicate that frequency is negatively tied to emotional workload, partially mediated through emotional labor. This finding aligns with the concept of habituation, where repeated exposure to similar events leads to decreased emotional response over time (Matthews & Ritter, 2019; Ferrari et al., 2011). Our study confirms that frequent events, though they might still be demanding, are perceived as less emotionally taxing, probably due to the familiarity and reduced surprise.

## Non-Significant Facets and Features of Emotionally Demanding Events in Healthcare

Our study identified several significant predictors of emotional load; however, contrary to our initial assumptions, some facets and features did not predict emotional load.

### *Duration of Demands and Emotional Load*

While employees encounter both episodic and ongoing events, this facet, identified in our qualitative analysis, evaluates the temporal aspect of work events. However, our quantitative analysis suggests that the duration of events does not significantly predict emotional load. Duration and frequency of events are considered different constructs in the literature, where duration is defined as the time the event lasts and frequency is the rate at which something occurs over a particular period of time (e.g. Brotheridge & Lee, 2003;

Sonnemans & Frijda, 1995). However, these constructs might overlap in what they capture about work events. Specifically, both constructs may reflect the expectedness and regularity of the event, two notions that influence how emotionally demanding an event is perceived to be. To illustrate, episodic events involve a sudden change compared to ongoing events and are therefore by definition less surprising (Roseman, 1984; Smith & Ellsworth, 1985). Similarly, as an event becomes more frequent, it is more expected (Shirom, 1982). Considering that, it may be that both duration and frequency deal with the predictability and regularity of the events, hence neither has a distinct in determining emotional load. Hence, while duration is an important aspect of work events, its impact on emotional load appears to be intertwined with frequency and may not provide additional explanatory power beyond what is already captured by frequency.

### *Non-Significant Features of Events*

Events where coworkers were responsible did not influence emotional load. Similarly, events where the system was responsible or influenced had no significant impact, likely due to the abstract nature of the system, which increases psychological distance and reduces emotional impact (Williams et al., 2014; Wong & Bagozzi, 2005).

Surprisingly, events that directly influenced patients did not impact emotional load, possibly due to habituation among healthcare employees (Matthews & Ritter, 2019; Ferrari et al., 2011). The routine nature of patient care and professional training may mitigate the emotional load associated with these events.

Our findings indicate that events occurring while healthcare employees are providing medical treatment do not significantly influence emotional load. Several factors may contribute to this outcome. Firstly, healthcare professionals are extensively trained to manage stress and maintain composure during medical procedures. This training likely equips them with strategies to mitigate the emotional load typically associated with such events. Secondly,

during medical treatments, professionals tend to be highly focused on the technical aspects of their work. This intense focus on procedure and precision may overshadow the emotional aspects of the job, thereby reducing the perceived emotional load. Thirdly, the structured environment of medical treatments is characterized by established protocols and routines. These protocols provide clear guidelines and reduce uncertainty, and therefore might buffer against emotional load.

**Challenges in Achieving Objective Measurement of Emotional Workload**

Our goal in this effort is to contribute to the development of a more objective measurement of emotional workload in healthcare by trying to predict emotional load using event-level data. This shift aligns with Brief and George's (1995) call for an objective understanding of work experiences. The predictive models at the event level, with and without same-source bias, demonstrated statistical significance, affirming the relevance of event features in predicting emotional load.

Although the direction of the effects on emotional load was consistent in some features, the mediation effects varied. Understanding these inconsistencies is crucial for developing objective measures of emotional workload. For instance, active participation showed partial mediation at the employee level, a direct effect at the event level, and no effect without same-source bias. When employees were responsible for an event, it demonstrated partial mediation at the employee level, no effect at the event level, and full mediation without same-source bias. Similarly, when family members were influenced, results demonstrated partial mediation at the employee level, no effect at the event level, and affected only emotional labor without same-source bias. Events occurring while performing administrative tasks resulted in partial mediation at the employee level and no effect at the event and without same-source bias levels. Frequency, however, showed a consistent pattern,

indicating a stable impact on emotional load across all three models—employee level, event level, and without same-source bias.

These inconsistencies highlight the complexity of emotional load and underscore the need for diverse methodological approaches. The variations in mediation effects emphasize the challenges in developing objective measures, as they likely arise from differences in how individuals perceive and respond to events versus a more generalized assessment at the event level. Moreover, the influence of same-source bias may have affected initial ratings, leading to different mediation effects when this bias was removed. Future studies should adopt multi-faceted methodological approaches, integrating both individual and event-level analyses while controlling for potential biases, to capture a more comprehensive and accurate understanding of the factors influencing emotional load in healthcare settings. It is also likely that the circumstances surrounding an event can effectively predict emotional load. This advancement holds significant implications for both management and research, offering a foundation for automating the estimation of the emotional demands employees experience.

**Future Directions and Limitations**

Our study, while providing valuable insights, has several limitations that suggest avenues for future research. First, we did not explicitly address the interactions between the features and facets of events. Understanding the effects of multiple features occurring simultaneously is crucial for a nuanced understanding of emotional load. Future research should explore these interactions, such as examining how the combination of event frequency and responsibility affects emotional load. Moreover, our study did not delve into the cumulative impact of multiple events during a workday, which could offer valuable insights into the aggregate effects on emotional load and employee well-being.

Although we aimed to objectively classify events based on facets and features, the classification process inevitably involved subjective judgments from participants. Predicting

emotional load using event level data provided less insights about specific event features effect than subject level. Since we see that people do agree on the emotional load level on most events, we suggest future studies to develop tools to measure emotional load objectively. Additionally, our study primarily focused on surface acting as a component of emotional labor, neglecting deep acting, where employees genuinely try to feel the emotions they are displaying. Including measures of deep acting in future studies could provide a fuller picture of emotional labor's role and offer insights into different coping strategies used by healthcare employees. And can also address the inconsistency found in the mediating role of emotional labor.

We relied on data from healthcare employees in specific settings such as hospitals, HMOs, and general practices. This limitation might restrict the generalizability of our findings to other healthcare environments or regions with different systems and cultural contexts. Extending the study to diverse professional settings could assess the universality or context-specific nature of emotional load, providing broader insights beyond healthcare.

One notable limitation is the inability to examine the direct impact of actual experiences of emotional demands on employees and their subsequent work performance. This remains a critical area for further investigation to unravel the intricate relationship between emotional load and employee well-being.

Beyond addressing these limitations, exploring the role of technology in managing emotional load, such as using AI and machine learning to predict emotionally demanding events and provide real-time support to healthcare employees, could offer innovative solutions to mitigate emotional load in healthcare settings.

By addressing these limitations and exploring these future directions, the research on emotional load in healthcare can be further refined and expanded, ultimately contributing to the well-being of healthcare employees and the quality of care they provide.

## Conclusion

In brief, our study establishes emotional load as a viable construct in healthcare settings. Firstly, it emerges as a distinct concept, separate from both operational load and emotional labor. Secondly, the role of emotional labor as a mediating factor unveils significant insights into the nuanced effects of emotional load. Lastly, our identification of six facets and 21 features defining healthcare work events underscores the diverse nature of emotional load, setting the ground for a more objective approach to define and measure emotional load. Moreover, our exploration of event-level measures for predicting emotional load underscores the importance of moving away from subjective assessments, paving the way for more reliable and practical applications in management and research. While our study marks a significant step forward, further research is needed to address remaining gaps and limitations, ultimately advancing our comprehension of emotional workload and its implications for workplace dynamics and employee health.

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**Appendix A.** *Descriptive statistics of emotional load, emotional labor and frequency for each event*

| | Event | n | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | | M | SD | M | SD | M | SD |
| 1 | Francis prepares someone for surgery | 20 | 1.92 | 1.10 | 2.18 | 1.19 | 4.15 | 1.06 |
| 2 | Francis must call a physician from a different ward | 21 | 2.05 | 1.28 | 2.02 | 1.12 | 4.14 | 1.28 |
| 3 | Francis' patient's condition does not require medical attention | 23 | 2.06 | 1.36 | 2.04 | 1.03 | 4.52 | 1.34 |
| 4 | Someone knocks on the door while Francis is with a patient | 22 | 2.09 | 1.02 | 2.47 | 1.01 | 5.05 | 1.01 |
| 5 | A coworker in Francis' shift repeatedly checks themselves before doing something | 21 | 2.18 | 1.06 | 2.51 | 1.22 | 3.81 | 1.55 |
| 6 | Francis must write a letter for a patient | 25 | 2.18 | 1.19 | 2.36 | 1.42 | 3.76 | 1.57 |
| 7 | Francis must request something from another ward | 22 | 2.20 | 1.39 | 2.29 | 1.35 | 4.59 | 1.47 |
| 8 | Francis repeatedly checks their email | 25 | 2.27 | 1.25 | 2.17 | 1.43 | 4.44 | 1.37 |
| 9 | Someone is moved to the front of the queue because of their medical condition | 23 | 2.29 | 1.05 | 2.45 | 1.43 | 4.46 | 1.54 |
| 10 | Francis has difficulties talking because of a sore throat | 19 | 2.42 | 1.19 | 2.81 | 1.76 | 2.89 | 0.76 |
| 11 | The cafeteria at Francis' work isn't open | 19 | 2.54 | 1.33 | 2.32 | 1.27 | 2.95 | 1.31 |
| 12 | Francis must wait to consult with a senior physician | 22 | 2.56 | 1.20 | 2.74 | 1.32 | 5.18 | 0.80 |
| 13 | A coworker Francis must answer to calls during work on Francis' personal phone | 19 | 2.58 | 1.28 | 2.91 | 1.46 | 3.68 | 1.45 |
| 14 | Francis must do administrative work | 22 | 2.60 | 1.71 | 2.58 | 1.37 | 5.20 | 1.39 |
| 15 | Francis' patient needs to be treated by multiple professionals | 24 | 2.60 | 1.26 | 2.17 | 1.15 | 4.98 | 1.07 |
| 16 | Patients chatter outside a room in which Francis is working | 25 | 2.70 | 1.64 | 2.76 | 1.55 | 4.88 | 1.26 |
| 17 | A coworker makes a mistake | 16 | 2.74 | 1.46 | 2.46 | 1.43 | 4.00 | 1.49 |
| 18 | Francis must reprioritize work tasks | 20 | 2.79 | 1.69 | 3.00 | 1.76 | 4.88 | 1.20 |
| 19 | Francis has to perform bureaucratic work | 21 | 2.81 | 1.86 | 3.05 | 1.92 | 4.19 | 1.42 |
| 20 | A patient enters a room while Francis is with another patient | 20 | 2.82 | 1.32 | 2.95 | 1.49 | 3.78 | 1.07 |
| 21 | Francis does something that is irrelevant for a patient's treatment just to meet their expectations | 20 | 2.85 | 1.58 | 3.50 | 1.78 | 3.90 | 1.36 |
| 22 | Francis' ward undergoes a reorganization | 23 | 2.85 | 1.55 | 2.57 | 1.48 | 2.35 | 0.78 |
| 23 | Francis is assigned to a new patient | 25 | 2.89 | 1.73 | 2.91 | 1.60 | 5.30 | 1.10 |
| 24 | A coworker on Francis' shift is late. | 23 | 2.92 | 1.27 | 3.22 | 1.62 | 4.35 | 1.11 |
| 25 | Francis' patient removes their IV | 20 | 2.94 | 1.48 | 3.72 | 1.52 | 3.75 | 1.20 |
| 26 | Francis feels a sense of identification with a family member (e.g., similar age, race) | 19 | 2.96 | 1.63 | 3.07 | 1.60 | 3.61 | 1.71 |
| 27 | Francis has multiple managers | 28 | 3.04 | 1.68 | 2.83 | 1.77 | 3.80 | 1.65 |
| 28 | Francis must closely follow and keep eyes on a monitor | 25 | 3.04 | 1.58 | 2.81 | 1.57 | 4.36 | 1.27 |
| 29 | Francis' shift has a lot of new staff members | 19 | 3.04 | 1.55 | 3.02 | 1.64 | 3.47 | 1.32 |
| 30 | There is a long queue of people waiting | 23 | 3.04 | 1.49 | 3.36 | 1.42 | 4.98 | 1.27 |
| 31 | It is night time and Francis must call the physician on duty | 23 | 3.05 | 1.69 | 2.72 | 1.66 | 4.50 | 1.13 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 32 | Francis arrives to work at the last minute and must immediately start to work | 26 | 3.12 | 1.34 | 2.90 | 1.73 | 3.71 | 1.13 |
| 33 | Francis' patient asks a lot of questions | 24 | 3.13 | 1.38 | 4.00 | 1.69 | 5.35 | 0.68 |
| 34 | Francis must do things that are not a part of their training (e.g., clean the corridor) | 21 | 3.17 | 1.21 | 3.49 | 1.09 | 3.90 | 1.51 |
| 35 | Francis' patient repeatedly tries to get out of bed despite given instructions | 19 | 3.18 | 1.46 | 3.39 | 1.55 | 4.21 | 1.45 |
| 36 | Francis' ward is not adequately stocked with medications or equipment | 19 | 3.24 | 1.20 | 3.47 | 1.49 | 4.00 | 1.55 |
| 37 | Crowding interferes when Francis needs to move equipment | 26 | 3.25 | 1.37 | 3.05 | 1.40 | 3.79 | 1.39 |
| 38 | Francis' must treat a patient who is addicted to drugs | 16 | 3.26 | 1.36 | 2.90 | 1.48 | 4.59 | 1.13 |
| 39 | Francis must ask family members to leave a patient's room | 24 | 3.28 | 1.10 | 3.64 | 1.47 | 4.60 | 1.27 |
| 40 | Francis' patient should have been in a different ward | 21 | 3.30 | 1.54 | 3.40 | 1.66 | 4.05 | 1.33 |
| 41 | A family member asks Francis a lot of questions | 23 | 3.30 | 1.90 | 3.91 | 1.88 | 4.91 | 1.03 |
| 42 | Francis is uncertain about what will happen in the shift | 17 | 3.31 | 1.33 | 2.92 | 1.22 | 4.79 | 1.20 |
| 43 | Francis' tasks are spread in distant locations | 19 | 3.33 | 1.87 | 3.32 | 1.59 | 4.63 | 1.25 |
| 44 | Francis must tend to a task that requires immediate attention | 22 | 3.33 | 1.29 | 2.95 | 1.38 | 4.98 | 1.48 |
| 45 | Francis' shift has ended and some tasks must remain for the next shift | 19 | 3.40 | 1.80 | 3.21 | 1.39 | 5.18 | 0.82 |
| 46 | A patient intrudes into Francis' private conversation with a coworker | 15 | 3.41 | 1.49 | 3.71 | 1.63 | 4.57 | 1.24 |
| 47 | Francis' must treat a patient who does not arrive on time | 24 | 3.43 | 1.74 | 4.40 | 1.85 | 4.50 | 1.21 |
| 48 | Someone else gives a patient the wrong medicine | 23 | 3.43 | 1.48 | 2.54 | 1.46 | 2.78 | 1.36 |
| 49 | Family members talk to Francis while Francis is working on something else | 25 | 3.45 | 1.62 | 3.89 | 1.56 | 4.48 | 1.50 |
| 50 | Francis must explain something they did to a manager | 22 | 3.45 | 1.70 | 3.11 | 1.69 | 4.00 | 1.20 |
| 51 | Francis thinks of the responsibility to "do no harm" | 20 | 3.49 | 1.30 | 3.25 | 1.42 | 4.45 | 1.45 |
| 52 | A family member makes multiple requests | 22 | 3.49 | 1.19 | 4.12 | 1.65 | 4.57 | 1.32 |
| 53 | Francis personally knows a patient who arrives for treatment | 23 | 3.50 | 1.27 | 3.81 | 1.39 | 3.09 | 1.05 |
| 54 | Francis needs a medical device that was not properly maintained | 24 | 3.51 | 1.70 | 2.96 | 1.31 | 3.54 | 1.02 |
| 55 | A patient demands attention | 21 | 3.52 | 1.65 | 3.73 | 1.65 | 5.05 | 1.20 |
| 56 | A coworker takes a break when there is no time for a break | 26 | 3.56 | 1.49 | 3.41 | 1.58 | 4.46 | 0.97 |
| 57 | Francis and a coworker have a private ‚Äœventing‚Äï conversation | 24 | 3.58 | 1.50 | 2.69 | 1.18 | 4.31 | 1.36 |
| 58 | Francis' patient requests to be treated elsewhere | 22 | 3.59 | 1.45 | 3.18 | 1.51 | 3.27 | 1.22 |
| 59 | Francis must move a patient to a treatment room which is occupied | 18 | 3.60 | 1.44 | 3.61 | 1.26 | 4.25 | 1.42 |
| 60 | A family member enters Francis' break room | 22 | 3.60 | 1.48 | 3.73 | 1.27 | 2.98 | 1.30 |
| 61 | Multiple people arrive at Francis' ward at the same time | 21 | 3.62 | 1.58 | 3.57 | 1.69 | 5.12 | 1.06 |
| 62 | Francis doesn't have enough time to complete a task | 24 | 3.63 | 1.25 | 2.71 | 1.29 | 4.54 | 1.15 |
| 63 | Francis' work guidelines change | 22 | 3.68 | 1.27 | 3.92 | 1.24 | 3.20 | 0.97 |
| 64 | The staff in Francis' ward work inefficiently | 19 | 3.69 | 1.26 | 3.26 | 1.54 | 4.68 | 1.34 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 65 | Francis' patient has an allergic reaction | 25 | 3.70 | 1.42 | 3.17 | 1.28 | 3.36 | 1.40 |
| 66 | Francis witnesses a family conflict | 28 | 3.74 | 1.20 | 3.31 | 1.59 | 3.77 | 0.95 |
| 67 | Someone else almost gives a patient the wrong medicine | 23 | 3.75 | 1.46 | 3.33 | 1.47 | 2.41 | 0.63 |
| 68 | Francis cannot say a suspected diagnosis to a patient without further tests | 25 | 3.75 | 1.51 | 3.84 | 1.60 | 4.08 | 1.25 |
| 69 | Francis encounters an unusual medical condition that requires a lot of time | 23 | 3.77 | 1.88 | 3.00 | 1.51 | 3.74 | 1.18 |
| 70 | Coworkers speak a language that Francis doesn't understand | 26 | 3.80 | 1.48 | 3.77 | 1.36 | 3.38 | 1.65 |
| 71 | A coworker Francis contacted regarding a patient doesn't answer | 20 | 3.80 | 1.42 | 3.63 | 1.51 | 4.70 | 1.28 |
| 72 | Francis' performance is evaluated by someone who is near by watching | 21 | 3.80 | 1.38 | 3.52 | 1.50 | 3.24 | 1.08 |
| 73 | Francis doesn't know enough about a patient's medical condition | 24 | 3.82 | 1.53 | 3.15 | 1.49 | 4.08 | 1.20 |
| 74 | Francis is in a closed room with a patient and their family member | 21 | 3.87 | 1.90 | 4.05 | 1.77 | 4.55 | 1.40 |
| 75 | Francis must treat a patient after a coworker refused to treat them | 21 | 3.89 | 1.43 | 4.14 | 1.67 | 3.24 | 1.03 |
| 76 | A family member is very negative and makes the patient feel worse | 22 | 3.89 | 1.43 | 3.36 | 1.64 | 3.64 | 1.01 |
| 77 | Francis feels a sense of personal identification with a patient (e.g., similar age, race) | 23 | 3.90 | 1.68 | 3.43 | 1.63 | 3.52 | 1.69 |
| 78 | Francis' patient is in COVID-19 quarantine with no family members | 26 | 3.90 | 1.19 | 3.56 | 1.53 | 4.48 | 1.07 |
| 79 | A doctor disagrees with Francis' diagnosis | 23 | 3.90 | 1.27 | 3.72 | 1.70 | 3.70 | 1.11 |
| 80 | Francis' patient is depressed | 17 | 3.92 | 1.25 | 3.04 | 1.08 | 4.44 | 1.06 |
| 81 | Francis thinks of their legal liability | 17 | 3.95 | 1.43 | 2.80 | 1.25 | 3.12 | 1.47 |
| 82 | Francis must treat a person who has COVID-19 | 22 | 3.95 | 1.66 | 3.61 | 1.75 | 4.98 | 1.20 |
| 83 | Francis has difficulties communicating with a patient | 22 | 3.97 | 1.46 | 3.61 | 1.23 | 3.91 | 1.20 |
| 84 | A coworker does not show up for work on Francis' shift | 26 | 3.98 | 1.45 | 3.90 | 1.53 | 4.31 | 1.17 |
| 85 | A patient expects special treatment because of their social status | 21 | 3.98 | 1.36 | 4.78 | 1.30 | 4.17 | 1.11 |
| 86 | Several patients team up with complaints | 11 | 3.98 | 1.14 | 3.33 | 1.19 | 4.23 | 1.19 |
| 87 | A patient says that Francis doesn't know anything based on a Google search | 24 | 4.00 | 1.71 | 3.96 | 1.41 | 3.54 | 1.34 |
| 88 | Francis' patient expects an unrealistic outcome | 19 | 4.00 | 1.47 | 3.58 | 1.72 | 4.18 | 1.54 |
| 89 | A patient nags Francis | 23 | 4.01 | 1.37 | 4.64 | 1.37 | 4.33 | 1.59 |
| 90 | Francis must tell a coworker that they are not doing a good job | 27 | 4.02 | 1.25 | 3.48 | 1.37 | 3.19 | 1.24 |
| 91 | Francis must give a patient a treatmnet while coworkers create a delay | 24 | 4.03 | 1.66 | 3.54 | 1.48 | 3.79 | 1.60 |
| 92 | Francis' patient requests something immediately and it is not possible | 18 | 4.03 | 1.45 | 3.52 | 1.71 | 4.86 | 0.97 |
| 93 | Francis has a conflict with a coworker about a treatment | 21 | 4.04 | 1.19 | 3.43 | 1.35 | 3.93 | 1.24 |
| 94 | Francis fails to properly insert an IV | 26 | 4.08 | 1.90 | 3.28 | 1.42 | 3.23 | 1.41 |
| 95 | A family member is constantly present almost as if they work in Francis' ward | 17 | 4.09 | 1.60 | 3.69 | 1.45 | 3.00 | 1.63 |
| 96 | A patient needs a medical procedure that Francis knows how to do but is not allowed to perform | 23 | 4.10 | 1.39 | 4.00 | 1.34 | 3.50 | 1.08 |
| 97 | Francis' patient must be transferred and no one is available to do it | 22 | 4.12 | 1.72 | 3.67 | 1.75 | 3.59 | 1.26 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 98 | Francis' patient requests to be treated by a different nurse | 20 | 4.13 | 1.56 | 3.98 | 1.44 | 3.70 | 1.23 |
| 99 | Francis is unexpectedly called to urgently come to work | 21 | 4.13 | 1.68 | 4.30 | 1.65 | 3.69 | 1.05 |
| 100 | Francis makes a mistake in identifying a patient | 20 | 4.14 | 1.66 | 3.32 | 1.62 | 2.93 | 1.18 |
| 101 | Francis must manipulate a report to meet official requirements | 23 | 4.17 | 1.69 | 3.71 | 2.00 | 2.46 | 1.19 |
| 102 | Francis cannot support someone who is in COVID-19 quarantine | 20 | 4.18 | 1.65 | 3.48 | 1.55 | 3.45 | 1.36 |
| 103 | Francis' patient is alone without any social support | 22 | 4.18 | 1.47 | 3.09 | 1.29 | 4.30 | 1.07 |
| 104 | A patient yells at someone in the ward | 19 | 4.19 | 1.53 | 3.86 | 1.54 | 4.29 | 1.36 |
| 105 | A family member intervens with Francis' treatment | 20 | 4.20 | 1.12 | 3.83 | 1.34 | 3.20 | 1.43 |
| 106 | Francis' patient is a criminal | 22 | 4.20 | 1.61 | 4.36 | 1.60 | 2.86 | 1.18 |
| 107 | Francis is a nurse treating a patient who demands to see a doctor | 24 | 4.21 | 1.39 | 4.58 | 1.42 | 4.08 | 1.42 |
| 108 | Francis must perform a task without clear guidelines | 22 | 4.24 | 1.49 | 3.79 | 1.65 | 3.36 | 1.13 |
| 109 | Francis must physically run from one place to another to complete work tasks | 25 | 4.25 | 1.55 | 3.99 | 1.61 | 4.76 | 1.22 |
| 110 | Francis feels like they are over-checking themselves | 25 | 4.26 | 1.48 | 3.13 | 1.50 | 4.36 | 1.30 |
| 111 | Francis feels a miscommunication with a coworker | 23 | 4.26 | 1.72 | 3.71 | 2.08 | 4.43 | 1.08 |
| 112 | Francis must manage multiple things at the same time | 22 | 4.26 | 1.39 | 3.42 | 1.53 | 5.39 | 0.72 |
| 113 | Parents of a patient are addicted to drugs | 25 | 4.26 | 1.88 | 3.49 | 1.60 | 3.16 | 1.21 |
| 114 | A coworker intrudes into Francis' tasks | 21 | 4.28 | 1.55 | 4.22 | 1.34 | 4.40 | 1.12 |
| 115 | A family member complains in Francis' presence | 23 | 4.29 | 1.25 | 3.87 | 1.70 | 4.17 | 1.19 |
| 116 | The manager rejects something Francis requests without giving an explanation | 25 | 4.30 | 1.18 | 4.44 | 1.46 | 3.20 | 0.96 |
| 117 | Francis is not sure what medical procedures a patient needs | 21 | 4.31 | 1.52 | 3.59 | 1.89 | 4.07 | 1.00 |
| 118 | No one who feels "a friend" is present during Francis' shift | 19 | 4.32 | 1.41 | 4.02 | 1.37 | 3.92 | 1.30 |
| 119 | Francis has too many tasks | 22 | 4.35 | 1.46 | 3.86 | 1.72 | 5.09 | 1.01 |
| 120 | Francis's patient does not cooperate with a treatment | 24 | 4.36 | 1.64 | 4.28 | 1.51 | 4.40 | 1.16 |
| 121 | Francis must calm down a patient | 17 | 4.36 | 1.86 | 4.33 | 1.70 | 4.74 | 0.99 |
| 122 | Francis cannot complete a work task on time | 18 | 4.38 | 1.46 | 3.19 | 1.69 | 4.75 | 0.75 |
| 123 | Francis knows that a provided protocol treatment will not help a patient | 23 | 4.39 | 1.59 | 3.68 | 1.89 | 3.39 | 1.02 |
| 124 | Francis sends someone for a test only because a fear of a lawsuit | 23 | 4.43 | 1.54 | 4.55 | 1.53 | 2.65 | 1.47 |
| 125 | A coworker physically attacks another coworker | 22 | 4.43 | 1.47 | 2.67 | 1.14 | 1.70 | 0.75 |
| 126 | Family members do not support Francis' elderly patient | 25 | 4.47 | 1.39 | 4.25 | 1.48 | 3.80 | 1.19 |
| 127 | There is not enough staff to give patients the immediate attention they need | 21 | 4.48 | 1.76 | 3.60 | 1.87 | 4.64 | 1.13 |
| 128 | Francis must treat multiple patients who have complex medical issues | 21 | 4.50 | 1.44 | 4.33 | 1.48 | 4.88 | 1.39 |
| 129 | A family member nags Francis | 22 | 4.52 | 1.67 | 4.12 | 1.31 | 4.36 | 0.85 |
| 130 | Francis cannot complete a task due to a lack of equipment | 21 | 4.53 | 1.47 | 4.02 | 1.43 | 4.33 | 0.73 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 131 | Francis' patient has a complex medical condition | 21 | 4.55 | 1.21 | 3.52 | 1.36 | 4.79 | 1.02 |
| 132 | Francis feels that splitting attention between multiple wards leads to a poor job | 24 | 4.59 | 1.51 | 3.56 | 1.55 | 4.31 | 1.23 |
| 133 | Too many guidelines restrict Francis' behavior | 25 | 4.59 | 1.07 | 4.37 | 1.56 | 4.34 | 1.35 |
| 134 | Francis must x€œbendx€• official guidelines to complete tasks on time | 24 | 4.60 | 1.33 | 3.82 | 1.42 | 4.48 | 1.22 |
| 135 | Francis' patient is frustrated with their medical condition | 18 | 4.61 | 1.53 | 3.48 | 1.48 | 3.78 | 1.68 |
| 136 | A patient complains about Francis in front of other people | 20 | 4.63 | 1.31 | 4.30 | 1.65 | 4.13 | 1.12 |
| 137 | Francis warns managers about a problem but they ignore | 22 | 4.64 | 1.48 | 3.80 | 1.34 | 3.48 | 1.27 |
| 138 | A coworker yells at someone in Francis' presence | 23 | 4.64 | 1.10 | 3.42 | 1.55 | 3.74 | 0.98 |
| 139 | Francis is uncertian whether an action they (themself) took is correct | 22 | 4.65 | 1.33 | 3.33 | 1.44 | 4.50 | 1.06 |
| 140 | Francis gives a treatment that doesn't work | 22 | 4.65 | 1.28 | 3.92 | 1.50 | 3.73 | 1.21 |
| 141 | Francis must treat a patient who suffers from PTSD | 19 | 4.66 | 1.59 | 3.95 | 1.93 | 3.74 | 1.31 |
| 142 | Francis' child patient is in alcohol or drug withdrawal | 22 | 4.66 | 1.18 | 4.09 | 1.40 | 3.07 | 1.12 |
| 143 | Francis' patient loses a lot of blood | 22 | 4.68 | 1.52 | 3.80 | 2.00 | 3.39 | 1.13 |
| 144 | Francis must keep on working after the shift has ended | 22 | 4.73 | 1.17 | 4.64 | 1.60 | 4.82 | 0.84 |
| 145 | Francis' shift is under-staffed | 18 | 4.73 | 1.40 | 4.44 | 1.44 | 5.22 | 0.77 |
| 146 | A new patient arrived and will likely need immediate CPR | 23 | 4.74 | 1.53 | 3.19 | 1.21 | 3.46 | 1.17 |
| 147 | Francis' patient has a medical condition because of caregiver neglect | 24 | 4.74 | 1.47 | 4.17 | 1.76 | 3.15 | 1.11 |
| 148 | Francis must repeatedly provide CPR to the same patient | 14 | 4.74 | 1.22 | 3.86 | 1.32 | 3.18 | 1.01 |
| 149 | Francis' ward receives lower patient satisfaction scores than another ward | 14 | 4.74 | 1.48 | 3.40 | 1.45 | 3.93 | 1.31 |
| 150 | Francis is held responsible for a delay caused by someone else (e.g. a late ambulance or doctor) | 25 | 4.76 | 1.25 | 3.92 | 1.73 | 3.32 | 1.20 |
| 151 | Parents of a child patient are under the influence of drugs | 23 | 4.77 | 1.38 | 4.25 | 1.29 | 2.65 | 1.09 |
| 152 | Francis must deal with a dissatisfied patient | 18 | 4.77 | 1.09 | 4.69 | 1.43 | 4.33 | 0.99 |
| 153 | Francis' patient survives but the quality of their life will be severely harmed | 22 | 4.77 | 1.26 | 3.47 | 1.36 | 3.27 | 1.44 |
| 154 | A security guard arrives because of someone's aggressive behavior | 16 | 4.80 | 1.69 | 3.81 | 1.68 | 4.06 | 1.11 |
| 155 | A patient specifically refuses to see Francis | 18 | 4.80 | 1.45 | 4.85 | 1.59 | 3.17 | 1.19 |
| 156 | A high status person acts violently | 23 | 4.82 | 1.59 | 3.97 | 1.94 | 3.09 | 1.35 |
| 157 | A family member is upset about something that Francis did | 20 | 4.85 | 1.22 | 4.43 | 1.58 | 3.70 | 1.09 |
| 158 | Francis is assigned multiple new patients at the same time | 19 | 4.85 | 1.44 | 4.77 | 1.41 | 5.18 | 0.77 |
| 159 | A patient physically attacks a coworker | 19 | 4.86 | 1.24 | 2.65 | 1.47 | 2.89 | 1.13 |
| 160 | A recurring negative event could have been avoided | 14 | 4.87 | 1.49 | 4.17 | 1.42 | 3.32 | 1.12 |
| 161 | A coworker pushes Francis to quickly complete a task | 18 | 4.88 | 1.61 | 4.20 | 1.63 | 4.61 | 1.18 |
| 162 | A family member does not respect Francis | 20 | 4.88 | 1.23 | 4.73 | 1.39 | 4.00 | 1.14 |
| 163 | A manager tries to change Francis' working conditions without asking for consent | 24 | 4.88 | 1.23 | 4.01 | 1.56 | 3.08 | 1.12 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 164 | Francis must treat someone who is neglected | 18 | 4.89 | 1.41 | 4.00 | 1.70 | 3.53 | 1.09 |
| 165 | Francis makes a mistake | 21 | 4.90 | 1.43 | 3.48 | 1.53 | 3.69 | 1.29 |
| 166 | Francis' manager is annoyed that Francis did not notice another person's medical mistake | 24 | 4.90 | 1.33 | 3.72 | 1.60 | 3.02 | 1.24 |
| 167 | The manager criticizes Francis | 20 | 4.90 | 1.22 | 4.35 | 1.23 | 3.18 | 1.23 |
| 168 | A patient's family member tries to manage Francis | 25 | 4.90 | 1.52 | 5.20 | 1.42 | 3.64 | 1.26 |
| 169 | Francis feels responsible for a coworker's mistake | 20 | 4.91 | 1.39 | 3.60 | 1.47 | 3.00 | 1.15 |
| 170 | A coworker criticizes a professional decision Francis makes | 23 | 4.91 | 1.30 | 4.14 | 1.70 | 3.70 | 1.26 |
| 171 | Francis' patient video records Francis | 20 | 4.93 | 1.15 | 4.33 | 1.38 | 2.65 | 1.11 |
| 172 | Francis must give a patient emotional support | 18 | 4.93 | 1.05 | 3.78 | 1.34 | 4.78 | 0.79 |
| 173 | Francis must display positive emotion with a patient without feeling positive | 20 | 4.97 | 1.14 | 6.30 | 0.94 | 4.53 | 1.53 |
| 174 | A patient is audio recording Francis | 23 | 4.97 | 1.58 | 4.28 | 1.66 | 2.43 | 1.03 |
| 175 | Francis feels lonely during a shift | 21 | 4.99 | 1.24 | 3.79 | 1.67 | 4.21 | 0.94 |
| 176 | Francis provides treatment to someone who will soon die anyway | 19 | 5.00 | 1.68 | 3.58 | 1.40 | 3.89 | 1.25 |
| 177 | Francis' patient is in a severe medical condition | 21 | 5.02 | 1.25 | 3.67 | 1.64 | 4.19 | 1.07 |
| 178 | People crowd around a dying patient | 23 | 5.03 | 1.60 | 3.10 | 1.69 | 3.17 | 1.39 |
| 179 | Francis needs professional assistance and cannot get it | 19 | 5.04 | 0.83 | 4.04 | 1.40 | 4.16 | 1.01 |
| 180 | Francis must deal with a personal issue during work time | 20 | 5.05 | 1.09 | 4.87 | 1.06 | 4.13 | 1.39 |
| 181 | A patient refuses to be seen by Francis because of Francis' race | 6 | 5.07 | 0.58 | 4.94 | 1.00 | 3.25 | 0.76 |
| 182 | A coworker refuses to cooperate with Francis | 26 | 5.08 | 1.20 | 3.88 | 1.50 | 3.46 | 1.31 |
| 183 | Francis cannot help a patient who suffers from severe pain | 25 | 5.10 | 1.48 | 3.65 | 1.80 | 4.24 | 1.32 |
| 184 | The condition of a patient Francis just treated deteriorates | 25 | 5.12 | 0.99 | 3.76 | 1.55 | 4.28 | 0.96 |
| 185 | Francis almost gives a patient the wrong medicine | 23 | 5.13 | 1.31 | 3.90 | 1.63 | 3.02 | 1.27 |
| 186 | Francis cannot take desired vacation days | 18 | 5.13 | 1.05 | 4.22 | 1.35 | 2.89 | 0.65 |
| 187 | Francis doesn't have a solution for a patient's needs | 22 | 5.15 | 1.34 | 4.18 | 1.39 | 4.39 | 1.34 |
| 188 | A patient refuses to be seen by Francis because of Francis' gender | 20 | 5.18 | 1.50 | 4.52 | 1.84 | 3.35 | 1.58 |
| 189 | Francis must prioritize between multiple patients who need immediate attention | 23 | 5.19 | 1.24 | 5.00 | 1.13 | 4.52 | 1.21 |
| 190 | A patient does not respect Francis | 21 | 5.21 | 1.39 | 5.08 | 1.39 | 4.19 | 1.18 |
| 191 | The manager does not back Francis up | 14 | 5.23 | 1.27 | 4.19 | 1.76 | 3.39 | 0.81 |
| 192 | An Intern doctor expresses distrust towards Francis | 25 | 5.23 | 1.45 | 3.92 | 1.40 | 3.12 | 1.14 |
| 193 | Francis must provide CPR | 23 | 5.25 | 1.29 | 3.91 | 1.31 | 3.39 | 1.51 |
| 194 | Family members do not support Francis' child patient | 27 | 5.26 | 1.22 | 4.41 | 1.70 | 3.20 | 1.13 |
| 195 | Francis must give a CPR procedure for a long time | 24 | 5.27 | 1.13 | 3.78 | 1.35 | 3.04 | 0.97 |
| 196 | A family member says that Francis is not professional | 22 | 5.27 | 0.94 | 4.56 | 1.42 | 3.05 | 1.65 |

| | Event | n | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | | M | SD | M | SD | M | SD |
| 197 | Francis' newborn patient is in alcohol or drug withdrawal | 22 | 5.27 | 1.47 | 4.68 | 1.57 | 2.32 | 0.82 |
| 198 | The manager acts unfairly to Francis | 21 | 5.28 | 1.17 | 4.56 | 1.46 | 3.57 | 1.10 |
| 199 | Francis must deliver bad news by phone because of COVID-19 | 23 | 5.29 | 1.22 | 3.58 | 1.66 | 4.15 | 1.33 |
| 200 | Francis is unable to express felt anger | 20 | 5.30 | 1.24 | 4.97 | 1.81 | 4.35 | 1.13 |
| 201 | Francis must decide on forced hospitalization of a patient | 21 | 5.32 | 1.31 | 4.13 | 1.79 | 3.05 | 1.15 |
| 202 | Francis must hide a personal internal feeling | 18 | 5.33 | 1.25 | 6.07 | 0.93 | 4.78 | 1.18 |
| 203 | Someone collapses and Francis doesn't know what to do | 22 | 5.34 | 1.17 | 3.70 | 2.07 | 2.68 | 1.08 |
| 204 | Francis' patient's medical condition is deteriorating | 22 | 5.35 | 0.90 | 4.52 | 0.94 | 4.18 | 1.32 |
| 205 | A patient throws something at Francis | 23 | 5.37 | 0.97 | 4.96 | 1.23 | 2.74 | 1.15 |
| 206 | A patient is mistreated by a coworker | 9 | 5.38 | 1.37 | 4.33 | 1.69 | 3.22 | 0.94 |
| 207 | Family expectations increase because someone who is about to die suddenly improves and Francis knows it is only temporary | 19 | 5.39 | 0.99 | 4.82 | 1.50 | 3.47 | 1.03 |
| 208 | A family member physically attacks a coworker | 25 | 5.40 | 1.28 | 4.25 | 1.20 | 2.54 | 0.99 |
| 209 | Francis cries in front of a patient | 20 | 5.41 | 0.95 | 3.32 | 1.79 | 3.00 | 1.29 |
| 210 | Francis gives a terminally ill patient a treatment that might harm them | 20 | 5.41 | 1.17 | 3.03 | 1.42 | 2.65 | 1.25 |
| 211 | Francis' patient "gives up" on themself | 24 | 5.42 | 1.33 | 4.32 | 1.59 | 3.63 | 1.13 |
| 212 | A guardian disallows a treatment that Francis knows would help the patient | 23 | 5.43 | 0.96 | 5.32 | 1.22 | 3.59 | 1.10 |
| 213 | Francis must perform a procedure with which they are inexperienced | 26 | 5.44 | 1.48 | 4.40 | 1.54 | 3.35 | 0.82 |
| 214 | Francis must work without proper protection from COVID-19 | 21 | 5.46 | 1.36 | 3.92 | 1.55 | 3.24 | 1.48 |
| 215 | Francis suspect's that a child patient is neglected | 21 | 5.49 | 0.90 | 3.76 | 1.73 | 2.52 | 0.97 |
| 216 | Francis has a conflict with a coworker | 20 | 5.52 | 0.93 | 4.85 | 1.83 | 3.58 | 1.16 |
| 217 | Francis must deliver bad news to family members of a patient | 21 | 5.52 | 0.98 | 4.52 | 1.57 | 4.02 | 1.11 |
| 218 | Francis delivers bad news to a patient | 21 | 5.52 | 1.06 | 3.81 | 1.40 | 3.76 | 1.01 |
| 219 | Francis feels being blamed for problems that cannot be solved | 24 | 5.53 | 1.41 | 4.18 | 1.66 | 3.60 | 1.10 |
| 220 | An unusual number of people die in a short period of time | 20 | 5.60 | 1.31 | 3.95 | 1.56 | 2.48 | 1.16 |
| 221 | A patient yells at Francis | 23 | 5.63 | 1.39 | 4.86 | 1.46 | 4.50 | 1.20 |
| 222 | A coworker undermines Francis in front of patients | 18 | 5.64 | 1.35 | 4.54 | 1.56 | 3.22 | 1.14 |
| 223 | Francis makes a mistake in a diagnosis | 22 | 5.65 | 1.00 | 3.76 | 1.31 | 2.68 | 0.95 |
| 224 | Francis' patient dies unexpectedly | 24 | 5.65 | 1.06 | 4.44 | 1.48 | 3.52 | 0.80 |
| 225 | A coworker shouts at Francis | 20 | 5.65 | 0.84 | 4.25 | 1.67 | 3.20 | 1.19 |
| 226 | A coworker physically pushes Francis | 25 | 5.66 | 1.28 | 3.63 | 1.79 | 2.06 | 0.96 |
| 227 | Francis suspects parental abuse of a child patient they are treating | 23 | 5.66 | 0.81 | 4.26 | 1.58 | 3.13 | 1.21 |
| 228 | Someone threatens Francis with physical violence | 25 | 5.69 | 1.29 | 4.43 | 1.57 | 2.90 | 1.27 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 229 | Francis' patient says they want to die | 20 | 5.70 | 0.71 | 4.42 | 1.57 | 2.80 | 0.92 |
| 230 | Francis' patient implicitly threatens to sue Francis | 23 | 5.70 | 1.56 | 4.68 | 1.82 | 2.48 | 1.05 |
| 231 | A patient curses Francis | 23 | 5.70 | 0.88 | 5.39 | 1.35 | 4.13 | 1.23 |
| 232 | Francis gives a patient the wrong medicine | 11 | 5.71 | 1.14 | 4.15 | 1.91 | 3.55 | 1.31 |
| 233 | An intern physician expresses distrust towards Francis | 24 | 5.72 | 1.16 | 4.18 | 1.49 | 3.13 | 1.21 |
| 234 | Francis' patient dies because of others' unprofessional treatment | 23 | 5.72 | 0.87 | 3.78 | 2.01 | 2.09 | 1.12 |
| 235 | A patient accuses Francis of lying to them | 13 | 5.74 | 1.17 | 4.97 | 1.73 | 3.23 | 0.99 |
| 236 | A patient calls Francis' private phone line and yells | 21 | 5.74 | 0.95 | 5.17 | 1.17 | 2.71 | 1.39 |
| 237 | Francis must treat a patient who was previously violent in the ward | 23 | 5.77 | 0.99 | 5.04 | 1.36 | 3.67 | 0.79 |
| 238 | Francis is blamed for another person's mistake | 24 | 5.77 | 1.14 | 4.56 | 1.74 | 3.27 | 1.22 |
| 239 | The manager is disrespectful to Francis | 23 | 5.77 | 1.27 | 4.78 | 1.59 | 3.15 | 0.76 |
| 240 | A very young patient dies | 24 | 5.78 | 1.06 | 3.94 | 1.45 | 3.17 | 0.94 |
| 241 | A patient aggressively approaches Francis' workstation | 24 | 5.80 | 0.90 | 5.21 | 1.31 | 3.98 | 1.15 |
| 242 | A patient yells at Francis in front of other people | 18 | 5.80 | 0.70 | 5.19 | 1.38 | 4.25 | 1.02 |
| 243 | The manager mistreats Francis | 15 | 5.80 | 1.01 | 5.24 | 1.20 | 3.93 | 1.00 |
| 244 | A coworker undermines Francis in front of other coworkers | 20 | 5.81 | 0.99 | 4.40 | 1.05 | 3.13 | 1.15 |
| 245 | Francis must go back to work immediately after a very difficult event | 22 | 5.82 | 1.26 | 5.14 | 1.57 | 2.98 | 0.98 |
| 246 | A family member yells at Francis | 22 | 5.84 | 1.05 | 4.68 | 1.51 | 3.57 | 1.04 |
| 247 | Francis must tie a patient to the bed to prevent self-harm | 19 | 5.87 | 0.94 | 4.82 | 1.34 | 3.03 | 1.46 |
| 248 | A patient accuses Francis of being unprofessional | 13 | 5.88 | 1.26 | 4.85 | 1.09 | 4.12 | 1.06 |
| 249 | A patient threatens Francis with a weapon | 7 | 5.89 | 0.76 | 2.95 | 1.89 | 3.14 | 1.03 |
| 250 | Someone sues a hospital or a clinic because of Francis' work | 20 | 5.92 | 1.10 | 4.43 | 1.85 | 2.45 | 1.69 |
| 251 | A patient commits suicide during Francis' shift | 22 | 6.05 | 1.06 | 3.86 | 1.47 | 2.00 | 0.82 |
| 252 | Francis must go back to work immediately after a sudden death of a patient | 22 | 6.07 | 1.11 | 4.76 | 1.78 | 3.48 | 1.16 |
| 253 | Francis' patient dies as a result of Francis' unprofessional treatment | 22 | 6.14 | 1.10 | 4.03 | 1.83 | 2.64 | 1.29 |
| 254 | A CPR procedure that Francis gave failed | 21 | 6.14 | 0.82 | 4.73 | 1.28 | 3.00 | 0.96 |
| 255 | The manager yells at Francis | 23 | 6.17 | 0.85 | 4.67 | 1.63 | 2.76 | 0.96 |
| 256 | Francis suspects abuse of a child patient they are treating | 18 | 6.18 | 0.67 | 5.20 | 1.41 | 2.58 | 0.91 |
| 257 | A patient physically attacks Francis | 23 | 6.24 | 0.74 | 4.49 | 1.57 | 3.02 | 1.29 |
| 258 | A CPR procedure that Francis is giving fails | 25 | 6.25 | 0.84 | 4.47 | 1.86 | 2.70 | 1.03 |
| 259 | A family member threatens Francis | 19 | 6.25 | 0.78 | 4.81 | 1.37 | 3.34 | 1.09 |
| 260 | A family member physically attacks Francis | 23 | 6.37 | 0.94 | 4.91 | 1.73 | 2.57 | 1.23 |
| 261 | The manager humiliates Francis in front of other people | 18 | 6.38 | 0.72 | 4.81 | 1.67 | 2.86 | 1.40 |

| | Event | | Emotional Load | | Emotional Labor | | Frequency | |
|---|---|---|---|---|---|---|---|---|
| | | n | M | SD | M | SD | M | SD |
| 262 | A coworker physically attacks Francis | 25 | 6.42 | 0.90 | 3.12 | 1.67 | 1.88 | 0.73 |

*Note*. n is the number of participants who rated each event.

**Appendix B.** *Attention Checks*

| Question | Answers |
|---|---|
| *Based on the situation you just read, where does Francis live?* | – Not mentioned in the situation<br>– Francis lives in Egypt<br>– Francis is from Austria<br>– She lives in Germany |
| *Does Francis work in healthcare?* | – Yes<br>– No |
| *How many horses were involved in the situation?* | – There were no horses involved in the situation<br>– There was one horse who was an external bystander<br>– There were many horses involved in the situation<br>– There were only 2 horses actively involved |
| *What did Francis eat for dinner based on the situation you just read?* | – Not mentioned<br>– She had eggs for dinner<br>– She had salad for dinner<br>– She hade dinner in a restaurant |
| *What is the name of Francis' co-worker? If you are reading this, check "Morgan."* | – Morgan<br>– Jamie<br>– Jordan<br>– Kim |
| *How many years Francis has been working in the hospital?* | – Not mentioned<br>– Exactly 5 years<br>– Exactly 10 years<br>– Exactly 2 years |
| *What is the name of Francis' pet? if you are reading this, please check "Bobby"* | – Bobby<br>– Jhony<br>– Bark<br>– Felix |
| *Based on the situation you just read, what is the name of Francis' manager?* | – Denver<br>– Tommie<br>– Jamie<br>– Not mentioned in the situation |
| *Where did the situation happen? If you read this, please check "In a restaurant."* | – In a restaurant<br>– On the bus<br>– In Francis' house<br>– In the street |
| *Which of the following is a pet?* | – Dog<br>– Computer<br>– Book<br>– Flower<br>– Train |
| *Which of the following is a drink?* | – Tea<br>– Dog<br>– Salad<br>– Bag<br>– Car |

**Appendix C.** *Emotional load rating differences: two-sided independent samples t-test between participants with and without experience with the event*

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| A coworker criticizes a professional decision Francis makes | 1 | 3.00 | | 22 | 5.00 | 1.26 | 2.00 | 1.55 | 21 | .14 |
| A coworker does not show up for work on Francis' shift | 3 | 3.80 | 1.04 | 23 | 4.00 | 1.52 | .20 | .22 | 24 | .83 |
| A coworker Francis contacted regarding a patient doesn't answer | 2 | 4.30 | .99 | 18 | 3.74 | 1.47 | -.56 | -.51 | 18 | .61 |
| A coworker Francis must answer to calls during work on Francis' personal phone | 4 | 1.75 | 1.14 | 15 | 2.80 | 1.26 | 1.05 | 1.51 | 17 | .15 |
| A coworker in Francis' shift repeatedly checks themselves before doing something | 8 | 2.18 | .85 | 13 | 2.19 | 1.21 | .01 | .02 | 19 | .99 |
| A coworker makes a mistake | 2 | 4.30 | 1.27 | 14 | 2.51 | 1.38 | -1.79 | -1.73 | 14 | .11 |
| A coworker on Francis' shift is late. | 3 | 2.73 | .46 | 20 | 2.95 | 1.36 | .22 | .27 | 21 | .79 |
| A coworker physically attacks another coworker | 17 | 4.25 | 1.58 | 5 | 5.04 | .81 | .79 | 1.51 | 13.81 | .16 |
| A coworker physically attacks Francis | 18 | 6.47 | .99 | 7 | 6.31 | .66 | -.15 | -.37 | 23 | .71 |
| A coworker physically pushes Francis | 22 | 5.80 | 1.13 | 3 | 4.60 | 2.08 | -1.20 | -1.57 | 23 | .13 |
| A coworker refuses to cooperate with Francis | 3 | 4.93 | 1.10 | 23 | 5.10 | 1.23 | .16 | .22 | 24 | .83 |
| A coworker shouts at Francis | 5 | 5.68 | .80 | 15 | 5.64 | .88 | -.04 | -.09 | 18 | .93 |
| A coworker takes a break when there is no time for a break | 3 | 3.07 | 1.40 | 23 | 3.63 | 1.52 | .56 | .60 | 24 | .55 |
| A coworker undermines Francis in front of other coworkers | 4 | 6.15 | .81 | 16 | 5.73 | 1.03 | -.43 | -.76 | 18 | .46 |
| A coworker undermines Francis in front of patients | 3 | 4.87 | 2.16 | 15 | 5.80 | 1.18 | .93 | 1.10 | 16 | .29 |
| A coworker yells at someone in Francis' presence | 2 | 2.80 | .28 | 23 | 4.64 | 1.10 | 1.84 | 2.32 | 23 | .03 |
| A CPR procedure that Francis gave failed | 11 | 6.47 | .43 | 10 | 5.78 | 1.00 | -.69 | -2.03 | 12 | .07 |
| A CPR procedure that Francis is giving fails | 20 | 6.13 | .86 | 5 | 6.72 | .63 | .59 | 1.43 | 23 | .17 |
| A doctor disagrees with Francis' diagnosis | 4 | 3.25 | .53 | 19 | 4.04 | 1.35 | .79 | 1.14 | 21 | .27 |
| A family member asks Francis a lot of questions | 1 | 3.20 | | 22 | 3.30 | 1.94 | .10 | .05 | 21 | .96 |
| A family member complains in Francis' presence | 3 | 4.20 | .20 | 20 | 4.30 | 1.35 | .10 | .13 | 21 | .90 |
| A family member does not respect Francis | 3 | 4.00 | .72 | 17 | 5.04 | 1.24 | 1.04 | 1.38 | 18 | .18 |
| A family member enters Francis' break room | 11 | 3.38 | 1.47 | 11 | 3.82 | 1.52 | .44 | .68 | 20 | .50 |
| A family member intervens with Francis' treatment | 8 | 4.35 | 1.07 | 12 | 4.10 | 1.19 | -.25 | -.48 | 18 | .64 |
| A family member is constantly present almost as if they work in Francis' ward | 9 | 3.64 | 2.07 | 8 | 4.60 | .65 | .96 | 1.32 | 9.74 | .22 |
| A family member is upset about something that Francis did | 3 | 4.33 | 2.04 | 17 | 4.94 | 1.09 | .61 | .79 | 18 | .44 |
| A family member is very negative and makes the patient feel worse | 2 | 5.10 | .99 | 20 | 3.77 | 1.43 | -1.33 | -1.27 | 20 | .22 |
| A family member makes multiple requests | 2 | 4.90 | .14 | 20 | 3.35 | 1.16 | -1.55 | -1.85 | 20 | .08 |
| A family member physically attacks a coworker | 16 | 5.66 | 1.08 | 9 | 4.93 | 1.53 | -.73 | -1.40 | 23 | .18 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| A family member physically attacks Francis | 14 | 6.46 | .98 | 9 | 6.24 | .93 | -.21 | -.52 | 21 | .61 |
| A family member says that Francis is not professional | 9 | 5.20 | .89 | 13 | 5.32 | 1.01 | .12 | .29 | 20 | .77 |
| A family member threatens Francis | 6 | 6.80 | .40 | 19 | 6.25 | .78 | -.55 | -2.26 | 17.29 | .04 |
| A family member yells at Francis | 4 | 6.50 | .58 | 18 | 5.69 | 1.08 | -.81 | -1.43 | 20 | .17 |
| A guardian disallows a treatment that Francis knows would help the patient | 6 | 5.30 | 1.12 | 17 | 5.47 | .92 | .17 | .37 | 21 | .72 |
| A high status person acts violently | 7 | 4.51 | 1.34 | 16 | 4.95 | 1.71 | .44 | .60 | 21 | .56 |
| A manager tries to change Francis' working conditions without asking for consent | 5 | 5.24 | 1.61 | 19 | 4.79 | 1.14 | -.45 | -.72 | 22 | .48 |
| A new patient arrived and will likely need immediate CPR | 8 | 5.28 | .81 | 15 | 4.45 | 1.77 | -.82 | -1.24 | 21 | .23 |
| A patient accuses Francis of being unprofessional | 7 | 3.86 | 1.80 | 13 | 5.88 | 1.26 | 2.02 | 2.95 | 18 | .01 |
| A patient accuses Francis of lying to them | 9 | 4.60 | 1.22 | 13 | 5.74 | 1.17 | 1.14 | 2.21 | 20 | .04 |
| A patient aggressively approaches Francis' work station | 3 | 6.00 | .60 | 21 | 5.77 | .95 | -.23 | -.40 | 22 | .69 |
| A patient calls Francis' private phone line and yells | 9 | 5.64 | 1.12 | 12 | 5.82 | .85 | .17 | .40 | 19 | .69 |
| A patient commits suicide during Francis' shift | 17 | 6.04 | 1.01 | 5 | 6.08 | 1.37 | .04 | .08 | 20 | .94 |
| A patient complains about Francis in front of other people | 5 | 5.80 | 1.36 | 20 | 4.63 | 1.31 | -1.17 | -1.77 | 23 | .05 |
| A patient curses Francis | 1 | 5.80 | | 22 | 5.70 | .90 | -.10 | -.11 | 21 | .92 |
| A patient demands attention | 1 | 6.00 | | 20 | 3.40 | 1.59 | -2.60 | -1.59 | 19 | .13 |
| A patient does not respect Francis | 1 | 4.20 | | 20 | 5.26 | 1.41 | 1.06 | .74 | 19 | .47 |
| A patient enters a room while Francis is with another patient | 3 | 2.27 | 1.10 | 17 | 2.92 | 1.35 | .65 | .78 | 18 | .44 |
| A patient expects special treatment because of their social status | 1 | 5.40 | | 20 | 3.91 | 1.36 | -1.49 | -1.07 | 19 | .30 |
| A patient intrudes into Francis' private conversation with a coworker | 1 | 1.60 | | 14 | 3.54 | 1.46 | 1.94 | 1.29 | 13 | .22 |
| A patient is audio recording Francis | 9 | 5.16 | 1.36 | 14 | 4.86 | 1.75 | -.30 | -.43 | 21 | .67 |
| A patient is mistreated by a coworker | 11 | 4.02 | 1.41 | 9 | 5.38 | 1.37 | 1.36 | 2.17 | 18 | .04 |
| A patient nags Francis | 3 | 5.13 | 1.50 | 20 | 3.84 | 1.30 | -1.29 | -1.58 | 21 | .13 |
| A patient needs a medical procedure that Francis knows how to do but is not allowed to perform | 3 | 4.73 | 1.30 | 20 | 4.01 | 1.41 | -.72 | -.83 | 21 | .41 |
| A patient physically attacks a coworker | 7 | 5.37 | .93 | 12 | 4.57 | 1.33 | -.80 | -1.41 | 17 | .18 |
| A patient physically attacks Francis | 11 | 6.26 | .73 | 12 | 6.23 | .78 | -.02 | -.07 | 21 | .95 |
| A patient refuses to be seen by Francis because of Francis' gender | 5 | 5.64 | 1.26 | 15 | 5.03 | 1.59 | -.61 | -.78 | 18 | .45 |
| A patient refuses to be seen by Francis because of Francis' race | 16 | 6.08 | 1.09 | 6 | 5.07 | .58 | -1.01 | -2.14 | 20 | .05 |
| A patient says that Francis doesn't know anything based on a Google search | 9 | 4.47 | 1.52 | 15 | 3.72 | 1.81 | -.75 | -1.04 | 22 | .31 |
| A patient specifically refuses to see Francis | 7 | 4.63 | 1.36 | 11 | 4.91 | 1.56 | .28 | .39 | 16 | .70 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| A patient threatens Francis with a weapon | 19 | 6.66 | .59 | 7 | 5.89 | .76 | -.78 | -2.76 | 24 | .01 |
| A patient throws something at Francis | 13 | 5.40 | .96 | 10 | 5.34 | 1.03 | -.06 | -.14 | 21 | .89 |
| A patient yells at Francis | 3 | 5.60 | 1.11 | 20 | 5.64 | 1.45 | .04 | .05 | 21 | .96 |
| A patient yells at Francis in front of other people | 2 | 4.30 | .14 | 18 | 5.80 | .70 | 1.50 | 2.94 | 18 | .01 |
| A patient yells at someone in the ward | 2 | 4.80 | .57 | 17 | 4.12 | 1.60 | -.68 | -.59 | 17 | .57 |
| A patient's family member tries to manage Francis | 7 | 4.06 | 1.90 | 18 | 5.23 | 1.25 | 1.18 | 1.82 | 23 | .08 |
| A recurring negative event could have been avoided | 4 | 5.90 | .81 | 10 | 4.46 | 1.53 | -1.44 | -1.76 | 12 | .10 |
| A security guard arrives because of someone's aggressive behavior | 3 | 2.40 | 1.00 | 16 | 4.80 | 1.69 | 2.40 | 2.35 | 17 | .03 |
| A very young patient dies | 8 | 5.90 | 1.28 | 16 | 5.71 | .98 | -.19 | -.40 | 22 | .69 |
| An Intern doctor expresses distrust towards Francis | 6 | 5.73 | 1.28 | 19 | 5.07 | 1.49 | -.66 | -.97 | 23 | .34 |
| An intern physician expresses distrust towards Francis | 8 | 5.75 | .84 | 16 | 5.70 | 1.32 | -.05 | -.10 | 22 | .92 |
| An unusual number of people die in a short period of time | 9 | 5.40 | 1.46 | 11 | 5.76 | 1.21 | .36 | .61 | 18 | .55 |
| Coworkers speak a language that Francis doesn't understand | 9 | 3.56 | 1.53 | 17 | 3.93 | 1.48 | .37 | .60 | 24 | .55 |
| Crowding interferes when Francis needs to move equipment | 3 | 3.73 | 2.70 | 23 | 3.18 | 1.19 | -.55 | -.65 | 24 | .52 |
| Family expectations increase because someone who is about to die suddenly improves and Francis knows it is only temporary | 8 | 5.43 | 1.16 | 11 | 5.36 | .91 | -.06 | -.13 | 17 | .90 |
| Family members do not support Francis' child patient | 9 | 5.62 | .94 | 18 | 5.08 | 1.33 | -.54 | -1.09 | 25 | .28 |
| Family members do not support Francis' elderly patient | 5 | 4.44 | 1.04 | 20 | 4.48 | 1.49 | .04 | .06 | 23 | .96 |
| Family members talk to Francis while Francis is working on something else | 4 | 3.75 | .77 | 21 | 3.39 | 1.74 | -.36 | -.40 | 23 | .69 |
| Francis almost gives a patient the wrong medicine | 7 | 5.63 | 1.39 | 16 | 4.91 | 1.26 | -.72 | -1.22 | 21 | .24 |
| Francis and a coworker have a private "venting" conversation | 3 | 4.87 | 1.10 | 21 | 3.40 | 1.48 | -1.47 | -1.64 | 22 | .12 |
| Francis arrives to work at the last minute and must immediately start to work | 2 | 3.00 | 1.70 | 24 | 3.13 | 1.35 | .13 | .12 | 24 | .90 |
| Francis cannot help a patient who suffers from severe pain | 4 | 5.40 | 1.96 | 21 | 5.05 | 1.43 | -.35 | -.43 | 23 | .67 |
| Francis cannot say a suspected diagnosis to a patient without further tests | 8 | 4.03 | .96 | 17 | 3.62 | 1.71 | -.40 | -.61 | 23 | .55 |
| Francis cannot support someone who is in COVID-19 quarantine | 9 | 3.93 | 1.70 | 11 | 4.38 | 1.66 | .45 | .59 | 18 | .56 |
| Francis cannot take desired vacation days | 4 | 3.80 | .78 | 18 | 5.13 | 1.05 | 1.33 | 2.37 | 20 | .03 |
| Francis' child patient is in alcohol or drug withdrawal | 14 | 4.79 | 1.24 | 8 | 4.45 | 1.10 | -.34 | -.64 | 20 | .53 |
| Francis cries in front of a patient | 7 | 5.46 | .81 | 13 | 5.39 | 1.05 | -.07 | -.16 | 18 | .88 |
| Francis delivers bad news to a patient | 7 | 5.66 | 1.02 | 14 | 5.46 | 1.11 | -.20 | -.40 | 19 | .69 |
| Francis does something that is irrelevant for a patient's treatment just to meet their expectations | 3 | 2.07 | .70 | 17 | 2.99 | 1.66 | .92 | .93 | 18 | .37 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| Francis doesn't have a solution for a patient's needs | 3 | 4.80 | 1.06 | 19 | 5.20 | 1.39 | .40 | .47 | 20 | .64 |
| Francis doesn't have enough time to complete a task | 2 | 3.10 | .42 | 22 | 3.68 | 1.30 | .58 | .62 | 22 | .54 |
| Francis doesn't know enough about a patient's medical condition | 4 | 4.10 | 1.31 | 20 | 3.76 | 1.59 | -.34 | -.40 | 22 | .69 |
| Francis encounters an unusual medical condition that requires a lot of time | 6 | 3.83 | 2.01 | 17 | 3.75 | 1.90 | -.08 | -.09 | 21 | .93 |
| Francis fails to properly insert an IV | 13 | 4.43 | 2.02 | 13 | 3.74 | 1.78 | -.69 | -.93 | 24 | .36 |
| Francis feels a miscommunication with a coworker | 3 | 4.53 | .90 | 20 | 4.22 | 1.82 | -.31 | -.29 | 21 | .78 |
| Francis feels a sense of identification with a family member (e.g., similar age, race) | 3 | 2.87 | 1.86 | 16 | 2.98 | 1.65 | .11 | .10 | 17 | .92 |
| Francis feels a sense of personal identification with a patient (e.g., similar age, race) | 8 | 3.90 | 1.84 | 15 | 3.89 | 1.65 | -.01 | -.01 | 21 | .99 |
| Francis feels being blamed for problems that cannot be solved | 4 | 5.40 | 1.36 | 20 | 5.56 | 1.45 | .16 | .20 | 22 | .84 |
| Francis feels like they are over-checking themselves | 1 | 1.80 | | 24 | 4.36 | 1.42 | 2.56 | 1.76 | 23 | .09 |
| Francis feels lonely during a shift | 2 | 6.50 | .71 | 19 | 4.83 | 1.19 | -1.67 | -1.92 | 19 | .07 |
| Francis feels responsible for a coworker's mistake | 8 | 5.60 | 1.15 | 12 | 4.45 | 1.38 | -1.15 | -1.94 | 18 | .07 |
| Francis feels that splitting attention between multiple wards leads to a poor job | 5 | 4.36 | 2.44 | 19 | 4.65 | 1.25 | .29 | .26 | 4.57 | .81 |
| Francis gives a patient the wrong medicine | 9 | 4.33 | 1.40 | 11 | 5.71 | 1.14 | 1.38 | 2.42 | 18 | .03 |
| Francis gives a terminally ill patient a treatment that might harm them | 12 | 5.17 | 1.26 | 8 | 5.78 | .99 | .61 | 1.14 | 18 | .27 |
| Francis gives a treatment that doesn't work | 7 | 5.11 | .92 | 15 | 4.44 | 1.40 | -.67 | -1.16 | 20 | .26 |
| Francis has a conflict with a coworker | 3 | 5.53 | .61 | 17 | 5.52 | 1.00 | -.02 | -.03 | 18 | .98 |
| Francis has a conflict with a coworker about a treatment | 2 | 4.30 | .71 | 19 | 4.01 | 1.24 | -.29 | -.32 | 19 | .75 |
| Francis has difficulties communicating with a patient | 3 | 5.20 | 1.00 | 19 | 3.78 | 1.45 | -1.42 | -1.62 | 20 | .12 |
| Francis has difficulties talking because of a sore throat | 6 | 3.97 | 1.76 | 19 | 2.42 | 1.19 | -1.55 | -2.47 | 23 | .02 |
| Francis has multiple managers | 9 | 2.84 | 1.46 | 19 | 3.13 | 1.81 | .28 | .41 | 26 | .69 |
| Francis has to perform bureaucratic work | 6 | 2.97 | 2.00 | 15 | 2.75 | 1.87 | -.22 | -.24 | 19 | .81 |
| Francis is a nurse treating a patient who demands to see a doctor | 3 | 3.40 | .92 | 21 | 4.32 | 1.42 | .92 | 1.08 | 22 | .29 |
| Francis is assigned to a new patient | 1 | 1.40 | | 24 | 2.95 | 1.74 | 1.55 | .87 | 23 | .39 |
| Francis is blamed for another person's mistake | 5 | 6.32 | .90 | 19 | 5.62 | 1.17 | -.70 | -1.24 | 22 | .23 |
| Francis is held responsible for a delay caused by someone else (e.g. a late ambulance or doctor) | 11 | 4.76 | 1.52 | 14 | 4.76 | 1.05 | -.01 | -.01 | 23 | .99 |
| Francis is in a closed room with a patient and their family member | 5 | 4.36 | 2.20 | 16 | 3.71 | 1.84 | -.65 | -.66 | 19 | .52 |
| Francis is not sure what medical procedures a patient needs | 4 | 5.45 | .60 | 21 | 4.31 | 1.52 | -1.14 | -2.55 | 12.16 | .03 |
| Francis is unable to express felt anger | 2 | 5.90 | .99 | 18 | 5.23 | 1.27 | -.67 | -.71 | 18 | .49 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| Francis is uncertain about what will happen in the shift | 2 | 4.70 | .14 | 17 | 3.31 | 1.33 | -1.39 | -4.14 | 16.74 | .00 |
| Francis is uncertian whether an action they (themself) took is correct | 1 | 5.00 | | 21 | 4.64 | 1.36 | -.36 | -.26 | 20 | .80 |
| Francis is unexpectedly called to urgently come to work | 4 | 3.95 | 1.79 | 17 | 4.18 | 1.70 | .23 | .24 | 19 | .82 |
| Francis knows that a provided protocol treatment will not help a patient | 5 | 4.28 | 1.12 | 18 | 4.42 | 1.73 | .14 | .17 | 21 | .87 |
| Francis makes a mistake | 2 | 4.80 | 1.13 | 19 | 4.91 | 1.48 | .11 | .10 | 19 | .92 |
| Francis makes a mistake in a diagnosis | 6 | 5.33 | .78 | 16 | 5.76 | 1.06 | .43 | .90 | 20 | .38 |
| Francis makes a mistake in identifying a patient | 5 | 4.24 | 1.47 | 15 | 4.11 | 1.76 | -.13 | -.15 | 18 | .88 |
| Francis' manager is annoyed that Francis did not notice another person's medical mistake | 10 | 4.94 | 1.74 | 14 | 4.87 | 1.01 | -.07 | -.12 | 22 | .90 |
| Francis must "bend" official guidelines to complete tasks on time | 2 | 4.10 | .71 | 22 | 4.65 | 1.37 | .55 | .55 | 22 | .59 |
| Francis must ask family members to leave a patient's room | 5 | 3.80 | 1.05 | 19 | 3.14 | 1.10 | -.66 | -1.21 | 22 | .24 |
| Francis must call a physician from a different ward | 3 | 1.67 | 1.15 | 18 | 2.11 | 1.32 | .44 | .55 | 19 | .59 |
| Francis must closely follow and keep eyes on a monitor | 9 | 3.80 | 1.48 | 16 | 2.61 | 1.51 | -1.19 | -1.90 | 23 | .07 |
| Francis must deal with a dissatisfied patient | 2 | 4.50 | 1.27 | 16 | 4.80 | 1.10 | .30 | .36 | 16 | .72 |
| Francis must deal with a personal issue during work time | 1 | 4.00 | | 19 | 5.11 | 1.09 | 1.11 | .99 | 18 | .33 |
| Francis must decide on forced hospitalization of a patient | 10 | 5.48 | 1.25 | 11 | 5.18 | 1.42 | -.30 | -.51 | 19 | .62 |
| Francis must deliver bad news by phone because of COVID-19 | 6 | 5.47 | 1.20 | 17 | 5.22 | 1.25 | -.24 | -.41 | 21 | .69 |
| Francis must deliver bad news to family members of a patient | 2 | 5.80 | .28 | 19 | 5.50 | 1.02 | -.31 | -.41 | 19 | .69 |
| Francis must display positive emotion with a patient without feeling positive | 3 | 4.47 | .61 | 17 | 5.06 | 1.20 | .59 | .82 | 18 | .42 |
| Francis must do administrative work | 3 | 4.33 | 2.89 | 19 | 2.33 | 1.38 | -2.01 | -1.18 | 2.147 | .35 |
| Francis must do things that are not a part of their training (e.g., clean the corridor) | 5 | 3.60 | 1.75 | 16 | 3.04 | 1.03 | -.56 | -.90 | 19 | .38 |
| Francis must explain something they did to a manager | 2 | 4.60 | 1.98 | 20 | 3.34 | 1.69 | -1.26 | -1.00 | 20 | .33 |
| Francis must give a CPR procedure for a long time | 8 | 5.48 | 1.11 | 16 | 5.16 | 1.16 | -.31 | -.63 | 22 | .54 |
| Francis must give a patient a treatmnet while coworkers create a delay | 7 | 3.60 | 1.68 | 17 | 4.20 | 1.67 | .60 | .80 | 22 | .43 |
| Francis must give a patient emotional support | 1 | 5.40 | | 17 | 4.91 | 1.07 | -.49 | -.45 | 16 | .66 |
| Francis must go back to work immediately after a sudden death of a patient | 8 | 5.55 | 1.51 | 14 | 6.37 | .71 | .82 | 1.75 | 20 | .10 |
| Francis must go back to work immediately after a very difficult event | 4 | 5.60 | 1.54 | 18 | 5.87 | 1.24 | .27 | .37 | 20 | .71 |
| Francis must hide a personal internal feeling | 1 | 5.20 | | 17 | 5.34 | 1.28 | .14 | .11 | 16 | .92 |
| Francis must keep on working after the shift has ended | 1 | 5.80 | | 21 | 4.68 | 1.17 | -1.12 | -.94 | 20 | .36 |
| Francis must manipulate a report to meet official requirements | 17 | 4.24 | 1.64 | 6 | 4.00 | 1.99 | -.24 | -.29 | 21 | .78 |
| Francis must move a patient to a treatment room which is occupied | 5 | 3.92 | .99 | 13 | 3.48 | 1.59 | -.44 | -.58 | 16 | .57 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| Francis must perform a procedure with which they are inexperienced | 6 | 5.93 | 1.55 | 20 | 5.29 | 1.46 | -.64 | -.93 | 24 | .36 |
| Francis must perform a task without clear guidelines | 4 | 4.05 | 2.06 | 18 | 4.28 | 1.41 | .23 | .27 | 20 | .79 |
| Francis must physically run from one place to another to complete work tasks | 1 | 2.60 | | 24 | 4.32 | 1.55 | 1.72 | 1.09 | 23 | .29 |
| Francis must prioritize between multiple patients who need immediate attention | 1 | 4.80 | | 22 | 5.21 | 1.26 | .41 | .32 | 21 | .75 |
| Francis must provide CPR | 13 | 5.19 | 1.40 | 10 | 5.34 | 1.21 | .16 | .28 | 21 | .78 |
| Francis must repeatedly provide CPR to the same patient | 9 | 6.09 | .91 | 14 | 4.74 | 1.22 | -1.35 | -2.83 | 21 | .01 |
| Francis must request something from another ward | 2 | 3.30 | .99 | 20 | 2.09 | 1.40 | -1.21 | -1.18 | 20 | .25 |
| Francis must tell a coworker that they are not doing a good job | 7 | 4.26 | 1.45 | 20 | 3.94 | 1.21 | -.32 | -.57 | 25 | .57 |
| Francis must tend to a task that requires immediate attention | 1 | 2.00 | | 21 | 3.39 | 1.29 | 1.39 | 1.05 | 20 | .31 |
| Francis must tie a patient to the bed to prevent self-harm | 10 | 5.58 | .83 | 9 | 6.20 | 1.00 | .62 | 1.48 | 17 | .16 |
| Francis must treat a patient after a coworker refused to treat them | 5 | 4.80 | 1.03 | 16 | 3.60 | 1.44 | -1.20 | -1.72 | 19 | .10 |
| Francis' must treat a patient who does not arrive on time | 3 | 5.00 | .60 | 21 | 3.20 | 1.74 | -1.80 | -1.75 | 22 | .10 |
| Francis' must treat a patient who is addicted to drugs | 5 | 5.12 | 1.38 | 16 | 3.26 | 1.36 | -1.86 | -2.66 | 19 | .02 |
| Francis must treat a patient who suffers from PTSD | 6 | 4.90 | 1.96 | 13 | 4.55 | 1.47 | -.35 | -.43 | 17 | .67 |
| Francis must treat a patient who was previously violent in the ward | 3 | 5.93 | 1.01 | 20 | 5.74 | 1.01 | -.19 | -.31 | 21 | .76 |
| Francis must treat a person who has COVID-19 | 5 | 4.56 | 1.71 | 17 | 3.78 | 1.65 | -.78 | -.93 | 20 | .37 |
| Francis must treat multiple patients who have complex medical issues | 3 | 3.53 | 1.17 | 18 | 4.67 | 1.44 | 1.13 | 1.28 | 19 | .22 |
| Francis must treat someone who is neglected | 3 | 5.20 | 1.80 | 15 | 4.83 | 1.39 | -.37 | -.41 | 16 | .69 |
| Francis must wait to consult with a senior physician | 1 | 1.60 | | 21 | 2.61 | 1.21 | 1.01 | .82 | 20 | .42 |
| Francis must work without proper protection from COVID-19 | 10 | 5.00 | 1.49 | 11 | 5.87 | 1.13 | .87 | 1.52 | 19 | .15 |
| Francis must write a letter for a patient | 6 | 2.53 | 1.48 | 19 | 2.07 | 1.11 | -.46 | -.82 | 23 | .42 |
| Francis needs a medical device that was not properly maintained | 6 | 3.80 | 1.73 | 18 | 3.41 | 1.73 | -.39 | -.48 | 22 | .64 |
| Francis needs professional assistance and cannot get it | 3 | 3.93 | .76 | 19 | 5.04 | .83 | 1.11 | 2.17 | 20 | .04 |
| Francis' newborn patient is in alcohol or drug withdrawal | 17 | 5.46 | 1.30 | 5 | 4.64 | 2.00 | -.82 | -1.10 | 20 | .29 |
| Francis' patient "gives up" on themself | 6 | 4.53 | 1.70 | 18 | 5.71 | 1.08 | 1.18 | 2.01 | 22 | .06 |
| Francis' patient dies as a result of Francis' unprofessional treatment | 11 | 6.42 | 1.02 | 11 | 5.86 | 1.14 | -.56 | -1.22 | 20 | .24 |
| Francis' patient dies because of others' unprofessional treatment | 18 | 5.87 | .90 | 5 | 5.20 | .58 | -.67 | -1.56 | 21 | .13 |
| Francis' patient dies unexpectedly | 6 | 6.03 | .60 | 18 | 5.52 | 1.16 | -.51 | -1.40 | 17.32 | .18 |
| Francis' patient expects an unrealistic outcome | 3 | 3.80 | 2.40 | 16 | 4.04 | 1.34 | .24 | .25 | 17 | .81 |
| Francis' patient has a complex medical condition | 2 | 3.70 | .99 | 19 | 4.64 | 1.22 | .94 | 1.05 | 19 | .31 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| Francis' patient has a medical condition because of caregiver neglect | 8 | 4.65 | 1.92 | 16 | 4.79 | 1.26 | .14 | .21 | 22 | .83 |
| Francis' patient has an allergic reaction | 7 | 4.40 | 1.31 | 18 | 3.43 | 1.40 | -.97 | -1.58 | 23 | .13 |
| Francis' patient implicitly threatens to sue Francis | 16 | 5.85 | 1.62 | 7 | 5.37 | 1.50 | -.48 | -.67 | 21 | .51 |
| Francis' patient is a criminal | 10 | 4.32 | 1.93 | 12 | 4.10 | 1.37 | -.22 | -.31 | 20 | .76 |
| Francis' patient is alone without any social support | 3 | 3.40 | 1.11 | 19 | 4.31 | 1.50 | .91 | .99 | 20 | .33 |
| Francis' patient is depressed | 1 | 3.60 | | 16 | 3.94 | 1.28 | .34 | .26 | 15 | .80 |
| Francis' patient is frustrated with their medical condition | 5 | 5.24 | 1.68 | 13 | 4.37 | 1.47 | -.87 | -1.09 | 16 | .29 |
| Francis' patient is in a severe medical condition | 4 | 4.00 | .63 | 17 | 5.26 | 1.25 | 1.26 | 1.93 | 19 | .07 |
| Francis' patient is in COVID-19 quarantine with no family members | 6 | 4.47 | 1.34 | 20 | 3.73 | 1.12 | -.74 | -1.36 | 24 | .19 |
| Francis' patient loses a lot of blood | 8 | 5.35 | 1.04 | 14 | 4.30 | 1.65 | -1.05 | -1.62 | 20 | .12 |
| Francis' patient must be transferred and no one is available to do it | 6 | 3.10 | 1.73 | 16 | 4.50 | 1.60 | 1.40 | 1.79 | 20 | .09 |
| Francis' patient needs to be treated by multiple professionals | 1 | 2.20 | | 23 | 2.62 | 1.28 | .42 | .32 | 22 | .75 |
| Francis' patient removes their IV | 8 | 2.88 | 1.33 | 12 | 2.98 | 1.63 | .11 | .16 | 18 | .88 |
| Francis' patient repeatedly tries to get out of bed despite given instructions | 6 | 2.43 | 1.25 | 13 | 3.52 | 1.46 | 1.09 | 1.58 | 17 | .13 |
| Francis' patient requests something immediately and it is not possible | 2 | 3.20 | .57 | 16 | 4.14 | 1.50 | .94 | .86 | 16 | .40 |
| Francis' patient requests to be treated by a different nurse | 4 | 4.00 | .73 | 16 | 4.16 | 1.73 | .16 | .18 | 18 | .86 |
| Francis' patient requests to be treated elsewhere | 6 | 2.63 | 1.44 | 16 | 3.95 | 1.32 | 1.32 | 2.03 | 20 | .06 |
| Francis' patient says they want to die | 8 | 5.93 | .64 | 12 | 5.55 | .74 | -.38 | -1.16 | 18 | .26 |
| Francis' patient should have been in a different ward | 6 | 3.87 | 1.83 | 15 | 3.07 | 1.41 | -.80 | -1.08 | 19 | .29 |
| Francis' patient survives but the quality of their life will be severely harmed | 12 | 4.45 | 1.45 | 10 | 5.16 | .90 | .71 | 1.34 | 20 | .19 |
| Francis' patient video records Francis | 7 | 4.91 | 1.18 | 13 | 4.94 | 1.18 | .02 | .04 | 18 | .97 |
| Francis' patient's condition does not require medical attention | 3 | 1.33 | .58 | 20 | 2.17 | 1.41 | .84 | 1.00 | 21 | .33 |
| Francis' patient's medical condition is deteriorating | 4 | 5.90 | .68 | 18 | 5.23 | .92 | -.67 | -1.36 | 20 | .19 |
| Francis' performance is evaluated by someone who is near by watching | 4 | 3.05 | 1.34 | 17 | 3.98 | 1.37 | .93 | 1.22 | 19 | .24 |
| Francis personally knows a patient who arrives for treatment | 5 | 4.32 | 1.08 | 18 | 3.28 | 1.25 | -1.04 | -1.69 | 21 | .11 |
| Francis prepares someone for surgery | 11 | 2.02 | 1.35 | 9 | 1.80 | .75 | -.22 | -.43 | 18 | .67 |
| Francis provides treatment to someone who will soon die anyway | 5 | 4.52 | 1.19 | 14 | 5.17 | 1.83 | .65 | .90 | 11.19 | .39 |
| Francis repeatedly checks their email | 2 | 2.60 | 2.26 | 23 | 2.24 | 1.20 | -.36 | -.38 | 23 | .71 |
| Francis sends someone for a test only because a fear of a lawsuit | 16 | 4.69 | 1.58 | 7 | 3.83 | 1.34 | -.86 | -1.25 | 21 | .23 |
| Francis' shift has a lot of new staff members | 5 | 3.88 | 1.26 | 14 | 2.74 | 1.57 | -1.14 | -1.46 | 17 | .16 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| Francis suspects abuse of a child patient they are treating | 7 | 6.29 | .64 | 11 | 6.11 | .71 | -.18 | -.53 | 16 | .60 |
| Francis suspects parental abuse of a child patient they are treating | 8 | 5.93 | .71 | 15 | 5.52 | .85 | -.41 | -1.15 | 21 | .26 |
| Francis suspect's that a child patient is neglected | 9 | 5.69 | .63 | 12 | 5.33 | 1.06 | -.36 | -.89 | 19 | .38 |
| Francis' tasks are spread in distant locations | 3 | 3.93 | 1.80 | 16 | 3.21 | 1.91 | -.72 | -.60 | 17 | .56 |
| Francis thinks of the responsibility to "do no harm" | 2 | 3.90 | .14 | 18 | 3.44 | 1.36 | -.46 | -.46 | 18 | .65 |
| Francis thinks of their legal liability | 7 | 4.29 | 1.66 | 10 | 3.72 | 1.27 | -.57 | -.80 | 15 | .44 |
| Francis' ward is not adequately stocked with medications or equipment | 4 | 3.30 | 1.06 | 15 | 3.23 | 1.27 | -.07 | -.11 | 17 | .92 |
| Francis' ward receives lower patient satisfaction scores than another ward | 7 | 2.97 | .86 | 14 | 4.74 | 1.48 | 1.77 | 3.46 | 18.36 | .00 |
| Francis' ward undergoes a reorganization | 8 | 3.10 | 1.64 | 15 | 2.72 | 1.55 | -.38 | -.55 | 21 | .59 |
| Francis warns managers about a problem but they ignore | 2 | 4.80 | 1.70 | 20 | 4.62 | 1.50 | -.18 | -.16 | 20 | .87 |
| Francis witnesses a family conflict | 3 | 3.33 | 1.47 | 25 | 3.79 | 1.19 | .46 | .62 | 26 | .54 |
| Francis' work guidelines change | 2 | 3.90 | .99 | 20 | 3.66 | 1.31 | -.24 | -.25 | 20 | .81 |
| Francis's patient does not cooperate with a treatment | 5 | 3.88 | 1.37 | 19 | 4.48 | 1.71 | .60 | .73 | 22 | .48 |
| It is night time and Francis must call the physician on duty | 4 | 2.80 | 1.66 | 19 | 3.11 | 1.74 | .31 | .32 | 21 | .75 |
| Multiple people arrive at Francis' ward at the same time | 1 | 1.60 | | 20 | 3.72 | 1.56 | 2.12 | 1.33 | 19 | .20 |
| No one who feels "a friend" is present during Francis' shift | 3 | 4.67 | 2.48 | 16 | 4.25 | 1.24 | -.42 | -.46 | 17 | .65 |
| Parents of a child patient are under the influence of drugs | 9 | 4.91 | 1.20 | 14 | 4.67 | 1.52 | -.24 | -.40 | 21 | .70 |
| Parents of a patient are addicted to drugs | 9 | 3.89 | 2.22 | 16 | 4.48 | 1.71 | .59 | .74 | 23 | .47 |
| Patients chatter outside a room in which Francis is working | 1 | 5.40 | | 24 | 2.58 | 1.57 | -2.82 | -1.76 | 23 | .09 |
| People crowd around a dying patient | 11 | 4.67 | 1.99 | 12 | 5.37 | 1.13 | .69 | 1.04 | 21 | .31 |
| Several patients team up with complaints | 8 | 5.23 | .51 | 11 | 3.98 | 1.14 | -1.24 | -2.87 | 17 | .01 |
| Someone collapses and Francis doesn't know what to do | 11 | 5.76 | .76 | 11 | 4.91 | 1.38 | -.85 | -1.80 | 20 | .09 |
| Someone else almost gives a patient the wrong medicine | 11 | 3.13 | 1.65 | 12 | 4.32 | 1.03 | 1.19 | 2.05 | 16.49 | .06 |
| Someone else gives a patient the wrong medicine | 12 | 3.03 | 1.55 | 11 | 3.86 | 1.35 | .82 | 1.35 | 21 | .19 |
| Someone is moved to the front of the queue because of their medical condition | 5 | 2.32 | .86 | 18 | 2.28 | 1.12 | -.04 | -.08 | 21 | .94 |
| Someone knocks on the door while Francis is with a patient | 1 | 1.00 | | 21 | 2.14 | 1.02 | 1.14 | 1.10 | 20 | .29 |
| Someone sues a hospital or a clinic because of Francis' work | 14 | 6.04 | 1.20 | 6 | 5.63 | .81 | -.41 | -.76 | 18 | .46 |
| Someone threatens Francis with physical violence | 10 | 6.22 | .60 | 15 | 5.33 | 1.52 | -.89 | -1.75 | 23 | .09 |
| The cafeteria at Francis' work isn't open | 4 | 2.85 | 1.59 | 15 | 2.45 | 1.30 | -.40 | -.52 | 17 | .61 |
| The condition of a patient Francis just treated deteriorates | 1 | 6.00 | | 24 | 5.08 | .99 | -.92 | -.91 | 23 | .38 |

| Event | Never experienced such an event | | | Experienced such an event | | | Mean Difference | t | df | sig. |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | N | M | SD | | | | |
| The manager acts unfairly to Francis | 2 | 6.50 | .71 | 19 | 5.15 | 1.14 | -1.35 | -1.62 | 19 | .12 |
| The manager criticizes Francis | 4 | 4.55 | .19 | 16 | 4.99 | 1.35 | .44 | 1.25 | 16.96 | .23 |
| The manager does not back Francis up | 4 | 6.35 | .41 | 14 | 5.23 | 1.27 | -1.12 | -2.83 | 15.31 | .01 |
| The manager humiliates Francis in front of other people | 8 | 6.53 | .58 | 10 | 6.26 | .83 | -.27 | -.76 | 16 | .46 |
| The manager is disrespectful to Francis | 2 | 5.00 | 2.83 | 21 | 5.85 | 1.14 | .85 | .90 | 21 | .38 |
| The manager mistreats Francis | 8 | 6.85 | .35 | 15 | 5.80 | 1.01 | -1.05 | -2.81 | 21 | .01 |
| The manager rejects something Francis requests without giving an explanation | 3 | 4.60 | .60 | 22 | 4.26 | 1.24 | -.34 | -.46 | 23 | .65 |
| The manager yells at Francis | 10 | 6.22 | .76 | 13 | 6.12 | .94 | -.10 | -.27 | 21 | .79 |
| The staff in Francis' ward work inefficiently | 1 | 2.80 | | 18 | 3.74 | 1.28 | .94 | .72 | 17 | .48 |
| There is a long queue of people waiting | 2 | 2.40 | .57 | 21 | 3.11 | 1.55 | .70 | .63 | 21 | .54 |
| There is not enough staff to give patients the immediate attention they need | 2 | 3.80 | 2.55 | 19 | 4.55 | 1.74 | .75 | .56 | 19 | .58 |
| Too many guidelines restrict Francis' behavior | 1 | 4.80 | | 24 | 4.58 | 1.09 | -.22 | -.20 | 23 | .85 |

*Note.* n is the number of participants who rated each event and reported experiencing or not experiencing each event

**Appendix D.** *Agreement Scores for Event Features, Emotional Labor, and Emotional Load*

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **1** | 23 | .22 | .83 | .04 | .74 | .74 | .04 | .91 | .91 | .74 | .74 | .83 | .74 | .91 | 1 | .39 | 1 | .74 | 1 | .65 | 1 | .83 | 1 | .48 | .46 | .28 | .58 |
| **2** | 26 | .38 | .69 | .08 | .15 | .15 | .85 | 1 | 1 | .85 | .69 | .77 | .62 | .15 | .77 | .62 | .23 | .23 | 1 | 1 | 1 | .15 | 1 | .15 | .53 | .41 | .47 |
| **3** | 20 | .00 | 1 | .00 | .80 | .80 | .30 | .60 | .90 | .80 | .90 | .80 | .40 | .30 | .80 | .60 | .90 | .70 | 1 | .40 | .90 | .80 | 1 | .10 | .44 | .43 | .49 |
| **4** | 19 | .58 | .89 | .47 | .68 | .68 | .05 | 1 | 1 | .16 | .68 | .58 | .89 | .47 | .89 | .16 | .89 | .79 | 1 | .89 | 1 | .05 | 1 | .05 | .27 | .46 | .59 |
| **5** | 21 | .90 | .52 | .62 | .71 | .71 | .90 | 1 | .90 | .71 | .81 | .90 | .33 | .81 | .90 | .43 | 1 | .90 | 1 | .81 | 1 | .14 | 1 | .05 | .17 | .63 | .72 |
| **6** | 21 | .62 | .81 | .43 | .71 | .71 | .81 | 1 | 1 | .81 | .90 | .62 | .90 | .71 | 1 | .05 | .90 | .71 | 1 | 1 | .62 | .71 | 1 | .33 | .57 | .55 | .40 |
| **7** | 16 | .13 | .88 | .25 | .88 | .88 | .88 | 1 | 1 | .88 | .88 | .75 | .63 | .13 | .75 | .63 | .50 | .38 | 1 | .88 | 1 | 1 | 1 | .88 | .23 | .49 | .47 |
| **8** | 23 | .22 | .91 | .13 | .48 | .48 | .91 | 1 | 1 | .91 | 1 | 1 | .57 | .13 | 1 | .65 | .30 | .57 | 1 | 1 | 1 | .13 | 1 | .13 | .57 | .35 | .60 |
| **9** | 22 | .36 | 1 | .36 | 1 | 1 | .82 | .82 | 1 | .82 | .82 | .55 | .55 | .73 | 1 | 1 | .64 | .73 | 1 | 1 | 1 | .82 | 1 | .82 | .81 | .68 | .46 |
| **10** | 25 | .28 | 1 | .28 | .92 | .92 | .68 | 1 | 1 | 1 | .68 | .76 | .84 | .84 | 1 | .20 | .68 | .84 | 1 | .92 | 1 | 1 | .92 | .84 | .82 | .31 | .80 |
| **11** | 25 | .36 | 1 | .36 | .76 | .76 | .68 | 1 | 1 | 1 | .84 | .76 | .76 | .92 | .92 | .44 | .84 | .92 | 1 | .52 | 1 | .84 | 1 | .36 | .68 | .20 | .59 |
| **12** | 18 | .56 | .56 | .11 | .89 | .89 | .33 | .89 | 1 | .78 | .67 | .33 | .67 | .33 | 1 | .33 | .89 | .78 | .89 | 1 | 1 | .56 | 1 | .44 | .52 | .34 | .36 |
| **13** | 26 | .85 | .69 | .54 | .77 | .77 | .23 | 1 | 1 | .92 | .46 | .92 | .54 | .62 | .85 | .77 | .62 | 1 | 1 | .54 | 1 | .62 | 1 | .15 | .41 | .44 | .64 |
| **14** | 20 | .10 | .90 | .00 | 1 | 1 | .70 | 1 | 1 | .80 | .80 | 1 | .60 | .90 | .90 | .50 | .70 | .90 | 1 | .50 | .90 | .80 | 1 | .20 | .52 | .30 | .82 |
| **15** | 26 | .08 | .85 | .23 | .77 | .77 | .92 | 1 | 1 | .92 | .46 | .69 | .31 | .15 | .85 | .92 | .77 | .23 | .92 | 1 | 1 | .46 | .85 | .23 | .68 | .38 | .45 |
| **16** | 20 | .80 | .70 | .50 | 1 | 1 | .80 | 1 | 1 | .90 | .60 | .90 | .80 | .90 | 1 | .40 | .70 | 1 | 1 | .60 | 1 | 1 | .90 | .50 | .55 | .73 | .76 |
| **17** | 18 | .56 | .89 | .44 | .78 | .78 | .33 | .78 | 1 | 1 | 1 | 1 | .67 | .11 | 1 | .56 | 1 | 1 | .89 | .78 | 1 | .44 | 1 | .11 | .55 | .39 | .54 |
| **18** | 23 | .04 | 1 | .04 | .91 | .91 | 1 | .91 | 1 | .83 | .91 | .91 | .48 | .74 | 1 | .65 | .91 | 1 | 1 | .83 | 1 | .91 | 1 | .74 | .67 | .40 | .70 |
| **19** | 21 | .71 | 1 | .71 | 1 | 1 | .62 | .52 | 1 | .62 | .81 | .52 | .81 | .62 | .24 | .62 | 1 | .90 | .62 | 1 | 1 | .81 | 1 | .81 | .68 | .59 | .83 |
| **20** | 25 | .52 | .92 | .60 | 1 | 1 | .44 | .28 | 1 | .76 | .76 | .52 | .68 | .84 | .28 | .60 | .76 | .84 | .52 | 1 | 1 | 1 | 1 | .52 | .63 | .13 | .82 |
| **21** | 23 | .30 | .91 | .39 | .83 | .83 | .48 | .91 | 1 | .39 | .91 | .83 | .57 | .22 | 1 | .13 | .83 | 1 | .74 | .13 | 1 | 1 | 1 | .13 | .58 | .28 | .60 |
| **22** | 23 | .04 | .74 | .22 | .91 | .91 | .04 | .65 | .74 | 1 | 1 | .83 | .91 | .48 | .57 | 1 | 1 | 1 | .39 | 1 | 1 | .74 | .91 | .04 | .64 | .12 | .10 |
| **23** | 23 | .13 | .83 | .04 | .13 | .13 | .22 | .74 | .57 | .48 | .57 | .57 | .65 | .04 | .39 | .74 | .83 | 1 | .83 | 1 | .91 | .57 | 1 | .30 | .51 | .28 | .61 |
| **24** | 20 | .80 | .40 | .20 | .80 | .80 | .40 | .90 | 1 | 1 | 1 | .60 | .60 | .40 | .40 | .80 | .80 | .60 | 1 | 1 | 1 | .80 | 1 | .80 | .56 | .52 | .62 |
| **25** | 22 | .27 | .64 | .64 | .45 | .45 | .64 | .91 | .64 | .91 | 1 | .91 | .64 | .73 | .00 | .73 | 1 | .91 | 1 | 1 | 1 | 1 | .64 | .64 | .42 | .60 | .45 |
| **26** | 20 | .10 | .90 | .20 | .70 | .70 | .40 | .70 | .90 | 1 | .90 | 1 | .30 | .20 | .10 | 1 | 1 | .90 | .20 | 1 | 1 | .70 | .90 | .20 | .30 | .55 | .69 |
| **27** | 17 | .88 | .76 | .88 | .29 | .29 | .53 | .88 | .53 | .88 | .53 | .65 | .88 | .41 | .29 | .06 | .76 | .29 | .76 | 1 | 1 | .06 | .88 | .29 | .09 | .48 | .36 |
| **28** | 20 | .10 | .90 | .00 | .90 | .90 | 1 | 1 | .00 | .90 | .90 | .60 | .60 | .10 | .90 | .90 | 1 | .90 | .80 | 1 | 1 | .80 | .90 | .50 | .59 | .37 | .63 |
| **29** | 22 | .45 | .64 | .09 | .91 | .91 | 1 | .73 | 1 | 1 | 1 | .91 | .82 | .91 | .27 | 1 | 1 | 1 | .82 | 1 | 1 | .82 | .91 | .55 | .65 | .33 | .49 |
| **30** | 22 | .55 | .36 | .09 | .45 | .45 | .45 | 1 | .55 | .82 | .91 | .64 | .82 | .55 | .18 | .73 | .82 | .82 | .91 | 1 | 1 | .64 | 1 | .55 | .40 | .32 | .64 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **31** | 22 | .36 | .64 | .00 | 1 | 1 | .27 | .64 | .45 | 1 | .73 | .73 | 1 | .36 | .27 | .82 | .91 | .82 | .91 | 1 | .91 | .36 | .91 | .09 | .75 | .57 | .30 |
| **32** | 25 | .12 | .92 | .20 | .52 | .52 | .92 | .76 | .84 | .52 | .76 | .92 | .28 | .76 | .20 | .52 | .92 | .92 | .92 | .92 | 1 | .68 | 1 | .52 | .66 | .64 | .59 |
| **33** | 23 | .65 | 1 | .65 | .83 | .83 | .65 | .83 | .83 | 1 | 1 | .83 | .74 | .22 | .57 | .57 | .65 | .83 | .74 | 1 | 1 | .65 | 1 | .39 | .48 | .25 | .78 |
| **34** | 22 | .64 | .73 | .36 | .73 | .73 | .18 | .73 | .55 | 1 | .55 | .91 | .91 | .18 | .18 | .82 | .73 | .91 | .55 | 1 | 1 | .82 | .91 | .27 | .06 | .50 | .78 |
| **35** | 19 | .26 | 1 | .26 | 1 | 1 | .47 | 1 | 1 | .89 | .89 | .68 | 1 | 1 | .16 | .89 | .89 | 1 | .79 | 1 | 1 | .58 | 1 | .37 | .59 | .53 | .85 |
| **36** | 22 | .18 | .82 | .36 | .91 | .91 | .91 | 1 | .91 | 1 | 1 | .73 | .73 | .64 | .18 | .91 | .82 | .91 | .82 | 1 | 1 | .64 | 1 | .45 | .63 | .43 | .73 |
| **37** | 23 | .04 | .91 | .13 | .57 | .57 | .74 | 1 | .91 | 1 | 1 | 1 | .30 | .74 | .13 | .91 | 1 | 1 | .13 | 1 | 1 | .65 | 1 | .22 | .58 | .63 | .77 |
| **38** | 23 | .22 | .91 | .13 | .65 | .65 | .91 | .30 | 1 | .65 | .30 | .57 | .04 | .13 | .91 | .22 | .39 | .48 | 1 | 1 | 1 | .91 | 1 | .91 | .38 | .06 | .37 |
| **39** | 24 | .17 | .50 | .33 | .08 | .08 | .92 | 1 | 1 | .92 | .92 | .75 | .75 | 1 | 1 | .92 | .42 | .83 | 1 | 1 | 1 | .92 | 1 | .92 | .57 | .39 | .62 |
| **40** | 23 | .04 | .91 | .13 | .22 | .22 | .13 | .30 | .83 | .22 | .48 | .30 | .04 | .83 | .48 | .13 | .65 | .39 | .65 | 1 | 1 | .39 | 1 | .04 | .53 | .64 | .41 |
| **41** | 13 | .23 | 1 | .23 | .85 | .85 | .54 | .38 | 1 | .85 | .69 | .85 | .69 | .38 | 1 | .85 | .85 | .69 | .38 | 1 | 1 | .54 | 1 | .08 | .61 | .70 | .60 |
| **42** | 13 | .38 | .69 | .08 | 1 | 1 | .69 | .54 | 1 | 1 | .54 | .85 | .85 | .69 | 1 | 1 | .69 | .69 | .54 | 1 | 1 | .69 | 1 | .23 | .66 | .25 | .66 |
| **43** | 24 | .58 | .92 | .67 | .67 | .67 | .75 | .92 | .92 | .92 | .92 | .75 | .75 | .08 | 1 | .92 | .92 | .92 | 1 | 1 | .50 | .75 | 1 | .25 | .55 | .57 | .80 |
| **44** | 21 | .05 | 1 | .05 | .71 | .71 | .62 | 1 | 1 | .90 | .90 | .81 | .81 | .05 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | .81 | .43 | .24 | .33 | .66 | .77 |
| **45** | 22 | .64 | 1 | .64 | .45 | .45 | .45 | .36 | .91 | .36 | .91 | .27 | .82 | .55 | .27 | .09 | .18 | .18 | .91 | 1 | .91 | .09 | 1 | .27 | .77 | .46 | .72 |
| **46** | 20 | .30 | 1 | .30 | .30 | .30 | .40 | .40 | 1 | 1 | .80 | .50 | .50 | .40 | .80 | .40 | .70 | .80 | .80 | 1 | .80 | 1 | 1 | .60 | .57 | .32 | .57 |
| **47** | 23 | .22 | 1 | .22 | .83 | .83 | .57 | 1 | .91 | .91 | .91 | .83 | .74 | .13 | 1 | .91 | 1 | 1 | .30 | 1 | 1 | 1 | 1 | .30 | .48 | .54 | .81 |
| **48** | 21 | .52 | .52 | .05 | .62 | .62 | .24 | .43 | 1 | .71 | 1 | .43 | .71 | .52 | 1 | .52 | .90 | .81 | .90 | .90 | 1 | .52 | 1 | .33 | .50 | .32 | .32 |
| **49** | 21 | .62 | .81 | .43 | .81 | .81 | .43 | .81 | .90 | 1 | .90 | .71 | .81 | .14 | .81 | .52 | .90 | 1 | .62 | 1 | .90 | .62 | 1 | .14 | .52 | .52 | .52 |
| **50** | 20 | .40 | 1 | .40 | .30 | .30 | .40 | .60 | 1 | .80 | .90 | .40 | .50 | 1 | .70 | .90 | 1 | .90 | .40 | 1 | 1 | .80 | 1 | .60 | .61 | .44 | .57 |
| **51** | 21 | .33 | .62 | .05 | .05 | .05 | .71 | .81 | .81 | 1 | .81 | .62 | .43 | .43 | .90 | .14 | .62 | .33 | .43 | .90 | .90 | .71 | 1 | .05 | .58 | .58 | .54 |
| **52** | 15 | .07 | .87 | .20 | 1 | 1 | .07 | 1 | 1 | .07 | 1 | .87 | .73 | .20 | .87 | .73 | 1 | 1 | 1 | .07 | 1 | .87 | 1 | .20 | .47 | .33 | .44 |
| **53** | 23 | .22 | .83 | .04 | .74 | .74 | .65 | .91 | .91 | 1 | .65 | .57 | .91 | .30 | .83 | .91 | .91 | .74 | .39 | 1 | 1 | .65 | 1 | .04 | .64 | .31 | .37 |
| **54** | 9 | .56 | 1 | .56 | 1 | 1 | .78 | .56 | 1 | 1 | .56 | .56 | .78 | .78 | .56 | .11 | 1 | .78 | 1 | .78 | 1 | 1 | 1 | .78 | .70 | .28 | .53 |
| **55** | 23 | .57 | 1 | .57 | .91 | .91 | .39 | .65 | 1 | 1 | 1 | .65 | .74 | .04 | 1 | .83 | .91 | 1 | .57 | 1 | 1 | .65 | 1 | .22 | .13 | .53 | .53 |
| **56** | 23 | .22 | .83 | .39 | .22 | .22 | .30 | .83 | 1 | .74 | .30 | .30 | .48 | .57 | 1 | .74 | .83 | .65 | .13 | .91 | 1 | .48 | 1 | .48 | .60 | .55 | .52 |
| **57** | 19 | .47 | 1 | .47 | .68 | .68 | .89 | .89 | 1 | .68 | .89 | .37 | .68 | .47 | .89 | .37 | .47 | .47 | .89 | 1 | 1 | 1 | 1 | .89 | .56 | .46 | .62 |
| **58** | 23 | .13 | .83 | .30 | .91 | .91 | .74 | .83 | .91 | .74 | 1 | .65 | .65 | .13 | .91 | .65 | .74 | .74 | .91 | 1 | 1 | .83 | 1 | .74 | .43 | .38 | .86 |
| **59** | 20 | .10 | .80 | .10 | .80 | .80 | .50 | .80 | 1 | 1 | .90 | .70 | .70 | .40 | 1 | .80 | .90 | .80 | .30 | .90 | 1 | .50 | 1 | .30 | .14 | .16 | .43 |
| **60** | 6 | .33 | 1 | .33 | .00 | .00 | 1 | 1 | 1 | 1 | 1 | 1 | .67 | .67 | 1 | 1 | 1 | 1 | .67 | 1 | 1 | .33 | 1 | .00 | .80 | .75 | .92 |
| **61** | 24 | .08 | .75 | .33 | .92 | .92 | .75 | 1 | .83 | .92 | 1 | .75 | .50 | .42 | .92 | .92 | .92 | .92 | .33 | 1 | 1 | .67 | 1 | .00 | .38 | .50 | .27 |
| **62** | 18 | .11 | .78 | .11 | .56 | .56 | .11 | .89 | 1 | .89 | .89 | 1 | .67 | .33 | .78 | .33 | .78 | .56 | .56 | 1 | 1 | .67 | 1 | .22 | .51 | .37 | .48 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **63** | 7 | .43 | .71 | .71 | .71 | .71 | .71 | 1 | 1 | 1 | .71 | .43 | .14 | .43 | 1 | .71 | 1 | 1 | .43 | 1 | 1 | .71 | 1 | .14 | .64 | .11 | .85 |
| **64** | 23 | .22 | .91 | .30 | .65 | .65 | .57 | .83 | .83 | .83 | .74 | .57 | .57 | .13 | 1 | .74 | 1 | 1 | .65 | 1 | 1 | .65 | 1 | .30 | .55 | .62 | .77 |
| **65** | 23 | .04 | .91 | .13 | .83 | .83 | .39 | .74 | 1 | 1 | .83 | .91 | .74 | .22 | 1 | .91 | 1 | .91 | .57 | 1 | .91 | .74 | 1 | .22 | .51 | .47 | .52 |
| **66** | 18 | .44 | 1 | .44 | 1 | 1 | .44 | 1 | 1 | 1 | 1 | .67 | 1 | .44 | 1 | .67 | .89 | 1 | .78 | 1 | 1 | .56 | 1 | .33 | .64 | .53 | .88 |
| **67** | 19 | .05 | .89 | .05 | .68 | .68 | .79 | .68 | .89 | .89 | 1 | .68 | .26 | .47 | .68 | .05 | .79 | .89 | 1 | 1 | 1 | .79 | 1 | .79 | .37 | .40 | .42 |
| **68** | 25 | .52 | 1 | .52 | .84 | .84 | .28 | .84 | .60 | 1 | 1 | .92 | .76 | .76 | .20 | .92 | .92 | 1 | .60 | 1 | 1 | .52 | 1 | .12 | .45 | .49 | .42 |
| **69** | 14 | .86 | .14 | .29 | .43 | .43 | .14 | .57 | .71 | .71 | .43 | .57 | .43 | .57 | .86 | .43 | .57 | .14 | .71 | 1 | 1 | .86 | 1 | .57 | .57 | .50 | .45 |
| **70** | 16 | .00 | .50 | .50 | .38 | .38 | .50 | .38 | .50 | .63 | .50 | .25 | .13 | .13 | .38 | .00 | .50 | .25 | 1 | 1 | 1 | .75 | 1 | .75 | .58 | .29 | .29 |
| **71** | 24 | .75 | .92 | .83 | .42 | .42 | .42 | .33 | .92 | .58 | .67 | .33 | .25 | .75 | .33 | .17 | .67 | .67 | .75 | .92 | 1 | .92 | 1 | .58 | .70 | .47 | .72 |
| **72** | 25 | .52 | .68 | .20 | .92 | .92 | .04 | .92 | .92 | .20 | .68 | .68 | .68 | .60 | .84 | .44 | .36 | .68 | .92 | .68 | 1 | .84 | 1 | .44 | .55 | .51 | .48 |
| **73** | 24 | .92 | .75 | .67 | .83 | .83 | .42 | .92 | 1 | .33 | .92 | .50 | .75 | .92 | 1 | .17 | 1 | .92 | 1 | .58 | 1 | .83 | 1 | .42 | .50 | .44 | .66 |
| **74** | 20 | .30 | .60 | .10 | .00 | .00 | .60 | .60 | 1 | .60 | .60 | .70 | .30 | .60 | .00 | .10 | .60 | .60 | 1 | 1 | 1 | .80 | 1 | .80 | .53 | .39 | .57 |
| **75** | 26 | 1 | .15 | .15 | .23 | .23 | .31 | .92 | 1 | .46 | .69 | .31 | .69 | .85 | 1 | .08 | .77 | .85 | 1 | .62 | 1 | .85 | .92 | .38 | .07 | .54 | .45 |
| **76** | 26 | .23 | .77 | .00 | .92 | .92 | .31 | .46 | .54 | .15 | .62 | .08 | .77 | .23 | .77 | .23 | .85 | .54 | .92 | .77 | .85 | .38 | 1 | .08 | .34 | .51 | .53 |
| **77** | 19 | .05 | .68 | .37 | .05 | .05 | .47 | .37 | .26 | 1 | 1 | .79 | .58 | .47 | 1 | .89 | 1 | 1 | .47 | 1 | 1 | .79 | 1 | .26 | .63 | .43 | .75 |
| **78** | 27 | .70 | .26 | .04 | .48 | .48 | .48 | .56 | .70 | 1 | .93 | .85 | .26 | .41 | .33 | .85 | .93 | 1 | .48 | 1 | 1 | .63 | 1 | .11 | .56 | .28 | .63 |
| **79** | 25 | .84 | .12 | .04 | .20 | .20 | .68 | .84 | 1 | .92 | .92 | .76 | .20 | .84 | .12 | .84 | 1 | .76 | .68 | 1 | 1 | .60 | 1 | .28 | .51 | .45 | .52 |
| **80** | 25 | .60 | .68 | .28 | .92 | .92 | .12 | .92 | .60 | 1 | .84 | .68 | .84 | .68 | .44 | .92 | 1 | .84 | .84 | 1 | .92 | .12 | 1 | .12 | .23 | .39 | .34 |
| **81** | 23 | .30 | 1 | .30 | 1 | 1 | 1 | 1 | 1 | 1 | .91 | .83 | .48 | .39 | .83 | .91 | .91 | .74 | .57 | 1 | 1 | .65 | 1 | .91 | .45 | .33 | .57 |
| **82** | 24 | .17 | .67 | .50 | 1 | 1 | .92 | 1 | 1 | .92 | .92 | .67 | .75 | .83 | 1 | .75 | .92 | .83 | .92 | .33 | 1 | .92 | .75 | .08 | .37 | .65 | .44 |
| **83** | 26 | .31 | 1 | .31 | .92 | .92 | .92 | 1 | 1 | 1 | 1 | .85 | .69 | .15 | .85 | .15 | .62 | .46 | 1 | .92 | 1 | .15 | .85 | .38 | .56 | .25 | .55 |
| **84** | 21 | .81 | .62 | .43 | .52 | .52 | .62 | .90 | 1 | .52 | .62 | .43 | .71 | .33 | .90 | .05 | .33 | .05 | .81 | 1 | .62 | .24 | 1 | .33 | .82 | .49 | .46 |
| **85** | 18 | .56 | .33 | .11 | 1 | 1 | .89 | .78 | 1 | .56 | .00 | .00 | .44 | .11 | .89 | .11 | .33 | .00 | 1 | 1 | .89 | .11 | 1 | .00 | .81 | .29 | .47 |
| **86** | 25 | .84 | .28 | .12 | .84 | .84 | .04 | .52 | 1 | .76 | .84 | .12 | .36 | .92 | .52 | 1 | 1 | .92 | .44 | 1 | 1 | .44 | .92 | .20 | .40 | .19 | .45 |
| **87** | 25 | .36 | .60 | .04 | 1 | 1 | .04 | .60 | 1 | .92 | .84 | .60 | .44 | .60 | .84 | .92 | .92 | .92 | .28 | 1 | .92 | .20 | 1 | .60 | .47 | .36 | .43 |
| **88** | 20 | .70 | .20 | .10 | .60 | .60 | .10 | .80 | .80 | 1 | .50 | .30 | .80 | .60 | .60 | .10 | .50 | .20 | .60 | 1 | 1 | .60 | 1 | .20 | .37 | .40 | .32 |
| **89** | 18 | .11 | .78 | .11 | .89 | .89 | .56 | 1 | 1 | 1 | .67 | .33 | 1 | 1 | .56 | .78 | .78 | 1 | 1 | .89 | .78 | 1 | .89 | .56 | .85 | .55 | .72 |
| **90** | 22 | .82 | .18 | .36 | .18 | .18 | .45 | .09 | .45 | 1 | .91 | .91 | .45 | .55 | .82 | .82 | .91 | .91 | .45 | 1 | 1 | .45 | 1 | .09 | .57 | .51 | .65 |
| **91** | 20 | .30 | .80 | .50 | .90 | .90 | .90 | .80 | .80 | .80 | .70 | .90 | .60 | .80 | .80 | .80 | .90 | 1 | .00 | 1 | 1 | .90 | 1 | .10 | .43 | .20 | .77 |
| **92** | 21 | .43 | .90 | .52 | 1 | 1 | .81 | .81 | .90 | 1 | 1 | .52 | .33 | .81 | .43 | .81 | .90 | .81 | .14 | 1 | 1 | .14 | 1 | .71 | .65 | .51 | .72 |
| **93** | 20 | .10 | .90 | .00 | 1 | 1 | 1 | .50 | 1 | 1 | 1 | .90 | .20 | .70 | .90 | .90 | 1 | .80 | .20 | 1 | 1 | .60 | 1 | .60 | .36 | .21 | .38 |
| **94** | 22 | .27 | .73 | .00 | .73 | .73 | .27 | .82 | 1 | .73 | .45 | .18 | .36 | .91 | .82 | .91 | .73 | .55 | .00 | 1 | .91 | .73 | 1 | .36 | .38 | .51 | .55 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **95** | 24 | .50 | .83 | .33 | .92 | .92 | .58 | .92 | .92 | .67 | .58 | .50 | 1 | .00 | .83 | .08 | .58 | .33 | 1 | 1 | 1 | .33 | 1 | .33 | .54 | .58 | .61 |
| **96** | 24 | .25 | .58 | .17 | .83 | .83 | .67 | .50 | .92 | .50 | .58 | .33 | .58 | .58 | .92 | .58 | .83 | .83 | .08 | 1 | 1 | .58 | 1 | .50 | .50 | .45 | .42 |
| **97** | 23 | .65 | .22 | .13 | .74 | .74 | .57 | .39 | 1 | .74 | .57 | .65 | .83 | .04 | .65 | .65 | .74 | .57 | .57 | .91 | 1 | .39 | 1 | .13 | .52 | .43 | .11 |
| **98** | 26 | .38 | .92 | .46 | 1 | 1 | 1 | .92 | 1 | .92 | 1 | .92 | .31 | .62 | 1 | .92 | .92 | .77 | .46 | 1 | 1 | .54 | 1 | .92 | .32 | .49 | .10 |
| **99** | 23 | .74 | .83 | .57 | 1 | 1 | .74 | .91 | 1 | .83 | .74 | .74 | .74 | .83 | 1 | .91 | .91 | .83 | 1 | .48 | 1 | .83 | 1 | .30 | .60 | .00 | .26 |
| **100** | 19 | .47 | .47 | .05 | .79 | .79 | .79 | 1 | .05 | 1 | 1 | 1 | .68 | .89 | .05 | 1 | 1 | 1 | .79 | 1 | 1 | .89 | 1 | .68 | .00 | .36 | .33 |
| **101** | 23 | .57 | .57 | .13 | .91 | .91 | 1 | .83 | .91 | 1 | 1 | .74 | .91 | .39 | .83 | 1 | 1 | .83 | .74 | 1 | 1 | .48 | 1 | .22 | .02 | .34 | .30 |
| **102** | 24 | .67 | .17 | .17 | .92 | .92 | .25 | .83 | .92 | .08 | .17 | .08 | .75 | .75 | .83 | .33 | .75 | .58 | .92 | 1 | 1 | .92 | 1 | .83 | .58 | .31 | .50 |
| **103** | 25 | .92 | .20 | .12 | .92 | .92 | .68 | 1 | 1 | .84 | .60 | .12 | .92 | .52 | .84 | .52 | .60 | .60 | 1 | .92 | .92 | .68 | 1 | .52 | .42 | .44 | .45 |
| **104** | 21 | .62 | .52 | .14 | .90 | .90 | .62 | .81 | .90 | .14 | .52 | .52 | .90 | 1 | 1 | .81 | 1 | 1 | 1 | 1 | 1 | .05 | 1 | .05 | .69 | .30 | .61 |
| **105** | 20 | .40 | .70 | .10 | .10 | .10 | .10 | 1 | 1 | .90 | .80 | .80 | .60 | .60 | 1 | .60 | .80 | .80 | 1 | .80 | 1 | 1 | 1 | .80 | .55 | .46 | .52 |
| **106** | 24 | .83 | .25 | .42 | .83 | .83 | .42 | 1 | .92 | .58 | .33 | .58 | .50 | .00 | .83 | .17 | .75 | .42 | .83 | 1 | .92 | .25 | 1 | .00 | .48 | .40 | .43 |
| **107** | 11 | .27 | 1 | .27 | .82 | .82 | 1 | .82 | 1 | 1 | .82 | .64 | .09 | .64 | .64 | .82 | .64 | .64 | .09 | 1 | .82 | .45 | 1 | .64 | .41 | .09 | .68 |
| **108** | 20 | .40 | .90 | .30 | 1 | 1 | .90 | .80 | 1 | 1 | .70 | .60 | .40 | .90 | .30 | 1 | 1 | 1 | .80 | 1 | .90 | 1 | 1 | .90 | .47 | .50 | .66 |
| **109** | 22 | .00 | .91 | .09 | 1 | 1 | .36 | .82 | 1 | 1 | 1 | .18 | .27 | .82 | 1 | .91 | 1 | .91 | .36 | 1 | 1 | .55 | 1 | .82 | .49 | .43 | .59 |
| **110** | 20 | .60 | .90 | .50 | 1 | 1 | .90 | 1 | 1 | .90 | .80 | .90 | .90 | 1 | 1 | .90 | .80 | .80 | 1 | .90 | 1 | .90 | 1 | .80 | .54 | .17 | .78 |
| **111** | 21 | .05 | .81 | .14 | 1 | 1 | .81 | 1 | 1 | 1 | .90 | .90 | .71 | .05 | 1 | .62 | .81 | .81 | 1 | .14 | 1 | .81 | 1 | .05 | .47 | .54 | .64 |
| **112** | 22 | .36 | .55 | .09 | 1 | 1 | .82 | .00 | 1 | 1 | .91 | .64 | .91 | .82 | 1 | .91 | .91 | .82 | .09 | 1 | 1 | .09 | 1 | .82 | .50 | .62 | .46 |
| **113** | 19 | .26 | .47 | .26 | .89 | .89 | 1 | .79 | .89 | .79 | .89 | .79 | .79 | .16 | .47 | .05 | .47 | .79 | 1 | 1 | 1 | .47 | 1 | .47 | .80 | .22 | .64 |
| **114** | 28 | .93 | .79 | .86 | .50 | .50 | .57 | 1 | 1 | .93 | .14 | .57 | .93 | .79 | .86 | .50 | .50 | .36 | 1 | .93 | 1 | .43 | 1 | .36 | .06 | .21 | .29 |
| **115** | 21 | .71 | .71 | .43 | .90 | .90 | .14 | 1 | 1 | .81 | .24 | .24 | .71 | .52 | 1 | .52 | .52 | .62 | .90 | 1 | .43 | .43 | 1 | .24 | .31 | .07 | .14 |
| **116** | 22 | .91 | .09 | .00 | 1 | 1 | .45 | .91 | 1 | .27 | .27 | .55 | .64 | .00 | .91 | .36 | .73 | .36 | .91 | 1 | .91 | .00 | 1 | .18 | .65 | .26 | .47 |
| **117** | 24 | .50 | .83 | .67 | .92 | .92 | .25 | .17 | 1 | .83 | .83 | .67 | .83 | .17 | 1 | .75 | .83 | .67 | .25 | 1 | 1 | .67 | 1 | .58 | .31 | .49 | .52 |
| **118** | 19 | .47 | .58 | .05 | .68 | .68 | .79 | .89 | 1 | .79 | .79 | .89 | 1 | .47 | .68 | .47 | .79 | .47 | .89 | .89 | 1 | .37 | 1 | .16 | .80 | .50 | .48 |
| **119** | 25 | .44 | .76 | .20 | .52 | .52 | .20 | .68 | .92 | .92 | .12 | .04 | .92 | .52 | .92 | .60 | .76 | .76 | .92 | 1 | .84 | .28 | 1 | .04 | .58 | .36 | .25 |
| **120** | 24 | .08 | .75 | .17 | .17 | .17 | .58 | .83 | .75 | .33 | .08 | .25 | .50 | .75 | .92 | .08 | .50 | .58 | .92 | .75 | .92 | .92 | 1 | .50 | .49 | .24 | .68 |
| **121** | 25 | .44 | .92 | .52 | .20 | .20 | .52 | .92 | 1 | .52 | .60 | .04 | .92 | .04 | .60 | .04 | .60 | .44 | 1 | .84 | 1 | .52 | 1 | .36 | .51 | .25 | .61 |
| **122** | 21 | .05 | .62 | .33 | .90 | .90 | .90 | .33 | .24 | .90 | .81 | .52 | .71 | .52 | .62 | 1 | 1 | 1 | .33 | 1 | 1 | .24 | 1 | .43 | .32 | .22 | .10 |
| **123** | 21 | .33 | .90 | .24 | 1 | 1 | .90 | .90 | 1 | .90 | .24 | .24 | .62 | .81 | .81 | .52 | .71 | 1 | .05 | 1 | 1 | .71 | 1 | .33 | .65 | .10 | .42 |
| **124** | 20 | .80 | .50 | .30 | 1 | 1 | .70 | .70 | .80 | .80 | .80 | .30 | .90 | .60 | .70 | .50 | .80 | .70 | 1 | 1 | 1 | 1 | 1 | 1 | .57 | .18 | .61 |
| **125** | 17 | .41 | .53 | .06 | .65 | .65 | .06 | 1 | 1 | .76 | .29 | .18 | 1 | .76 | 1 | .88 | 1 | .88 | 1 | 1 | 1 | .29 | .88 | .18 | .51 | .63 | .56 |
| **126** | 22 | .18 | .73 | .09 | 1 | 1 | .82 | .91 | 1 | .73 | .64 | .73 | .82 | .09 | .82 | .27 | .73 | .82 | .64 | .82 | 1 | 1 | 1 | .45 | .62 | .48 | .56 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **127** | 21 | .14 | 1 | .14 | 1 | 1 | .52 | .90 | 1 | .43 | .81 | .14 | .90 | .90 | .71 | .62 | .24 | .52 | 1 | 1 | 1 | .90 | .52 | .62 | .62 | .32 | .30 |
| **128** | 23 | .30 | .74 | .04 | .83 | .83 | .04 | .83 | .91 | .48 | .83 | .39 | .22 | .74 | .74 | .91 | .91 | .57 | .13 | 1 | 1 | .65 | 1 | .22 | .64 | .10 | .37 |
| **129** | 21 | .14 | .90 | .24 | 1 | 1 | 1 | 1 | 1 | .90 | .90 | .62 | .81 | .05 | .90 | .71 | .90 | .33 | 1 | 1 | 1 | .81 | 1 | .81 | .43 | .42 | .49 |
| **130** | 22 | .09 | .91 | .18 | 1 | 1 | 1 | 1 | 1 | .91 | .64 | .64 | .27 | 1 | .45 | .45 | .45 | .18 | .00 | 1 | 1 | .64 | 1 | .36 | .69 | .57 | .75 |
| **131** | 20 | .50 | .90 | .60 | 1 | 1 | .90 | 1 | 1 | .80 | .80 | .50 | .20 | .90 | 1 | .90 | .90 | .80 | .50 | 1 | 1 | .50 | 1 | .00 | .52 | .34 | .31 |
| **132** | 24 | .50 | 1 | .50 | .58 | .58 | .17 | .92 | 1 | .50 | .42 | .83 | .50 | .17 | .67 | .00 | .42 | .67 | 1 | .75 | 1 | .75 | 1 | .50 | .47 | .36 | .56 |
| **133** | 24 | .25 | .83 | .42 | 1 | 1 | .67 | .83 | .25 | .92 | .92 | .50 | .33 | .17 | .58 | .92 | 1 | .92 | .25 | 1 | .92 | .58 | 1 | .25 | .49 | .50 | .56 |
| **134** | 21 | .14 | .81 | .33 | .90 | .90 | .52 | .90 | 1 | .71 | .81 | .33 | .43 | .14 | 1 | .05 | 1 | 1 | .52 | 1 | 1 | .24 | 1 | .24 | .45 | .46 | .70 |
| **135** | 17 | .06 | .76 | .29 | .88 | .88 | .41 | .88 | .88 | .88 | .88 | .65 | .65 | 1 | .88 | .76 | 1 | 1 | .53 | 1 | 1 | .29 | 1 | .18 | .44 | .69 | .59 |
| **136** | 25 | .76 | .28 | .04 | 1 | 1 | .76 | .84 | 1 | 1 | .84 | .36 | .84 | .20 | .92 | .92 | 1 | .84 | .76 | 1 | .60 | .04 | 1 | .60 | .67 | .28 | .14 |
| **137** | 18 | .22 | .67 | .11 | .89 | .89 | .33 | .33 | .78 | .44 | .44 | .11 | .56 | .22 | .67 | .56 | .56 | .56 | .89 | 1 | 1 | .44 | .89 | .22 | .45 | .39 | .38 |
| **138** | 20 | .20 | .60 | .60 | 1 | 1 | .90 | 1 | .80 | 1 | 1 | 1 | .90 | .70 | .60 | .40 | .80 | .80 | 1 | 1 | 1 | .40 | 1 | .40 | .67 | .49 | .71 |
| **139** | 21 | .05 | .71 | .33 | 1 | 1 | .62 | .24 | .62 | .52 | .62 | .05 | .05 | .81 | .24 | .81 | 1 | .43 | .05 | .81 | 1 | .52 | 1 | .62 | .33 | .72 | .71 |
| **140** | 23 | .30 | 1 | .30 | 1 | 1 | .04 | .74 | 1 | .74 | .83 | .30 | .30 | .30 | .04 | .91 | 1 | .83 | .83 | 1 | .91 | .13 | 1 | .13 | .55 | .20 | .57 |
| **141** | 21 | .33 | .90 | .43 | 1 | 1 | .71 | .90 | 1 | .62 | 1 | .43 | .52 | .33 | .81 | .90 | 1 | 1 | .81 | .90 | .90 | .33 | 1 | .05 | .40 | .31 | .63 |
| **142** | 20 | .50 | .60 | .10 | 1 | 1 | .60 | .50 | 1 | .90 | .90 | .70 | .80 | .40 | .90 | .80 | .90 | .90 | .40 | 1 | .90 | .20 | 1 | .50 | .57 | .38 | .76 |
| **143** | 22 | .45 | .27 | .27 | 1 | 1 | .64 | .91 | 1 | .82 | .09 | .36 | .91 | .82 | 1 | .64 | .64 | .36 | 1 | 1 | .36 | .09 | 1 | .55 | .19 | .78 | .68 |
| **144** | 21 | .71 | .43 | .14 | .90 | .90 | .52 | .90 | 1 | .62 | .43 | .62 | .81 | .62 | 1 | .24 | .81 | .62 | .90 | .90 | .90 | .05 | 1 | .24 | .34 | .53 | .27 |
| **145** | 22 | .36 | .91 | .27 | 1 | 1 | .91 | 1 | 1 | 1 | .09 | .91 | .82 | .64 | 1 | .55 | .55 | .45 | 1 | .73 | 1 | .55 | 1 | .27 | .21 | .70 | .63 |
| **146** | 24 | .08 | .50 | .58 | .83 | .83 | .50 | .17 | 1 | .58 | .83 | .50 | .83 | .92 | .50 | .42 | .75 | .75 | .25 | 1 | 1 | .75 | 1 | .00 | .51 | .29 | .28 |
| **147** | 24 | .17 | .92 | .25 | .92 | .92 | .08 | .92 | 1 | .75 | .83 | .58 | .67 | .58 | 1 | .00 | .92 | .83 | .42 | .83 | 1 | .75 | 1 | .83 | .68 | .54 | .68 |
| **148** | 18 | .67 | .56 | .22 | 1 | 1 | .78 | .11 | .89 | .89 | .89 | .78 | .33 | 1 | .33 | .67 | .89 | .89 | .67 | 1 | 1 | .33 | 1 | .00 | .12 | .45 | .31 |
| **149** | 22 | .27 | 1 | .27 | .45 | .45 | .18 | .45 | .82 | .27 | .36 | .45 | 1 | .27 | .45 | .55 | .82 | .91 | .91 | 1 | .91 | .64 | .55 | .00 | .79 | .55 | .73 |
| **150** | 22 | .09 | .82 | .09 | .82 | .82 | .09 | .91 | .82 | .64 | .09 | .55 | .82 | .55 | .82 | .36 | .18 | .45 | 1 | 1 | 1 | .82 | .55 | .36 | .54 | .21 | .69 |
| **151** | 18 | .78 | .22 | .00 | .89 | .89 | .89 | 1 | 1 | .78 | .78 | .56 | .89 | .78 | .89 | .78 | .78 | .89 | 1 | 1 | 1 | .78 | 1 | .78 | .67 | .38 | .60 |
| **152** | 22 | .36 | .64 | .00 | .82 | .82 | .64 | .82 | 1 | .45 | .73 | .73 | .91 | .36 | .82 | .55 | .73 | .64 | .91 | 1 | .91 | .00 | 1 | .18 | .52 | .78 | .61 |
| **153** | 22 | .91 | .00 | .09 | .91 | .91 | .09 | 1 | 1 | .45 | .18 | .55 | .82 | .73 | .82 | .36 | .73 | .55 | 1 | 1 | .82 | .36 | 1 | .18 | .76 | .36 | .66 |
| **154** | 23 | .13 | .74 | .13 | 1 | 1 | .65 | 1 | 1 | 1 | .22 | .04 | .74 | .57 | .91 | .65 | .48 | .22 | 1 | 1 | .39 | .74 | 1 | .65 | .82 | .42 | .52 |
| **155** | 18 | .33 | .78 | .56 | .89 | .89 | .33 | .89 | .89 | .00 | .33 | .22 | .44 | .67 | .89 | .11 | .78 | .22 | .00 | .89 | 1 | .67 | 1 | .44 | .52 | .00 | .29 |
| **156** | 26 | .00 | .92 | .08 | 1 | 1 | .38 | .92 | 1 | .69 | .15 | .31 | .77 | .62 | .92 | .85 | .77 | .85 | .38 | 1 | 1 | .77 | 1 | .62 | .31 | .60 | .48 |
| **157** | 22 | .45 | .55 | .00 | .91 | .91 | .09 | .91 | 1 | .64 | .36 | .09 | 1 | .09 | .73 | .55 | .45 | .55 | .36 | 1 | 1 | .55 | 1 | .09 | .77 | .41 | .45 |
| **158** | 25 | .92 | .44 | .52 | 1 | 1 | .20 | .92 | 1 | .60 | .20 | .44 | .84 | .44 | .92 | .68 | .84 | .44 | .92 | 1 | .92 | .04 | 1 | .20 | .56 | .32 | .44 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **159** | 23 | .91 | .13 | .22 | 1 | 1 | .22 | .91 | 1 | .22 | .22 | .65 | .57 | .48 | .48 | .39 | .48 | .39 | .39 | 1 | .91 | .22 | 1 | .48 | .49 | .35 | .40 |
| **160** | 23 | .04 | .57 | .48 | 1 | 1 | .13 | .04 | .83 | .65 | .83 | .65 | .83 | .39 | .57 | .30 | .91 | .91 | .65 | 1 | 1 | .30 | 1 | .04 | .50 | .68 | .62 |
| **161** | 14 | .43 | .14 | .43 | 1 | 1 | .57 | .86 | 1 | .57 | .86 | .43 | .43 | .71 | .71 | .43 | .86 | .86 | .14 | 1 | 1 | .43 | 1 | .43 | .22 | .57 | .58 |
| **162** | 20 | .70 | .10 | .20 | 1 | 1 | .70 | .90 | .90 | .60 | .20 | .40 | .90 | .60 | .90 | .30 | .80 | .50 | 1 | 1 | .70 | .50 | 1 | .20 | .65 | .57 | .63 |
| **163** | 22 | .09 | .73 | .18 | .91 | .91 | .18 | 1 | 1 | .45 | .36 | .00 | .73 | .55 | .91 | .18 | .91 | .64 | 1 | .91 | 1 | .45 | 1 | .36 | .50 | .23 | .29 |
| **164** | 27 | .41 | .78 | .19 | .85 | .85 | .19 | 1 | 1 | .85 | .78 | .85 | .48 | .93 | 1 | .93 | 1 | .78 | 1 | .41 | .93 | .33 | 1 | .33 | .26 | .55 | .52 |
| **165** | 22 | .09 | .82 | .27 | .91 | .91 | .55 | .82 | 1 | .64 | .64 | .18 | .73 | .36 | .73 | .73 | .91 | .82 | .91 | 1 | .91 | .64 | 1 | .45 | .47 | .53 | .61 |
| **166** | 19 | .37 | 1 | .37 | 1 | 1 | .58 | .37 | .89 | .68 | .68 | .26 | .58 | .89 | .68 | .37 | 1 | .89 | .47 | 1 | 1 | .16 | 1 | .37 | .25 | .53 | .58 |
| **167** | 21 | .14 | 1 | .14 | .81 | .81 | .33 | .62 | 1 | .90 | .52 | .62 | .71 | .52 | .90 | .43 | .71 | 1 | .81 | .62 | 1 | .52 | .90 | .14 | .27 | .55 | .78 |
| **168** | 24 | .42 | .83 | .58 | .83 | .83 | .83 | .75 | .75 | .92 | .92 | .67 | .92 | .50 | .83 | .25 | .92 | .67 | .50 | 1 | 1 | .33 | 1 | .17 | .63 | .31 | .49 |
| **169** | 16 | .63 | .50 | .13 | .75 | .75 | .13 | .25 | .88 | .88 | .75 | .38 | .63 | .75 | 1 | 1 | 1 | 1 | .00 | 1 | 1 | .50 | 1 | .50 | .50 | .14 | .24 |
| **170** | 19 | .68 | .47 | .16 | .89 | .89 | .16 | .26 | .89 | .89 | .89 | .68 | .37 | .89 | .79 | 1 | 1 | 1 | .05 | 1 | 1 | .47 | 1 | .58 | .56 | .45 | .54 |
| **171** | 23 | .65 | .57 | .22 | .91 | .91 | .30 | .83 | 1 | .91 | .74 | .30 | .83 | .30 | 1 | .22 | .74 | .65 | .39 | 1 | 1 | .39 | 1 | .22 | .41 | .07 | .37 |
| **172** | 22 | .55 | .45 | .00 | 1 | 1 | .45 | .18 | 1 | .91 | .36 | .18 | .64 | .73 | .82 | .73 | .91 | .73 | .36 | 1 | 1 | .00 | 1 | .64 | .78 | .54 | .75 |
| **173** | 21 | .71 | .05 | .24 | 1 | 1 | .24 | .62 | 1 | .52 | .43 | .14 | .62 | .33 | .90 | .43 | .90 | .62 | .14 | 1 | 1 | .05 | 1 | .81 | .51 | .24 | .31 |
| **174** | 18 | .11 | .67 | .44 | 1 | 1 | .33 | .67 | .22 | .56 | .56 | .33 | .44 | .67 | .89 | .89 | .89 | .78 | .11 | 1 | 1 | .33 | 1 | .56 | .34 | .45 | .48 |
| **175** | 22 | .09 | .73 | .18 | .82 | .82 | .00 | .91 | 1 | .18 | .55 | .09 | .91 | .09 | .82 | .36 | .73 | .82 | .91 | .64 | 1 | .27 | 1 | .18 | .59 | .28 | .50 |
| **176** | 21 | .71 | .43 | .14 | .81 | .81 | .81 | 1 | 1 | .90 | .62 | .81 | 1 | .05 | .33 | .14 | .33 | .71 | .90 | .90 | 1 | .05 | 1 | .24 | .78 | .56 | .64 |
| **177** | 25 | .36 | .84 | .52 | 1 | 1 | .76 | .20 | .92 | 1 | 1 | .76 | .52 | .60 | 1 | 1 | 1 | 1 | 1 | 1 | .36 | .60 | .92 | .12 | .25 | .40 | .54 |
| **178** | 24 | .83 | .25 | .08 | 1 | 1 | .42 | 1 | 1 | 1 | .25 | .25 | .75 | .42 | .92 | .50 | .58 | .42 | .83 | 1 | .83 | .25 | 1 | .08 | .15 | .49 | .65 |
| **179** | 24 | .67 | .58 | .25 | .83 | .83 | .83 | 1 | 1 | .08 | .08 | .50 | .92 | .42 | 1 | .50 | .75 | .50 | .08 | 1 | 1 | .58 | 1 | .33 | .64 | .57 | .28 |
| **180** | 19 | .47 | .68 | .16 | .89 | .89 | .37 | 1 | .89 | .16 | .16 | .58 | .89 | .26 | .79 | .47 | 1 | .68 | .89 | .89 | 1 | .58 | 1 | .37 | .65 | .51 | .83 |
| **181** | 22 | .00 | .45 | .55 | .36 | .36 | .55 | .18 | .27 | .91 | 1 | .82 | .18 | .91 | .18 | .82 | 1 | .91 | .36 | 1 | 1 | .45 | 1 | .18 | .77 | .38 | .46 |
| **182** | 24 | .75 | .50 | .25 | .08 | .08 | .50 | .75 | .92 | .83 | 1 | .67 | .67 | .75 | .42 | .67 | 1 | 1 | .83 | 1 | 1 | .58 | 1 | .42 | .56 | .37 | .56 |
| **183** | 24 | .92 | .67 | .58 | 1 | 1 | .50 | .67 | .83 | .83 | .83 | .58 | .67 | .42 | .92 | .92 | .92 | .83 | .33 | 1 | 1 | .58 | 1 | .08 | .84 | .28 | .52 |
| **184** | 22 | .27 | .82 | .45 | 1 | 1 | .82 | .91 | 1 | 1 | .73 | .64 | .18 | .55 | .36 | .64 | .73 | .82 | .09 | 1 | 1 | .73 | 1 | .36 | .43 | .16 | .70 |
| **185** | 23 | .57 | .91 | .65 | .22 | .22 | .65 | .91 | .91 | .83 | .65 | .48 | .65 | .48 | .04 | .13 | .74 | .74 | .91 | .91 | 1 | .74 | 1 | .57 | .57 | .00 | .81 |
| **186** | 24 | .67 | 1 | .67 | .42 | .42 | .17 | .08 | .83 | .75 | .67 | .25 | .75 | .25 | .25 | .17 | .83 | .67 | .92 | 1 | 1 | .67 | 1 | .58 | .78 | .45 | .72 |
| **187** | 19 | .68 | .26 | .05 | .68 | .68 | .16 | .68 | .79 | 1 | .89 | .58 | .26 | .79 | .68 | .89 | .89 | .89 | .37 | 1 | 1 | .68 | 1 | .05 | .19 | .26 | .46 |
| **188** | 21 | .71 | .14 | .43 | .90 | .90 | .14 | .05 | 1 | .62 | .90 | .71 | .71 | .33 | .62 | .33 | .81 | .71 | .52 | 1 | 1 | .52 | 1 | .05 | .64 | .53 | .63 |
| **189** | 24 | .67 | .25 | .08 | .33 | .33 | .25 | 1 | .08 | .25 | .92 | .25 | .00 | .58 | .08 | .58 | .67 | .58 | .25 | 1 | 1 | .75 | 1 | .00 | .58 | .23 | .46 |
| **190** | 25 | .12 | .92 | .20 | .44 | .44 | .60 | .36 | .76 | .68 | .84 | .20 | .04 | .84 | .68 | .52 | 1 | .84 | .92 | 1 | 1 | .68 | 1 | .60 | .32 | .59 | .50 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **191** | 23 | .22 | 1 | .22 | .83 | .83 | .13 | .48 | .83 | 1 | .74 | .65 | .83 | .22 | .74 | .83 | .74 | .65 | .65 | .91 | .91 | .83 | 1 | .30 | .62 | .17 | .39 |
| **192** | 22 | .45 | .64 | .09 | .36 | .36 | .36 | .55 | .91 | 1 | .82 | .45 | .64 | .09 | .82 | .45 | .73 | .73 | .64 | 1 | 1 | .18 | 1 | .18 | .52 | .36 | .35 |
| **193** | 22 | .73 | .09 | .36 | .27 | .27 | .36 | .82 | .09 | .82 | .73 | .27 | .45 | .91 | .82 | .91 | 1 | .64 | 1 | 1 | 1 | .55 | .91 | .45 | .61 | .58 | .46 |
| **194** | 17 | 1 | .41 | .41 | .29 | .29 | .53 | .65 | .88 | .76 | 1 | .41 | .06 | 1 | .41 | .76 | 1 | .88 | .53 | 1 | 1 | .53 | 1 | .06 | .61 | .71 | .61 |
| **195** | 18 | .67 | .33 | .00 | .22 | .22 | .11 | .22 | 1 | 1 | .78 | .56 | .11 | .44 | .89 | 1 | .89 | .78 | .33 | 1 | 1 | .67 | 1 | .00 | .03 | .45 | .41 |
| **196** | 21 | .62 | .43 | .05 | .62 | .62 | .14 | .24 | .81 | .71 | .81 | .43 | .52 | .90 | .62 | .52 | 1 | .81 | .62 | 1 | 1 | .81 | 1 | .43 | .61 | .33 | .61 |
| **197** | 26 | .46 | .00 | .54 | .00 | .00 | .77 | .38 | .69 | 1 | 1 | .62 | .00 | .85 | .31 | .77 | .92 | .69 | .85 | 1 | .92 | .38 | 1 | .15 | .60 | .42 | .65 |
| **198** | 22 | .00 | .82 | .18 | .73 | .73 | .27 | .45 | .91 | .36 | .45 | .27 | .64 | .64 | .45 | .36 | .82 | 1 | .64 | 1 | 1 | .91 | 1 | .55 | .56 | .00 | .42 |
| **199** | 22 | .18 | .82 | .00 | .64 | .64 | .55 | .91 | 1 | .18 | .18 | .64 | .55 | .36 | .91 | .45 | .82 | .55 | .73 | 1 | 1 | .36 | 1 | .09 | .45 | .24 | .26 |
| **200** | 24 | .75 | .33 | .08 | .67 | .67 | .17 | .50 | 1 | .25 | .33 | .08 | .33 | .75 | .75 | .25 | .75 | .83 | .67 | .92 | 1 | .58 | 1 | .17 | .61 | .67 | .60 |
| **201** | 20 | .20 | .80 | .40 | .20 | .20 | .50 | .80 | .90 | .80 | .90 | .80 | .40 | .70 | 1 | .80 | 1 | .90 | .90 | .90 | 1 | .80 | 1 | .60 | .51 | .42 | .45 |
| **202** | 19 | .79 | .05 | .16 | .16 | .16 | .26 | .89 | 1 | 1 | 1 | .79 | .68 | .68 | .89 | .68 | 1 | 1 | .79 | 1 | 1 | .47 | 1 | .26 | .28 | .40 | .47 |
| **203** | 18 | .56 | .44 | .00 | .78 | .78 | .11 | .11 | 1 | .78 | .78 | .11 | .56 | .78 | 1 | .89 | .67 | .67 | .56 | .89 | 1 | .56 | 1 | .00 | .68 | .27 | .48 |
| **204** | 20 | .20 | .90 | .30 | .50 | .50 | .30 | .60 | 1 | .80 | .90 | .60 | .30 | .60 | .90 | .30 | 1 | .90 | .60 | 1 | 1 | .70 | .90 | .20 | .48 | .48 | .39 |
| **205** | 22 | .27 | .91 | .36 | .64 | .64 | .00 | .45 | 1 | .55 | .73 | .18 | .27 | .82 | .91 | .82 | .64 | .82 | .55 | .91 | 1 | .64 | 1 | .09 | .49 | .43 | .47 |
| **206** | 20 | .50 | .80 | .30 | .20 | .20 | .80 | .90 | .60 | 1 | 1 | .50 | .80 | .30 | .20 | .80 | .90 | .80 | .20 | 1 | 1 | .90 | 1 | .10 | .71 | .39 | .87 |
| **207** | 21 | .43 | .43 | .14 | .24 | .24 | .43 | 1 | 1 | .52 | .05 | .43 | .05 | .43 | .90 | .62 | .62 | .62 | 1 | 1 | .90 | .62 | 1 | .52 | .39 | .31 | .41 |
| **208** | 22 | .09 | .18 | .73 | .27 | .27 | .09 | .55 | .91 | .36 | .64 | .00 | .36 | .73 | .18 | .45 | .55 | .73 | .36 | 1 | 1 | .73 | 1 | .09 | .29 | .54 | .60 |
| **209** | 20 | .30 | 1 | .30 | .60 | .60 | .80 | .90 | 1 | .90 | .90 | 1 | .70 | .10 | 1 | 1 | .90 | 1 | .20 | 1 | 1 | .90 | 1 | .10 | .57 | .52 | .67 |
| **210** | 23 | .04 | .83 | .22 | .30 | .30 | .13 | .13 | .91 | .74 | .83 | .22 | .22 | .65 | .74 | .83 | .91 | .83 | .57 | 1 | .91 | .65 | .91 | .04 | .39 | .73 | .54 |
| **211** | 22 | .55 | .36 | .09 | .45 | .45 | .09 | .45 | 1 | .55 | .82 | .18 | .45 | .73 | .09 | .36 | .73 | .73 | .73 | 1 | 1 | 1 | 1 | .73 | .40 | .78 | .80 |
| **212** | 21 | .43 | .52 | .05 | .71 | .71 | .14 | .90 | 1 | .90 | .05 | .33 | .52 | 1 | 1 | .43 | .33 | .71 | .62 | 1 | .90 | .52 | 1 | .05 | .60 | .44 | .52 |
| **213** | 23 | .30 | 1 | .30 | .48 | .48 | .48 | .30 | 1 | 1 | 1 | .65 | .83 | .65 | .83 | 1 | 1 | .83 | .48 | 1 | 1 | .48 | 1 | .04 | .62 | .52 | .60 |
| **214** | 20 | .00 | .80 | .20 | 1 | 1 | 1 | .80 | 1 | 1 | .70 | .80 | .20 | .80 | 1 | .80 | 1 | 1 | .20 | 1 | 1 | .40 | 1 | .80 | .61 | .64 | .70 |
| **215** | 19 | .16 | .47 | .37 | 1 | 1 | .47 | .58 | 1 | 1 | .89 | .05 | .26 | 1 | .68 | 1 | 1 | .89 | .37 | 1 | 1 | .68 | 1 | .68 | .46 | .51 | .29 |
| **216** | 25 | .84 | .44 | .60 | 1 | 1 | .84 | 1 | 1 | .92 | .84 | .60 | .76 | .12 | 1 | .20 | .92 | .60 | .92 | 1 | .76 | .76 | 1 | .44 | .35 | .49 | .61 |
| **217** | 23 | .48 | .91 | .57 | .83 | .83 | .57 | .30 | .83 | .91 | .57 | .22 | .57 | .22 | .83 | .74 | .74 | .13 | .22 | 1 | 1 | .30 | 1 | .48 | .26 | .42 | .41 |
| **218** | 19 | .68 | .16 | .16 | .37 | .37 | .58 | 1 | 1 | .26 | .47 | .37 | .68 | .05 | .79 | .79 | .37 | .37 | 1 | 1 | 1 | .26 | 1 | .26 | .40 | .33 | .40 |
| **219** | 19 | .79 | .68 | .47 | 1 | 1 | .37 | .89 | 1 | .37 | .16 | .47 | .68 | .47 | .89 | .68 | .47 | .26 | 1 | .89 | .79 | .26 | 1 | .58 | .77 | .52 | .19 |
| **220** | 18 | .89 | .00 | .11 | .56 | .56 | 1 | 1 | 1 | .22 | .89 | .67 | .56 | .33 | .56 | .78 | .11 | .11 | 1 | 1 | 1 | .22 | 1 | .22 | .80 | .48 | .51 |
| **221** | 18 | .67 | .78 | .44 | .44 | .44 | .11 | .67 | .33 | .67 | .56 | .22 | .22 | .56 | .56 | 1 | 1 | .78 | .33 | .89 | 1 | .78 | 1 | .00 | .71 | .50 | .89 |
| **222** | 23 | .91 | .48 | .39 | .30 | .30 | .48 | .57 | .74 | 1 | .91 | .74 | .30 | .48 | .22 | .65 | .65 | .74 | .22 | 1 | .83 | .83 | 1 | .13 | .50 | .37 | .84 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **223** | 21 | .52 | .81 | .33 | .14 | .14 | .24 | .81 | .24 | .62 | .62 | .24 | .71 | .52 | .14 | 1 | .71 | .71 | .62 | 1 | 1 | .52 | 1 | .14 | .68 | .25 | .80 |
| **224** | 19 | .79 | .47 | .26 | .68 | .68 | .58 | 1 | 1 | .89 | .37 | .05 | 1 | .68 | 1 | .89 | .79 | .58 | 1 | 1 | 1 | .47 | 1 | .47 | .47 | .37 | .13 |
| **225** | 20 | .80 | .10 | .10 | .80 | .80 | .90 | .90 | .90 | .90 | .90 | .60 | .80 | .30 | .70 | .80 | .80 | .60 | .70 | 1 | .80 | .70 | 1 | .20 | .28 | .49 | .58 |
| **226** | 17 | .65 | .18 | .18 | .88 | .88 | .65 | .88 | 1 | .76 | .88 | .06 | .88 | .65 | .88 | .88 | .76 | .29 | .88 | 1 | 1 | .88 | .88 | .65 | .25 | .61 | .49 |
| **227** | 19 | .89 | .16 | .05 | .26 | .26 | .37 | .89 | 1 | .37 | .58 | .47 | .79 | .47 | .68 | .68 | .47 | .37 | 1 | 1 | .89 | .58 | 1 | .47 | .18 | .44 | .64 |
| **228** | 14 | .57 | .14 | .29 | .57 | .57 | .29 | .86 | .86 | .29 | .14 | .14 | .29 | .14 | .57 | .00 | .00 | .14 | 1 | 1 | 1 | .86 | 1 | .86 | .41 | .47 | .45 |
| **229** | 23 | .22 | .65 | .13 | .04 | .04 | .83 | 1 | .91 | .74 | .30 | .74 | .74 | .30 | .57 | .74 | .30 | .39 | 1 | 1 | 1 | .74 | 1 | .74 | .79 | .45 | .40 |
| **230** | 22 | .36 | .55 | .09 | 1 | 1 | .55 | 1 | 1 | .82 | .91 | .09 | .73 | .36 | .55 | .09 | .18 | .18 | .91 | .82 | 1 | .91 | 1 | .64 | .45 | .55 | .46 |
| **231** | 28 | .21 | .86 | .36 | .93 | .93 | .79 | .64 | .93 | 1 | .93 | 1 | .07 | .43 | .79 | 1 | 1 | 1 | 1 | 1 | 1 | .79 | 1 | .79 | .69 | .36 | .64 |
| **232** | 22 | .55 | .18 | .64 | .09 | .09 | .55 | .91 | .91 | .82 | .36 | .55 | .82 | .27 | .73 | .00 | .00 | .00 | 1 | .91 | 1 | .64 | 1 | .55 | .68 | .61 | .60 |
| **233** | 24 | .75 | .75 | .50 | .58 | .58 | .42 | .75 | .83 | .92 | .92 | .83 | .58 | .75 | .75 | .75 | .83 | .92 | .00 | 1 | 1 | .58 | 1 | .42 | .54 | .43 | .33 |
| **234** | 23 | .04 | 1 | .04 | 1 | 1 | .65 | .39 | 1 | .74 | .65 | .74 | .74 | .13 | 1 | .04 | 1 | .83 | .91 | 1 | 1 | .04 | 1 | .04 | .56 | .31 | .28 |
| **235** | 21 | .43 | .71 | .14 | .52 | .52 | .71 | .62 | .71 | .81 | .43 | .62 | .62 | .33 | .62 | .33 | .90 | .71 | .90 | 1 | .90 | .62 | 1 | .43 | .61 | .29 | .37 |
| **236** | 19 | .79 | .05 | .16 | .68 | .68 | .47 | .79 | 1 | .58 | .58 | .05 | .89 | .37 | .79 | .26 | .89 | .79 | .79 | .89 | 1 | .16 | 1 | .47 | .42 | .53 | .50 |
| **237** | 23 | .22 | .65 | .13 | .48 | .48 | .57 | .91 | .83 | 1 | .83 | .65 | .13 | .91 | .04 | .74 | .83 | .91 | .83 | 1 | 1 | .48 | 1 | .30 | .59 | .58 | .52 |
| **238** | 25 | .76 | .36 | .60 | .60 | .60 | .92 | .44 | .68 | 1 | 1 | .68 | .36 | .52 | .44 | .68 | .92 | .92 | 1 | 1 | 1 | .76 | 1 | .76 | .49 | .36 | .11 |
| **239** | 25 | .44 | .44 | .12 | .60 | .60 | .84 | .52 | .84 | .92 | .92 | .68 | .76 | .04 | .84 | .92 | 1 | .92 | .36 | 1 | .84 | .52 | .92 | .36 | .45 | .40 | .33 |
| **240** | 23 | .57 | .91 | .65 | .65 | .65 | .74 | .48 | .30 | .13 | .65 | .22 | .30 | .65 | .13 | .13 | .83 | .65 | 1 | 1 | 1 | 1 | 1 | 1 | .34 | .29 | .36 |
| **241** | 11 | .82 | .27 | .09 | .82 | .82 | .64 | .45 | 1 | .45 | .45 | .45 | .09 | .09 | 1 | .09 | .09 | .09 | 1 | 1 | 1 | .64 | 1 | .64 | .51 | .64 | .68 |
| **242** | 22 | .73 | 1 | .73 | .91 | .91 | .64 | .64 | .91 | .45 | .27 | .27 | 1 | .18 | 1 | .73 | .91 | 1 | .73 | .91 | 1 | .82 | 1 | .45 | .60 | .00 | .66 |
| **243** | 23 | .57 | 1 | .57 | .91 | .91 | .91 | .74 | 1 | .65 | .74 | .57 | .91 | .65 | .91 | .13 | .91 | .74 | .91 | .83 | 1 | .83 | 1 | .57 | .86 | .46 | .47 |
| **244** | 23 | .39 | 1 | .39 | .91 | .91 | .83 | 1 | 1 | .65 | .83 | .57 | .91 | .83 | .83 | .13 | .83 | .65 | .91 | 1 | 1 | .91 | .83 | .65 | .36 | .47 | .45 |
| **245** | 23 | .04 | .83 | .22 | .57 | .57 | .57 | .74 | 1 | .48 | .30 | .30 | .48 | .48 | .83 | .74 | .83 | .48 | .91 | .91 | .83 | .83 | 1 | .48 | .19 | .49 | .72 |
| **246** | 22 | .27 | .91 | .36 | .73 | .73 | .55 | .91 | .45 | .09 | .55 | .18 | .73 | .73 | 1 | .91 | 1 | .82 | .82 | 1 | 1 | .82 | 1 | 1 | .65 | .74 | .74 |
| **247** | 20 | .00 | .80 | .20 | .80 | .80 | .70 | .60 | .90 | .80 | .50 | .00 | .70 | .10 | .70 | .50 | .00 | .30 | .60 | 1 | 1 | .90 | 1 | .50 | .02 | .14 | .70 |
| **248** | 25 | .20 | .92 | .12 | 1 | 1 | .68 | .04 | .68 | .76 | .68 | .04 | .60 | .36 | .76 | .76 | .84 | .68 | 1 | 1 | 1 | .52 | 1 | .52 | .45 | .38 | .58 |
| **249** | 19 | .05 | 1 | .05 | .47 | .47 | .89 | 1 | 1 | .89 | .26 | .47 | .79 | .37 | .47 | .16 | .16 | .58 | 1 | 1 | 1 | .79 | .26 | .05 | .41 | .60 | .56 |
| **250** | 25 | .20 | .76 | .04 | .84 | .84 | .52 | .28 | 1 | .68 | .84 | .52 | .52 | .84 | .28 | .60 | .76 | .76 | .44 | .92 | 1 | .60 | 1 | .04 | .68 | .40 | .76 |
| **251** | 21 | .43 | .62 | .05 | 1 | 1 | .81 | 1 | 1 | .90 | .90 | .71 | 1 | .90 | .90 | .81 | .43 | .90 | 1 | .71 | 1 | .52 | 1 | .24 | .59 | .47 | .66 |
| **252** | 20 | .10 | .80 | .10 | .90 | .90 | .50 | 1 | 1 | .90 | .80 | .90 | .80 | 1 | 1 | .90 | .20 | .90 | 1 | .90 | .90 | .40 | 1 | .20 | .48 | .62 | .63 |
| **253** | 14 | .86 | .71 | .57 | 1 | 1 | .43 | .86 | 1 | 1 | .86 | .71 | .71 | .86 | .86 | 1 | .29 | .86 | .86 | .71 | 1 | .86 | 1 | .43 | .77 | .23 | .60 |
| **254** | 18 | .33 | .78 | .11 | .78 | .78 | .89 | 1 | 1 | .89 | 1 | 1 | .89 | .67 | .89 | .00 | .00 | 1 | .89 | .89 | 1 | .89 | 1 | .67 | .32 | .30 | .87 |

| Event num. | n | Facets | | | | | | | | | | | | | | | | | | | | | | Emo Labor | Emo Load |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $a_2$ | $a_3$ | $b_1$ | $b_2$ | $c_1$ | $c_2$ | $c_3$ | $c_4$ | $c_5$ | $c_6$ | $d_1$ | $d_2$ | $d_3$ | $d_4$ | $d_5$ | $d_6$ | $e_1$ | $e_2$ | $e_3$ | $e_4$ | $e_5$ | $e_6$ | Freq | | |
| **255** | 23 | .65 | .74 | .39 | .91 | .91 | .65 | 1 | 1 | 1 | .91 | .74 | .83 | .91 | .91 | .65 | .30 | .91 | .91 | .91 | 1 | .91 | 1 | .74 | .80 | .37 | .60 |
| **256** | 15 | .87 | .20 | .07 | 1 | 1 | .87 | 1 | 1 | .73 | 1 | .60 | 1 | .87 | 1 | .73 | .47 | .60 | 1 | 1 | 1 | .60 | 1 | .60 | .66 | .64 | .74 |
| **257** | 25 | .20 | 1 | .20 | .76 | .76 | .52 | 1 | 1 | 1 | .92 | .60 | .68 | .76 | .92 | .76 | .04 | .68 | 1 | .68 | .92 | .76 | 1 | .36 | .68 | .47 | .65 |
| **258** | 23 | .04 | .91 | .13 | .91 | .91 | .39 | 1 | 1 | 1 | .91 | .83 | .83 | .91 | 1 | .74 | .04 | .91 | 1 | 1 | .91 | .74 | 1 | .65 | .68 | .34 | .82 |
| **259** | 19 | 1 | .26 | .26 | .16 | .16 | .58 | .79 | 1 | .58 | .37 | .58 | .16 | .05 | .68 | .37 | .79 | .37 | 1 | 1 | .89 | .37 | 1 | .26 | .39 | .41 | .60 |
| **260** | 23 | .65 | .39 | .04 | .04 | .04 | .74 | .91 | 1 | .83 | .57 | 1 | .22 | .48 | .39 | .13 | .57 | .13 | .91 | 1 | 1 | .65 | .91 | .48 | .45 | .50 | .44 |
| **261** | 21 | .90 | .05 | .14 | .43 | .43 | .81 | 1 | 1 | .71 | .24 | .81 | .52 | .62 | .24 | .52 | .33 | .33 | .90 | 1 | 1 | .43 | 1 | .33 | .56 | .13 | .22 |
| **262** | 25 | .92 | .60 | .68 | .76 | .76 | .36 | 1 | 1 | .92 | .60 | .76 | .84 | .76 | 1 | .76 | .84 | .68 | .84 | 1 | .92 | .68 | 1 | .44 | .37 | .39 | .72 |

*Note.* A full list of event numbers and descriptions is available in Appendix A.
n represents the number of participants who rated each event.
Scores in features $a_1$-$e_6$ represent the agreement metric, calculated as $|Percentage\_ij(x)-0.5| \times 2$
Scores in frequency, emotional labor, and emotional load represent rwg scores.

# עומס רגשי: פרספקטיבה חדשה להבנת עומס עבודה

חיבור על מחקר
לשם מילוי חלקי של הדרישות לקבלת התואר
מגיסטר למדעים במדעי ההתנהגות והניהול – פסיכולוגיה ארגונית

**קרן אדגואיצאו**

הוגש לסנט הטכניון, מכון טכנולוגי לישראל

אב, התשפ״ד, חיפה, אוגוסט 2024

המחקר התבצע בהנחיית פרופ׳ אמריטה ענת רפאלי
בפקולטה למדעי הנתונים וההחלטות

מחברת חיבור זה מצהירה כי המחקר, כולל איסוף הנתונים, עיבודם והצגתם, התייחסות והשוואה למחקרים קודמים וכו׳, נעשה כולו בצורה ישרה, כמצופה ממחקר מדעי המבוצע לפי אמות המידה האתיות של העולם האקדמי. כמו כן, הדיווח על המחקר ותוצאותיו בחיבור זה נעשה בצורה ישרה ומלאה, לפי אותן אמות מידה.

אני מודה לטכניון על התמיכה הכספית הנדיבה בהשתלמותי.

**תקציר**

בעבודתם היומיומית, עובדי שירותי הבריאות מתמודדים עם מגוון רחב של דרישות רגשיות. דרישות רגשיות חוזרות ונשנות אלו עלולות להשפיע על רווחת העובדים, לגרום לתשישות רגשית ולשחיקה, ולהשפיע על ביצועיהם. לדוגמה, Elfering et al. (2017) הראה כי דרישות רגשיות מעלות את רמת הלחץ הקוגניטיבי, יוצרות בעיות בריכוז, בקבלת החלטות ובזיכרון, ומסכנות את בטיחות המטופלים.

אמנם מחקרים קודמים הזכירו את המושג "עומס רגשי" (Emotional Load) אך המושג זכה לתשומת לב מחקרית מוגבלת. מטרתנו המרכזית במחקר הנוכחי היא להגדיר ולמדוד את העומס הרגשי בעבודת בריאות. המטרה הרחבה יותר היא לשלב את העומס הרגשי עם המחקר התפעולי בתחום התכנון, ניתוב והעסקת עובדים. ניתוחים קיימים של עומס רגשי אינם מתחשבים במצבי עבודה שמטילים דרישות רגשיות כמקור לעומס. אנו מציעים שיש להתחשב בדרישות רגשיות אלו כאלמנט בעומס העבודה של העובדים, שילוב שיאפשר התחשבות בעומס רגשי בתכנון התפעולי.

המחקר הנוכחי מגדיר ומודד עומס רגשי בעבודת צוותי בריאות, בהתייחס לחוסר ההגדרות הסטנדרטיות והמדדים בספרות הקיימת, שמסתמכת בעיקר על דיווחים עצמיים סובייקטיביים. אנו מנסחים הגדרה רב-ממדית של עומס רגשי ותהליך מדידה שמאפשר לשלב עומס רגשי בתכנון תפעולי במסגרות בריאותיות. הגדרה זו מאפשרת הבנה מעמיקה יותר של הגורמים והמאפיינים התורמים לעומס רגשי ובכך משפרת את היכולת לניהול עומס העבודה בקרב צוותי הבריאות.

המחקר הנוכחי ממשיך את עבודתו של Altman (2021) שזיהה והגדיר אירועים המייצרים עומס רגשי בעבודת שירותי הבריאות. תחילה ביצענו ניתוח שטחות (Facet Analysis) להגדרת שטחות (Facets) המגדירות אירועים רגשיים בעבודת שירותי הבריאות. ניתוח זה כלל התחשבות במודלים קיימים של לחץ בעבודה (Stress in Organizations) ושל עוצמת הרגש (Emotional Intensity) על מנת להגדיר את השטחות השונות המאפיינות את אותם אירועים רגשיים. לאחר מכן, ניסוי 1 משתמש בשיטות איכותניות לבחינת 262 אירועי עבודה בשירותי הבריאות באופן שיטתי על מנת לזהות מאפיינים (Features) בתוך ההיבטים הללו. בניסוי 2, עובדים פעילים בשירותי הבריאות התבקשו לסווג את 262 האירועים על פי השטחות והמאפיינים שזוהו, ולדרג את העומס הרגשי ועבודת הרגשות עבור כל אירוע. מחקר 2 מציע כימות של ההשפעה הייחודית של כל אחד ממאפייני האירועים על עומס רגשי, מבחין בין עומס רגשי לעומס תפעולי (Operational Load) ובוחן את התפקיד של עבודת רגשות (Emotional Labor) כמתווך בקשר בין מאפייני האירועים לעומס רגשי. תהליך זה מאפשר להבין את ההבדלים בין עומס רגשי לעומס תפעולי, ולבחון את ההשפעה של עבודת רגשות על עומס רגשי.

ממצאי המחקר שלנו מראים כי עומס רגשי הוא מושג נפרד מעומס תפעולי ועבודת רגשות. בניסוי 1 זיהינו חמישה היבטים ו-23 מאפיינים של אירועי עבודה רגשיים במערכות הבריאות. הממצאים של ניסוי

2 מראים כי חלק מהמאפיינים תורמים יותר להסבר העומס הרגשי מאחרים. בנוסף, נמצא כי עומס רגשי הוא מושג נפרד מעומס תפעולי ועבודת רגשות. כמו כן, נמצא כי עבודת רגשות מתווכת את הקשר בין מאפייני האירועים לבין העומס הרגשי שהם יוצרים.

תוצאות המחקר מראות כי עומס רגשי הוא מושג עצמאי ובר קיימא. ניתוח השטחות מעמיק את ההבנה של הגורמים והמאפיינים המשפיעים על עומס רגשי ומציע דרך לפיתוח של כלי מדידה אובייקטיביים בעתיד, ובכך מאתגר הנחות קודמות של הסובייקטיביות של עומס רגשי. הגישה שלנו להגדרת עומס רגשי מאפשרת שילוב של סוג זה של עומס, יחד עם עומס תפעולי וקוגניטיבי, בתכנון ארגוני, ניתוב ותכנון כוח אדם במסגרות בריאותיות. ההשלכות והאתגרים שזוהו במחקר הנוכחי סוללים את הדרך להמשך חקר והבנה של עומס רגשי.