Examining burnout profiles in the Veterans Administration: All Employee Survey narrative comments

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A B S T R A C T

This mixed-method study examined burnout profiles: statistically generated configurations reflecting relative levels of the three MBI-based burnout dimensions – exhaustion, depersonalization, and reduced personal achievement – within individuals. These profiles, based on quantitative ratings, were examined in parallel with open-ended employee comments in the same survey (a large organizational census in the USA Veterans Administration; $N = 179,271$). We were able to distinguish between the quantitatively defined profiles based on the raw data of the comments. *Summary themes* (derived from comment data through content analysis) did not differentiate between the profiles. We discuss the conceptual and pragmatic and implications and recommendations for future research.

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1. Introduction

Understanding employee burnout is critically important for organizations. Employees who are burned out are more likely to show greater absenteeism, higher turnover intention as well as actual turnover, lower job satisfaction, and lower organizational commitment (Bakker, Demerouti, de Boer, & Schaufeli, 2003; Maslach & Leiter, 2008; Suñer-Soler et al., 2014). The Veterans Administration, the second largest federal agency in the United States that provides comprehensive healthcare, financial, and burial services to American Veterans and their families, is experiencing growing stress to its system due to an increasing number of Veterans returning from two concurrent wars. This additional strain, whether through greater numbers of patients requiring health services or more disability claims being filed that need to be processed by employees, impacts the amount of stress, and, therefore, increases the risk of burnout in Veterans Administration employees.

Research suggests that burnout consists of three dimensions: emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA). EE is the manifestation of the stress experienced when burnt out. It is what most people think of when they feel and report being burned out. However, EE does not constitute burnout in its entirety. DP, the need to distance oneself from

work as a result of exhaustion or feelings of cynicism toward one's job, is also a critical dimension of the construct. Reduced PA, or loss of sense of self at work (efficacy), is considered to be a function, to varying degrees, of EE, DP, or a mixture of both dimensions (Maslach, Schaufeli, & Leiter, 2001). The burnout state is, therefore, a complex, multi-dimensional construct that provides insight into employee's psychological well-being, job attitude and productivity at work. Indeed, employee burnout is often conceptualized as the negative end of the same continuum where the positive end is employee engagement (Innanen, Tolvanen, & Salmela-Aro, 2014; Schaufeli, Bakker, & Salanova, 2006). The implication of this view is that increasing engagement and reducing burnout represents fundamentally the same task for organizations. In other words, differentiating between the two concepts is a matter of perspective – much like describing the glass as half-full or half-empty.

One step in addressing burnout in the Veterans Administration employees is to examine its measurement. Burnout in the Veterans Administration is measured within the annual organizational census, All Employee Survey (AES), using items from the most widely validated measure of employee burnout: Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1986). These items reflect employee self-ratings of the three burnout aspects (EE, DP, and PA). Using these data, we take a configurational approach (Meyer, Tsui, & Hinings, 1993) to burnout; first noting individual-level patterns (i.e. which dimensions of burnout are rated high or low relative to the others), then using these to group individuals into burnout profiles, then consider how the specific profiles are distributed (e.g. which ones are most typical) among various organizational groups. Thus,

the configurational approach involves looking at the *combination* of burnout dimensions (by summarizing them as burnout profiles), as opposed to continuous or discrete measurement of each dimension as a separate measure of burnout. The configurational approach allows for a more fine-grained understanding and thus a clearer and more accurate picture of the Veterans Administration employees' experience of burnout.

The current study is a qualitative examination of the Veterans Administration employee burnout profiles defined from EE, DP and PA ratings of MBI items administered within the organizational census survey. We begin with a brief overview of the Job Demands-Resource model – the most well-known theory explaining burnout – followed by a description of how burnout impacts Veterans Administration employees. We describe in more detail the configurational approach to measuring burnout, and explain how the results of burnout measurement across organizational groups are reported within the Veterans Administration. We then report a qualitative examination of the burnout profiles that we conducted to evaluate whether the content of employee open-ended comments about their work environment (was consistent with the burnout profiles based on quantitative ratings of burnout included in that same survey). We end with discussing applications of these findings within organizations and ideas for continued work in this area.

1.1. The Job Demands-Resources model

The most common framework that explains the underlying mechanism of burnout is the Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to the JD-R, burnout results from both an excess of job demands (i.e. workload) and a depletion of job resources (e.g. social support). It is insufficient to have one or the other but rather it is a combination of the two that creates burnout. For example, an overwhelming amount of work, given adequate resources, will not lead to burnout. If, however, the job requirements are overly demanding – such as an emergency room surgeon overwhelmed with the number of patients – and the equipment and supplies to perform surgery are lacking, resulting in inefficiency and a backlog of patient appointments, then burnout will predictably occur. The JD-R model has been empirically supported in multiple populations (Bakker, Demerouti, & Schaufeli, 2003; Bakker, Demerouti, & Verbeke, 2004; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Schaufeli & Bakker, 2004), both in cross-sectional and longitudinal research (Hakanen, Schaufeli, & Ahola, 2008).

1.2. Burnout in the Veterans Administration

The Veterans Administration seeks to reduce burnout and improve well-being among its employees, therefore addressing or preempting burnout is of concern. Research on burnout in the Veterans Administration suggests that supervisor burnout may spillover onto the shared work environment, resulting in less favorable perceptions of workplace by the supervised staff (Hernandez, Luthanen, Osatuke, & Ramsel, 2014; Hernandez, Osatuke, & Ramsel, 2014; Hernandez, Yanovsky, & Osatuke, 2014). Additionally, staff who are already experiencing burnout are less likely to successfully cope with a critical event (shock) at work, resulting in greater turnover intentions. Minimizing burnout can lessen shock impact and thus minimize turnover intentions (Tenbrink, Weinhardt, & Griffeth, 2012). This outcome is particularly important in healthcare as it ensures the continuity of patients' experience of services, a critical factor in improving patient outcomes (Cabana & Jee, 2004; Plomondon et al., 2007). On the other hand, greater self-awareness appears to serve as a protective factor for burnout. For example, for Veterans Administration supervisors more aware of their

workplace behaviors and its impact on others, their supervised workplace climate was largely unaffected by their personal (self-reported) burnout, likely because they were better at monitoring their burnout levels (Hernandez, Luthanen, et al., 2014; Hernandez, Osatuke, et al., 2014; Hernandez, Yanovsky, et al., 2014).

1.3. Measurement of burnout

One approach used to better understand and attend to burnout in the Veterans Administration is to enhance the quality of its measurement across organizational groups, to be able to monitor and clearly communicate results to broad organizational audiences including leaders, decision-makers, and employees themselves. The traditional methods of measuring burnout consists of evaluating its levels, i.e. continuous measures (assessing whether more or less burnout is present) or evaluating presence versus absence of burnout, i.e. discrete measures (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Lasalivia et al., 2009; Rudman & Gustavsson, 2012). A less typical configurational approach to the construct (e.g. Meyer et al., 1993) examines combinations of the burnout elements (EE, DP and PA) as they form specific patterns per individual (Demerouti, Verbeke, & Bakker, 2005). This allows conceptualizing the individual expression of burnout in a way that captures the interplay of individual differences and workplace conditions at one point in time (Luthanen, Beckstrand, Yanchus, & Osatuke, 2015). There is evidence to suggest that the configurational approach is a more useful measure of burnout than using the dimensions separately (see Boersma & Lindblom, 2009; Maslach & Leiter, 2008; Luthanen et al., 2015).

Of note, this conclusion addresses a different point than the one advocated in Golembiewski and Munzenrider's (1984) early work on phases of burnout. These authors dichotomized burnout into high and low categories and translated these into phases, describing these as progressive, temporal phases of burnout, related in the expected direction with a variety of organizational variables, and possibly moderated by the hierarchical level and job type within the organization. The present authors do not view configurations of burnout dimensions as necessarily reflecting temporal phases, e.g. we do not claim that individuals progress from one profile to another as their burnout improves or worsens. We see the configurational approach as beneficial because it allows simultaneously considering all the three dimensions of burnout, while reflecting their relative salience in the individual experience *at a given time*. Further, based on the subsequent research evidence accumulated since the early work by Golembiewski and Munzenrider, we do not believe that the concept of developmental progression between burnout phases has been empirically supported. For example, Leiter (1989) found no such evidence, and also questioned Golembiewski and Munzenrider findings based on the specific method they used to interpret their data. To our knowledge, Leiter's (1989) conclusion has not been reverted by any subsequent empirically based studies.

Within the framework of the configurational approach, the present study conceptualized burnout as consisting of the three dimensions (EE, DP, and PA) that combine into eight unique burnout profiles. We defined these profiles as non-overlapping clusters that comprehensively included all of the theoretical possibilities of how the three burnout dimensions may be configured, that is how high versus low levels on each dimension may be combined with high versus low levels on each other dimension (e.g. high EE and high DP with high PA; high EE and high DP with low PA; etc.). (For a detailed rationale and description of the statistical method and analyses used to develop the profiles, please contact the corresponding author). The benefit offered by this approach is that it allows comparing the conceptual possibilities of how burnout may be expressed, to the actual (observed) frequencies of burnout configurations in groups of interest.

To summarize results of measurement obtained from this approach for communicating the findings to the broad organizational audience (e.g. leaders and employees in the Veterans Administration), burnout profiles for specific groups are described and compared to other groups. For example, physicians in primary care can be compared to physicians in other medical specialties, both within the same hospital or nationally (to all 140 of the Veterans Administration hospitals in the USA). Nurses working in a specific setting (e.g. emergency room) can be compared to nurses in the same setting but a different hospital; executives can be compared to managers and to frontline employees; and so forth. The comparison of groups in terms of their burnout profiles characterizes the most frequent patterns of burnout in individuals who form these groups. This highlights group differences possibly in need of workforce support, intervention, or process improvements. For example, in our 2013 data for Veteran Administration, primary care physicians compared to any other physician specialty had a substantially higher frequency of the profile labeled "Burned Up", characterized by high ratings on all the three burnout aspects (EE, DP and reduced PA). Changes in group burnout levels (e.g. from one year to another, or from pre- to post- an organizational intervention program) can also be described in terms of changes in their burnout profiles. In sum, expressing burnout in terms of the eight profiles captures the individual (and occupational) variation in how burnout is configured, while offering a common ground to compare burnout across organizational groups (for a discussion of psychometric and statistical benefits of this approach, please contact the corresponding author).

Luthanen et al. (2015) illustrate the pragmatic usefulness of burnout profiles in clarifying their relationships to other aspects of organizational functioning in the Veterans Administration. For example, once the burnout profiles were examined relative to other AES measures, the two most problematic profiles – Burned Out and Burning Up – were found to be significantly, negatively related to employee perceptions of job satisfaction, workplace civility, workload and job control, work/family balance, and positively related to turnover intention and turnover plans. Luthanen et al. also reported the relationships between the burnout profiles and patients' perceptions of care. The percentage of nurses in the Burned Out and Overextended profiles were significantly, negatively correlated with multiple and specific patients' perceptions (e.g. of being treated with courtesy and respect, being listened to, being cared for as a person, cleanliness of the room, being properly informed), as well as with patients' ratings of whether, when given the choice, they would choose the Veterans Administration for future care or recommend the Veterans Administration to others for care. These findings illustrate the usefulness of the burnout profiles in examining correlates and implications of burnout in the Veterans Administration.

1.4. Purpose of the current study

The purpose of this study was to expand our understanding of the burnout profiles based on the MBI item ratings by considering their relationship to the contents of the qualitative (free text) comments shared by the same Veterans Administration AES respondents whose MBI item ratings placed them into specific profiles. First, we assessed the validity of the burnout profiles through an examination of employees' narrative comments (obtained via open-ended questions in the Veterans Administration AES) about the strengths and weaknesses of their work environment. We sought to find out whether employees, who based on their numeric survey ratings were placed into statistically generated categories of the eight burnout profiles, reflected in their comments the same combinations of EE, DP, and PA as they did in their ratings which defined their statistical profile. For example, we evaluated whether

respondents statistically assigned to the Burned Out profile would demonstrate, through their verbal expression in the comment, the view of their workplace that was consistent with them experiencing a high EE, high DP, and low PA. If not, then we determined what combination – if any – they did present and which of the eight profiles, if any, their comment would be consistent with. Second, we sought to determine whether any additional elements (among those found in qualitatively derived themes from the comments) were associated with the burnout profiles, which would further distinguish the eight profiles from each other or provide additional insight into the meaning of each profile.

Additionally, we hoped to contribute to the literature in the following ways. First, showing a correspondence between the qualitative comments and the burnout profiles would lend support for the use of the profiles as an additional way of summarizing the experience of organizational members. In our experience, this additional summary helps in translating the burnout assessment results to wider interested audiences within the organization (e.g. human resource specialists, managers, etc. – rather than researchers or psychologists only). Currently, burnout is most frequently summarized via reporting the three separate dimension scores. While informative, these do not convey all of the relevant aspects of the construct or summarize them in ways that are easy to understand and use, from the perspective of organizational decision-makers or advocates for well-being of specific employee groups. Second, the themes derived from the qualitative data for each profile may enhance our understanding of what burnout means, particularly in terms of the JD-R model.

2. Method

2.1. Participants

Participants in the current study were Veterans Administration employees who responded to the 2013 Veterans Administration AES, shared open-ended comments regarding either strengths or improvement areas at their workplace, also rated their burnout on three questions from MBI included in the AES, and whose survey responses were randomly sampled from the AES dataset (2043 participants, out of $N = 84,058$ commenters). The participants were from all of the Veterans Administration, representing a variety of individual and occupational demographics (e.g. over 200 occupations employed in this large system), all levels of organizational tenure (from less than 6 months to over 20 years on the job), all supervisory levels from frontline to executive employees, as well as multiple work types, locations, and settings across the 50 US states. Fifty-seven percent were between ages 40–59; 60% were female; and 46% had been with the Veterans Administration between two and ten years. Sixty-six percent were frontline staff. The two largest occupational groups were administrative employees (20%) and registered nurses (17%).

2.2. Measures

The Veterans Administration AES (Osatuke et al., 2012), an annual, voluntary census survey administered for the purposes of organizational feedback and action planning, was used as the source of archival data for this study, with the permission obtained from the Veterans Administration Institutional Review Board. The AES response rate in the examined year 2013 was 65% ($N = 179,271$). The survey was available to respondents in Intranet, paper, or telephone format; a large majority ($n = 174,167$ or 97.2%) responded via intranet. The survey included 51 closed-ended questions asking to rate aspects of job satisfaction, workgroup climate (e.g. civility, psychological safety), perceptions of supervisors and senior

managers, burnout, and turnover intentions. The open-ended questions (available in the intranet format only) asked employees to "please share any *strengths* about your workplace or aspects your workplace should *keep supporting*; please share any *areas of improvement* about your workplace or aspects your workplace *should correct*." Survey instructions indicated that the open-ended responses would be shared verbatim with the organizational leaders, and asked employees not to include any individually identifying information. All comments, limited to 400 characters for each type of response (positive: regarding strengths, or negative: regarding areas of needed improvement), were confidential and could not be linked back to survey respondents.

Burnout was assessed by three questions taken, with permission, from the Maslach Burnout Inventory (MBI; Maslach et al., 1986) and rated using a 7-point scale (assessing frequency of occurrence from 0 = never to 6 = every day). The items "I feel burned out from my work" represented EE; "I worry that this job is hardening me emotionally" represented DP; and "I have accomplished many worthwhile things in this job" represented PA. One MBI item was selected from each MBI subscale in consultation with the MBI authors and previous MBI-based research (e.g. Boles, Dean, Ricks, Short, & Wang, 2000; Leiter & Shaughnessy, 2006; Maslach & Jackson, 1981; Maslach et al., 2001; Rohland, Kruse, & Rohrer, 2004). Two of these MBI items were the highest loading on their respective factors (.87 (EE) and .83 (DP)) and the third item was the second highest loading on its factor (.67 (PA)) in a study of 7538 Veterans Administration employees across 34 occupational groups in 250 locations in the United States from 2008 to 2012 (Hernandez, Luthanen, et al., 2014; Hernandez, Osatuke, et al., 2014; Hernandez, Yanovsky, et al., 2014). Each item also demonstrated strong face validity. In addition, the correlation between the MBI summated scores and the items were respectively, .85 (EE), .77 (DP) and .70 (PA).

2.3. Procedure

We examined whether the content of the AES text comments provided the information sufficient to (a) identify and (b) differentiate between eight computer generated burnout profiles based on respondents' numeric ratings of three survey items (EE, DP, and PA measures). Each burnout profile was defined by a unique combination of these three items. For example, Engagement consisted of high accomplishment, low depersonalization, and low exhaustion, whereas Burned Out consisted of low accomplishment, high depersonalization, and high exhaustion (see Table 1).

The confirmatory coding proceeded as follows. First, the coder noted the computer generated profile based on the participants' numeric ratings. Next, the coder read both the positive and negative comments of the participant, and determined if the overall content of the qualitative response fit the numerically-based profile or not. In other words, if the coder read a comment from a participant whose numeric ratings were computer-categorized in the "Engagement" profile, she read it looking for evidence of high accomplishment, low depersonalization, and low exhaustion. If these elements were present in the text of the qualitative comment, she confirmed the participants' profile. If not, the coder reviewed the response looking for the other seven profiles' characteristics, to determine whether the response might fit into another profile. If the content of the response did not contain any elements that allowed placing it into any particular profile, it was coded as "can't tell." The total number of comments read was 2043. Of these comments, 539 were confirmed as matching and 429 comments were disconfirmed as not matching their statistical profile assignment (for these latter an alternative profile assignment was subsequently provided); and 1075 comments did not provide elaborated enough content to be classified into any specific profile based on the

Table 1
Eight burnout profiles coding results.

Profile name[a]	Most frequent positive themes[b,c]	Most frequent negative themes[b,c]
Engaged N = 119	Supervisor (24) Core mission (21) Teamwork (19)	Communication (20) Training/continuing education (11) Accountability (11)
Total positive themes = 36 Total negative themes = 38		
Unfulfilled N = 109	Teamwork (15) Core mission (11) Dedication (9)	Promotions (24) Rewards/recognition/ praise (21) Accountability (17)
Total positive themes = 30 Total negative themes = 45		
Frustrated N = 116	Core mission (30) Teamwork (31) Dedication (20)	Morale (34) Accountability (28) Upper management (22)
Total positive themes = 32 Total negative themes = 40		
Withdrawn N = 142	Core mission (11) Supervisor (9) Communication (5)	Fairness-favoritism (46) Accountability (40) Upper management (28)
Total positive themes = 22 Total negative themes = 49		
Striving N = 108	Teamwork (30) Core mission (20) Dedication (17)	Workload (40) Staffing (39) Morale (17) Accountability (17)
Total positive themes = 28 Total negative themes = 41		
Overextended N = 117	Teamwork (16) Core mission (9) Supervisors (8)	Workload (41) Staffing (39) Morale (24)
Total positive themes = 25 Total negative themes = 39		
Burning up N = 104	Teamwork (17) Core mission (17) Dedication (11)	Workload (26) Morale (25) Staffing (24)
Total positive themes = 22 Total negative themes = 40		
Burned Out N = 140	Core mission (20) Dedication (7) Teamwork (6)	Favoritism-Fairness (40) Morale (34) Well-being (32)
Total positive themes = 19 Total negative themes = 43		

[a] N = total comments coded (positive and negative pair).
[b] Notes on themes: Core Mission = patient care/customer service; Well-being = burnout, exhaustion, and stress.
[c] Note = Frequency is how often the theme occurred.

qualitative data. The coding continued until a minimum of 100 responses per profile were classified into their respective categories, which resulted in a total of 925 coded comments. (This number exceeded 800 – hundred comments per each of the 8 profiles – because, as the computer categorization of some comments was disconfirmed, additional comments had be coded to reach a minimum of 100 comments qualitatively categorized into each

profile. This number was also less than the total confirmed/ alternate assignment quantity (968) due to the accidental loss of some comments – approximately five per burnout profile – when transferring the data across software programs used for tracking and coding qualitative data.) These coded (confirmed; plus disconfirmed with alternate assignment) responses were then entered into NVivo 10 for additional qualitative coding and data mining, to explore in detail the themes about the work environment present in the comments.

3. Results

3.1. Confirmatory coding

We confirmed 26.4% (n = 539) of AES comments as belonging to their numerically based profile. We disconfirmed and re-classified 21% (n = 429) of the AES comments as not belonging to their numerically based profile. Based on the content of the comments (i.e. an insufficient elaboration about aspects of burnout), we were unable to place 53% (n = 1075) of the examined comments into any specific burnout profile. The results highlight the relatively high number of comments without sufficient detail about the commenters' burnout experience (the reason that those comments could not be classified into burnout profiles based on qualitative data). Such responses contained numeric ratings of burnout levels, but no additional elaboration regarding burnout-related content in the open-ended text. For the purposes of follow-up qualitative analyses within this study (classifying contents or themes within the comments), we consider these records as missing.

Of those comments where the respondents did talk about burnout and specifically about its three numerically rated dimensions (EE, DP, and PA), their statistically generated profiles were confirmed rather than disconfirmed for a higher number of respondents. Using a two-sample z-test, this difference was statistically significant in the expected direction (i.e. more confirmed than disconfirmed comments) at the .05 level. Thus, the number of comments with contents consistent with the commenters' numeric ratings significantly exceeded the number of comments with contents divergent or different from the commenters' numeric ratings.

3.2. Content analysis

Results of the content analysis of the eight burnout profiles appear in Table 1. The most prevalent theme across all the burnout profiles was *core mission*, which we defined as employees' belief in and internalization of the Veterans Administration's critical mission to serve Veterans. While *core mission* appeared as a positive theme in every profile, its frequency compared to other themes within a profile was greatest for the Burnout profile. This suggests that in those instances when employees perceive little reason to be enthusiastic about their work environment, they still remain cognizant of the main purpose of their work – taking care of Veterans – and in those times of strain and stress, still see this as a strength (if even the only strength) of their Veterans Administration employment. Connection with the core mission of the organization, however, appears to not be enough to offset the high job demands and lack of resources which collectively can lead to burnout. If it were, then employees in this profile would not be experiencing such a negative state. Instead, it may be that *core mission* is enough to keep employees in their jobs and focused on serving Veterans, but it does not resolve the general negative feelings generated by being in a difficult work environment.

Supervisor, the extent to which employees' direct supervisor is supportive of and involved with their work, was the most

frequently mentioned positive theme for the Engaged profile. Supervisor support is formal or informal, instrumental or emotional, stable, consistent facilitation for employees (Ng & Sorensen, 2008). Supervisory support can act as a buffer in stressful jobs (Cummins, 1990; Karasek, Triantis, & Chaudhry, 1982). This finding suggests that a work environment with supportive supervision can foster employee well-being and growth, and is a critical factor in creating an engaging work environment and engaged employees.

Teamwork was the most frequent positive theme in the Unfulfilled, Striving, Overextended, and Burning Up profiles. Teamwork implies cohesiveness among workgroup members as well as shared mental models as they work together to complete tasks. There is also a supportive, social element in teamwork. Having a strong team to rely on in order to perform well on the job may heighten a sense of personal accomplishment, which is one of the shared dimensions between the Striving and Burning Up profiles. Additionally, the social element may help or make bearable a work environment that causes great emotional exhaustion, a key dimension in the Overextended, Striving, and Burning Up profiles. This social element may also offer a type of enjoyable distraction when the job is not challenging, as is the experience of the Unfulfilled employees.

Morale, defined as a positive, energetic state, was perceived negatively or viewed as being at a low level, in five out of the eight profiles (Frustrated, Striving, Overextended, Burning Up, and Burned Out). It was also the most frequently cited negative theme for these profiles. Morale is a state rather than a job demand or job resource; therefore, it may serve as an indicator of distress when those factors are high and low, respectively. Four of these five profiles that contained comments about low morale (Striving, Overextended, Burning Up, and Burned Out) shared in common – high EE; and the AES item measuring EE specifically asks about level of burnout. It is noteworthy that employees who directly endorse being burned out in their ratings also directly express feelings of low morale in their comments. This suggests a relationship between burnout and morale, which has been conceptually postulated and supported in the literature (e.g. Maslach & Jackson, 1981). In the current study, this relationship is supported by the association of qualitative comment themes with quantitatively based burnout profiles. Based on our reading of the comments, when employees reference having low morale, they are implying that they are experiencing a high degree of EE and burnout in their jobs and work environment.

Three profiles, Striving, Overextended, and Burning Up, each referenced the negative themes of *workload* (amount of work) and *staffing* (number of staff available to do the work). In employees' comments, these two themes were inversely related to each other: too much work and too little staff to get it done. This is indicative of high job demands and low job resources – the combination most conducive for creating feelings of burnout. Out of these three profiles, the Burned Out profile included comments which reported a greater prevalence of difficulty with *well-being*, which consists of burnout, stress, and exhaustion. This suggests two conclusions. First, in their comments on the organizational survey, employees were comfortable directly expressing their concerns with specific high job demands and low job resources in their work environment which in combination contribute to their lowered well-being. Second, employees who specifically experienced burnout directly spoke to the psychological impact of their job and work environment. Overall, this indicates that employees' open-ended text comments are a useful resource for revealing critical indicators impacting employee psychological well-being at work.

Favoritism-fairness, or the extent to which preferential treatment toward certain employees was perceived from supervisors and management, appeared in only two profiles: Withdrawn and

Burned Out, which shared in common the high depersonalization component. Feeling depersonalized, or being emotionally hardened on the job, lends itself to greater expression of cynicism, and preferential treatment – real or perceived – is a suitable target for upset employees. This finding is consistent with previous research; e.g. according to Maslach et al. (2001), lack of fairness impacts burnout by increasing the level of cynicism about the job.

The Unfulfilled profile also had two unique themes not shared with the other profiles: *promotions* and *rewards/recognition/praise*. Not being able to achieve career advancement and not getting recognized for current achievements may feed into the feelings of low personal accomplishment that characterize this profile. Interestingly, in previous studies, rewards/recognition/praise have been described as a perceived key job resource (Bakker & Demerouti, 2007; Bakker et al., 2007; Bakker, van Veldhoven, & Xanthopoulou, 2010), and promotional opportunities, because they can be perceived as a source of job feedback, could also be categorized as such, though to a lesser degree. The Unfulfilled profile, therefore, experiences low resources but not high job demands. The JD-R model suggests that low resources are not enough to create the conditions of burnout but rather both high demands and low resources contribute to it. Therefore, burnout is not high in this profile compared to the other profiles in which greater demands but also low resources exist.

Fig. 1 presents the themes representing key job demands and resources in the Veterans Administration across all eight burnout profiles. Additionally, the valence of the theme (the extent to which the theme is viewed by employees as a negative or positive element of the work environment) is included. This figure presents a snapshot of the relationship of the themes and their valence *within* a burnout profile. It provides a picture of how varied the themes appear by profile. For example, the Engaged profile has many more positive than negative themes, whereas the Burned Out profile has almost no positive themes. This figure also shows the differences *between* the profiles based on valence. In general, in terms of positive themes, there were more similarities than

differences between the profiles. For example, *core mission* appeared across all profiles; and *teamwork* appeared in five profiles. One positive theme appearing singularly in one and only one specific profile was *supervisor* in the Engaged profile, which underscores the importance of employee perceptions of their supervisors in influencing, and perhaps indeed defining, their levels of engagement at the workplace. This conclusion is consistent with prior research which suggests that supervisory support is a critical job resource (e.g. Bakker et al., 2007). There were again, a number of similarities between the profiles in the negative themes, although negative themes showed more differences than positive themes across profiles. *Morale* appeared in five of the profiles; *workload* and *staffing* appeared in three; and. the Unfulfilled profile was most distinctive by having two unique negative themes.

3.3. Quantitative analysis

As seen in Table 1, the Engaged profile had by far the highest number of positive theme references. Striving and Frustrated also had over 100 positive theme references. All three profiles are characterized by high PA. Similarly, all three profiles emphasize interpersonal relationships (supervisor, teamwork) as a positive element of their work environment. The profiles with the highest negative theme references were Withdrawn and Burned Out. The commonality between these profiles is high DP. Both also share the negative theme of *favoritism-fairness*. Review of the comments containing references to *favoritism-fairness* yields several variations around one core sentiment: 'The distribution of the workload is unfair. People who work hard end up being given more work while those who do nothing are given less.'

Table 2 presents the ordering of the profiles by odds of negative text comments. The odds of negative text comments imply a potential basis for ordering the unfavorableness of the Burnout Profiles. Our analysis of odds of negative comments associated with specific profiles suggests that when only *one* dimension of burnout is rated
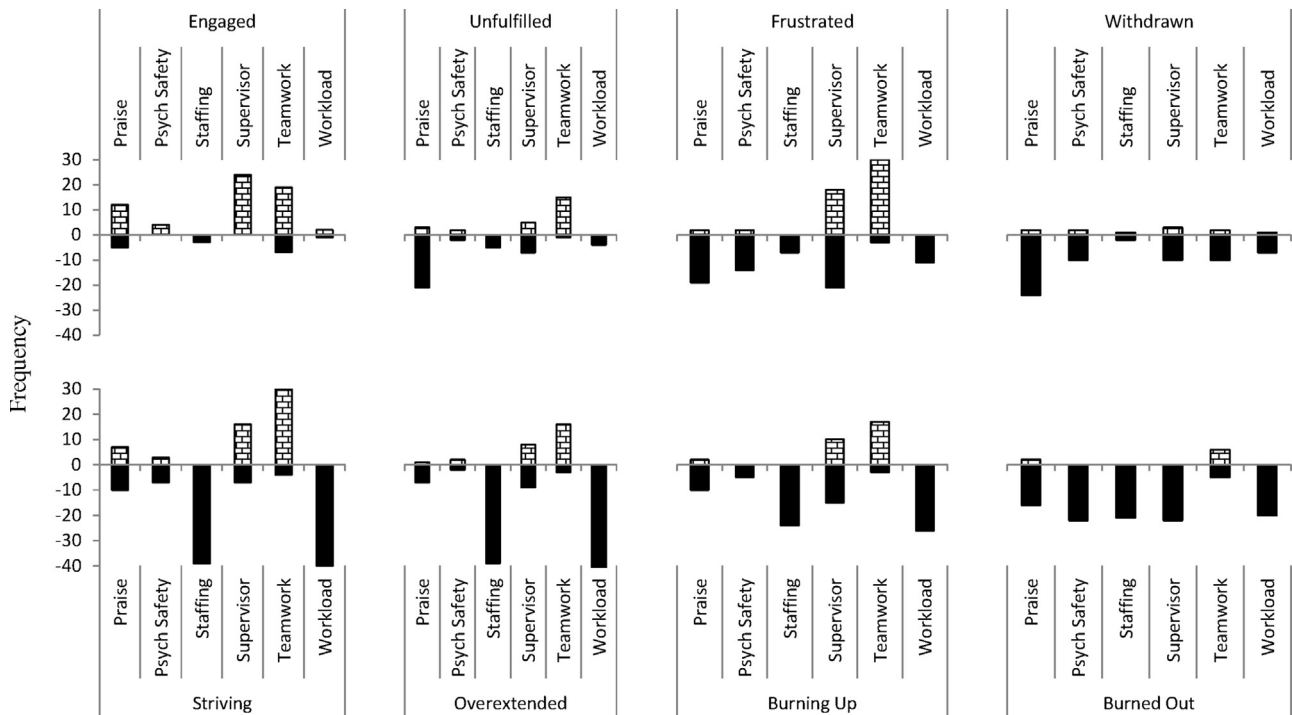

Fig. 1. Frequency of themes in the burnout profiles from AES text comments characterized by all three elements of burnout (EE, DP, PA) that reflect job demands and resources; negative valence (black/bottom bars) = theme reflects a negative aspect of the work environment; positive valence (patterned/top bars) = theme reflects a positive aspect of the work environment.

Table 2
Odds of negative text comments by burnout profiles.

Profile	Total positive references	Total negative references	Odds+	Odds−
1. Burned Out	69	494	.14	7.16
2. Withdrawn	57	388	.15	6.81
3. Overextended	73	301	.24	4.12
4. Burning Up	98	341	.29	3.48
5. Unfulfilled	108	224	.48	2.07
6. Frustrated	189	350	.54	1.85
7. Striving	174	285	.61	1.64
8. Engaged	247	141	1.75	0.57

unfavorably, it is worse to have PA as *unfavorable* (as opposed to DP or EE). This is an important finding with relevant implications for researchers and managers alike; we will come back to it in the discussion section. Further, Table 2 shows that when it is DP or EE that is a single unfavorably rated dimension, then in terms of the odds of negative comments, it is worse to have DP be unfavorable. Similarly, when only one dimension is rated *favorably*, it is always worse when it is not PA. Thus, at least in our VA sample, perceptions of reduced PA appear to be the most important indicator of employee negativity toward the organization, and this is true whether the single most problematic dimension or two most problematic dimensions of burnout are taken into account. Finally, when DP and PA are both unfavorable, in terms of the associated negativity, it is worse than when EE and PA are both unfavorable. This, again, has conceptual and pragmatic implications of interest which will be further discussed later in the paper.

4. Discussion

The current study sought to contribute to our understanding of employee burnout experience using Veterans Administration data to examine qualitative contents associated with respondents' numerically defined burnout profiles. Specifically, we aimed to evaluate confirmatory evidence for the presence of burnout profiles in the AES narrative text comments, as well as examine these comments looking for additional features relevant to describing and distinguishing the profiles from each other.

4.1. Matching comments to burnout profiles

The results of the confirmatory coding suggest that what employees say about their experience of the work environment overlaps to a non-trivial extent with their MBI ratings-based burnout profile. Approximately half of the AES text comments that we read were indicative of belonging to a particular burnout profile that could be expressed in terms of a combination of EE, DP and PA aspects. This is a noteworthy finding, given that, because of the open-ended format of the comments; employees were simply directed to speak about the strengths and weaknesses of their work environment, as opposed to being given any leading instruction to directly address their level of burnout or any aspects of their workplace directly related to burnout. In other words, we were reading comments that could be about anything in employees' experience at their Veterans Administration jobs, from parking difficulties or promotion opportunities to dealing with an overwhelming workload. In this context, it is telling that approximately half of commenters whose survey records included all the three burnout ratings chose to bring up aspects of burnout in their free text comments, and discussed them in sufficient detail to allow for qualitatively coding their burnout profile. Since approximately half of comments did not contain enough information about the commenters' experience of the burnout dimensions. Thus it is clear that discerning employees' level of burnout is challenging based on their

open-ended comments alone, at least when they are not asked to comment specifically on burnout. This also brings up a second challenge with trying to confirm the burnout profiles from the free text comments: the profiles are *combinations* of the dimensions. Therefore, establishing just one dimension of burnout mentioned in the comment was not sufficient to code it into a profile. All *three dimensions* had to be present in the free text response in order to confirm, or disconfirm, a statistically generated profile. In other words, in order to qualitatively confirm, based on the respondent's comments, the computer-assigned Burned Out profile based on that respondent's ratings, not only did the comment have to include a mention of high EE, it also had to include high DP and low PA. Frequently, employees did not provide detailed enough information to assess the presence of varying levels of all three dimensions. In this context, the finding that this information was present in approximately half of the randomly selected comments is noteworthy as it suggests the salience of the burnout concept in determining employees' broader experience of strengths and weaknesses of their workplace.

In terms of the number of comments that we were able to confirm into the assigned statistically generated burnout profile, the total confirmed exceeded half of those where it was possible to make an assignment. Statistically comparing this difference suggests a greater than chance occurrence of the likelihood that the burnout profiles assigned from numeric ratings will be discernable in the respondents' brief open-ended text comments. We conclude that respondents' ratings of survey items and respondents' survey comments provide substantially more parallel (rather than substantially more complementary or divergent) information with respect to their burnout perceptions.

4.2. The JD-R model and burnout profiles

Of note, the Engagement profile was more straightforward to confirm than any other profile in our data, likely because – first, this is the only profile with a positive valence; and second, it was also the most prevalent profile in our overall sample. Two conditions that appeared associated with Engagement were reflected in two themes, frequently brought up by commenters in the Engaged profile: supportive supervisor and teamwork. Based on employees' comments, these conditions are apparently conducive to Engagement. This finding suggests specific strategies for organizational leaders and consultants interested in supporting engagement at the workplace, in the Veterans Administration and beyond. In addition to this pragmatic implication (i.e. where to focus organizational efforts in order to support employee engagement), this finding has a conceptual implication of presenting engagement as a potentially obtainable state. That is, removing the barriers (high EE, high DP, low PA), and creating facilitative conditions (supportive supervisors and teamwork) outlines a potentially promising strategy to support and enhance engagement.

The results of the content analysis provide insight into what greater distinctions can, and cannot, be made between the burnout profiles. In general, in terms of positive themes, there were more similarities than differences between the profiles. When viewed through the lens of job demands and resources, the themes offer yet another way of drawing comparisons between the burnout profiles. The JD-R model (see the introduction) indicates that it is the interplay between job demands and resources that can lead to burnout: high demands are not sufficient to have an impact but when combined with low resources, burnout and its subsequent outcomes can occur (Bakker, Demerouti, de Boer, et al., 2003; Bakker, Demerouti, et al., 2003). Examining the profiles with this point in mind, the two profiles that stand in stark contrast to each other are Engagement, which is associated with perceptions of abundant resources and moderate or low levels of job demands,

and Burned Out, which is nearly opposite, i.e. associated with high levels of job demands and a deficit of job resources. However, beyond this obvious contrast, looking for profiles that *match* points to three notable pairs. First, Burned Out remarkably mirrors Withdrawn in that all themes are considered demands with minimal resources. The common burnout dimensions between these two profiles (Burned Out and Withdrawn) are high DP and low PA. Another pair sharing a resemblance is Frustrated and Burning Up, characterized by all themes as demands, except *supervisor* and *teamwork*; the commonalities between them are high DP and high PA. Finally, Striving and Overextended have high levels of the same job demands – *staffing* and *workload*; both share in common high EE and low DP. Considering three pairs of profiles that share only two burnout dimensions yet appear to be almost the same in terms of the themes raised in survey comments suggests a possibility that some burnout dimensions may be more important than others in defining the overall employee experience at work, at least to the extent that it is reflected in open-ended comments about strengths and weaknesses of one's workplace. In other words, if one was trying to create distinct profiles capturing burnout-related experience and using, as the main criterion, the distinctiveness of themes within employee general comments about organizational strengths and weaknesses, then such profiles might be better developed using information from only two dimensions.

4.3. PA as the primary driver of burnout

The logs analysis also gives new insight into the burnout construct. Our data suggest that, contrary to what might be expected, EE is not the primary driver of negative views about the organization. Instead, our evidence indicates that, at least in our Veterans Administration sample, it is low PA that ultimately underlies a negative reaction to the workplace. One potential explanation is that some EE can result in negative feelings, and be positively associated with DP as indicated in previous research. However, it is the addition of low PA that makes for a more problematic and, perhaps, chronic state of burnout. This finding raises questions, generally, about the effects of chronicity versus acuity in the dimensions of the burnout construct, and more specifically, about how sense of accomplishment is lost. It seems less likely that the strength of any one dimension alters burnout levels, but rather, it may be the extended presence of each burnout aspect added together and lasting through time that ultimately makes the difference in the experience of burnout. For example, considering someone with a chronic medical condition, they may experience occasional acute episodes of the illness, but the chronic condition underlies and ultimately explains the problem. Our results suggest this may be similar in burnout: low PA creates a chronic condition for a highly negative psychological state, whereas DP and even more so, EE, remain more on the surface and perhaps more episodic in terms of their impact. In addition to this conceptual point, establishing that PA, of all the three burnout dimensions, has the strongest relationship to negativity suggests a substantive implication which, we believe, is of great interest to Veterans Administration. Employees in our Veterans Administration sample appear to have a great personal investment in maintaining high PA levels. We draw this conclusion because, when respondents rated their self-efficiency or productivity (PA) as reduced at work, they reacted even more negatively than they did under condition of high personal exhaustion (EE) or under conditions of feeling disconnected from the personal meaning of work (DP). This finding is consistent with the known, consistently high endorsement of personal connection to the Veterans Administration organizational mission by the overwhelming majority of Veterans Administration employees (83.3%). Future studies should evaluate whether a similar pattern (of higher relationship of PA than of DP and EE to the overall amount of negativity

in comments) replicates in data from other organizations, noting whether their data reflect other federal (e.g. USA Department of Defense), public, or private sector (Figs. 2–4).

4.4. Limitations

Only one coder performed the qualitative analyses. While this person is a trained expert (i.e. has completed a formal training with inter-coder reliability assessment, has four years of experience in coding this exact type of data, and has trained others in both the content and software aspects of the coding), it is ideal for qualitative coding to be performed by at least two individuals (e.g. Gilmer, Katz, Stefancic, & Palinkas, 2013). Limited resources created this situation: the confirmatory coding was complex and difficult (maintaining cognizance of eight combinations of three burnout dimensions, for a total of 24 elements), and required a great amount of expertise with qualitative data, both generally and in this particular context, as reflected in previous training and existing skills (e.g. experience working with Veterans Administration qualitative data and with Veterans Administration AES comments). Due to time constraints, only one expert coder was available to do the work. This limitation should be addressed in future studies using comparable data and resources greater than ours.

4.5. Applications

The primary application for this research is field work (e.g. workplace interventions, consultation to executive leaders) conducted to assist organizational decision-makers in their tasks of supporting their workforce morale and positive climate at the workplace. For example, this describes the nature of services offered by internal organization development consultants in the Veterans Administration (see Osatuke et al., 2012, for more detail). A large amount of their work consists of organizational assessment, often done through interviewing workgroups about their work environment. In these conversations, references are made to aspects of the work environment – particularly in the assessments of Veterans Administration workgroups. Knowing the themes related to the burnout profiles, in the context of employees describing their work environments, can offer consultants insight into the level of burnout experienced by a workgroup as well as the qualitative nature of their experience compared to other similar groups. For example, a plausible working hypothesis based on our data may be that a workgroup referring excessively to *staffing* and *workload* is likely Burned Out, Overextended, or Striving. Similarly, workgroups expressing concern about *praise* and *supervisors* yet speaking positively about *teamwork* are likely Unfulfilled. This knowledge is useful to have because it is often not possible to directly measure burnout in workgroup assessments using survey items. Another example of relevant applications of the current findings is executive coaching, a popular service in high demand with organizational leaders in Veterans Affairs and elsewhere. This too involves an assessment element, usually in an interview format rather than via more formal surveying – due to time limitations and preferences of coached executives. In this context, recognizing themes associated with burnout during an open-ended discussion is relevant to consultants; it can at least partly make up for a more formal burnout assessment when it is lacking.

4.6. Future research

Building off the primary limitation of the current study, future research involving confirmatory coding could include more than one expert coder. Additionally, this mainly qualitative work could expand on its quantitative component by linking the burnout profiles and themes of comments associated with them to numeric
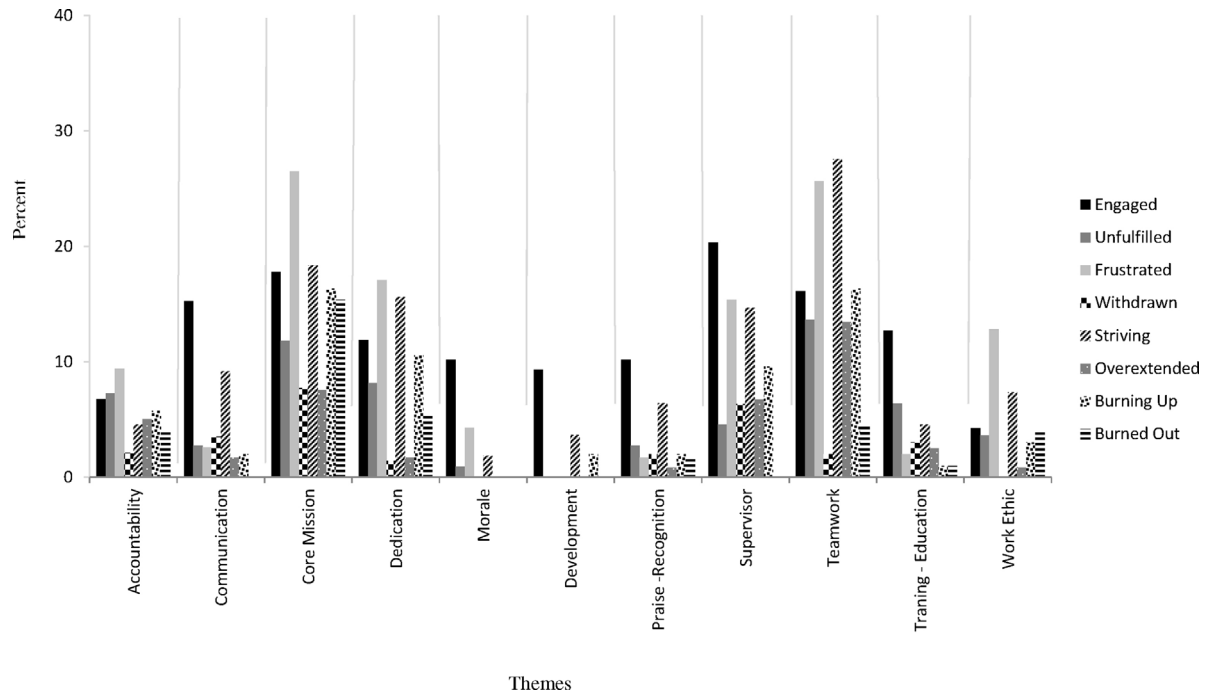
Fig. 2. Differences between burnout profiles on themes viewed as *positive* aspects of the work environment, reported as percentages due to unequal group sizes. (Note: themes derived from AES text comments characterized by elements of burnout (EE, DP, PA).)

ratings within organizational surveys. Conducting this type of study, within Veterans Affairs or elsewhere, could explicate what work environment variables are related to the different configurations of burnout experience which, we suggest, are likely dissimilar across organizational groups. (The different prevalence for specific burnout profiles across organizational groups was highly consistent in the Veterans Administration data – e.g. U.S. Department of Veterans Affairs, 2013, 2014).

Finally, the burnout profiles offer a rich and, as far as we are aware, currently unique source of information about how burnout is more specifically understood and described by employees who experience it at their workplace. This information can potentially be incorporated in research on the JD-R model – a primary way of understanding the underlying mechanisms of burnout – For example, the themes mentioned in describing burnout can inform the definition of outcome variables or possible moderators between
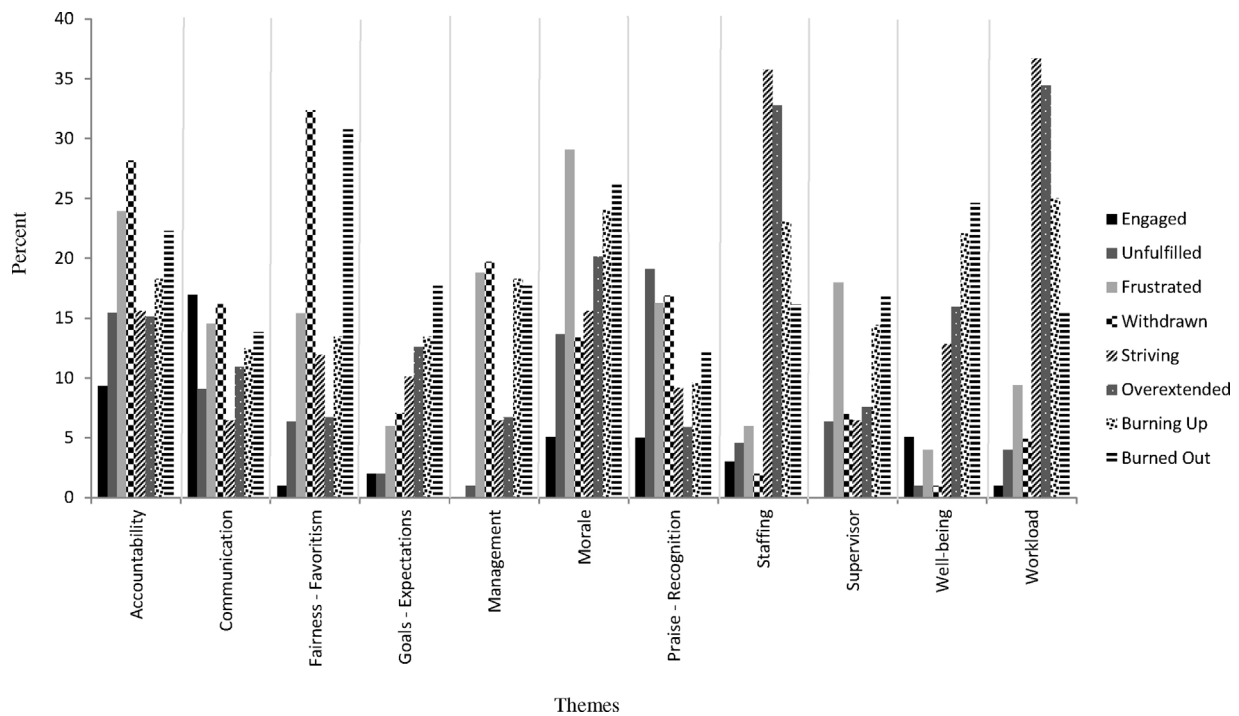

Fig. 3. Differences between burnout profiles on themes viewed as *negative* aspects of the work environment, reported as percentages due to unequal group sizes. (Note: 'Well-being' = burnout, stress, and exhaustion.) (Note: themes derived from AES text comments characterized by elements of burnout (EE, DP, PA).)
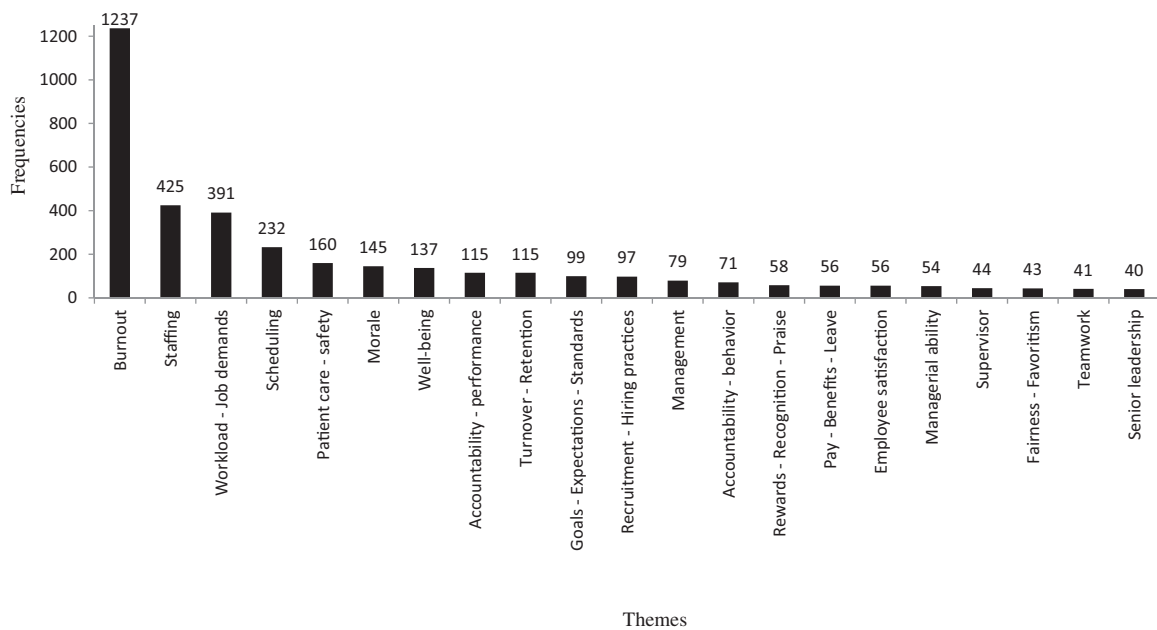
Fig. 4. These are the most frequent themes in the AEs text comments with the elements of burnout (EE, DP, PA) that contain the word 'burnout,' and reflect areas in VA that employees' perceive negatively and as needing improvement.

job demands, job resources, and organizational outcomes such as job satisfaction or turnover intention (e.g. Hernandez, Yanchus, & Osatuke, 2015).

5. Conclusions

The current study suggests several general conclusions. First, it is possible to recognize burnout profiles from employees' text comments. Given that employees were not asked specifically about burnout, but were invited to comment about general strengths and weaknesses of their workplace, this underscores the salience of burnout in defining the overall workplace experience. Second, based solely on themes that summarized the content of open-ended comments, it may be impossible to categorize the commenters into burnout profiles (i.e. to distinguish the profiles from one another); the themes in the general comments show more the similarities than the differences among the burnout profiles. That is, from the standpoint of effectively summarizing distinct themes brought up by employee general comments on the organizational strengths and weaknesses, some of the statistically generated profiles are more informative than others; more specifically, based on our data, those that contrast the PA and DP dimensions seem to be the most informative ones. Overall, the study sheds light on how burnout is perceived and described by the Veterans Administration employees, based on examining their own summary of their direct personal experience (i.e. words that employees used in their comments, rather than numeric ratings selected to rate the standard survey items). We suggest that incorporating this perspective – and our specific findings – into organizational actions to create conditions for engagement and/or prevent burnout constitutes useful steps toward improving the psychological well-being of the workforce.

Disclaimer

Any opinions, findings, conclusions, or recommendations expressed in this material are those of the research investigators and do not necessarily represent the view of the Department of Veterans Affairs or U.S. Government.

Conflict of interest

The authors declare that there are no conflicts of interest.

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