Coping, Mental Health, and Subjective Well-being among Mental Health Staff working in Secure Forensic Psychiatric Settings: Results from a Workplace Health Assessment

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Abstract

Given raised rates of patient suicide and violence in secure psychiatric facilities, staff in such settings are arguably at increased risk for burnout and reduced mental health. The present paper responds to the recent UK National Institute for Health and Care Excellence (NICE) call to assess workforce well-being. This paper held the following aims: (1) to quantify existing levels of mental health (i.e., depression, anxiety, distress, and post-traumatic stress) and subjective well-being (i.e., job satisfaction, life satisfaction, and four domains of burnout), and (2) to evaluate Coping Self-Efficacy (CSE) and Need for Affect (NFA) as factors associated with staff mental health and subjective well-being. We conducted a voluntary cross-sectional health needs assessment of forensic mental health staff (N=170) between 2017 and 2018 from one National Health Service (NHS) Trust. Descriptive findings suggest staff possessed non-clinical average ranges of mental health symptoms. Subjective well-being findings showed burnout was relatively low, whereas job and life satisfaction were modest. Regression models demonstrated that: (a) thought/emotion stopping beliefs were negatively associated with psychological exhaustion; (b) social support beliefs were positively associated with life satisfaction and job enthusiasm; (c) NFA Avoidance was linked with poor mental health and burnout, and; (d) NFA Approach was positively associated with two health subjective well-being indicators. Overall, assessment results suggest NHS forensic mental health staff reported relatively good health. Cognitive- and emotion-focused coping beliefs demonstrate promise as content for prevention programming. Using Emotional Labour Theory, we offer psychological services-based recommendations for future prevention programming and research.

Key Words: Forensic Mental Health; Coping; Burnout; Need for Affect; Depression
Forensic mental health staff working in secure psychiatric services face a range of pressing workforce issues, such as under staffing and lack of resources (Wilson et al., 2018). A particular matter of interest concerns the unique stressors faced by staff working with violent and self-harming patients. Indeed, experiences of patient violence are common for UK National Health Services (NHS) and other treatment staff (e.g., emergency departments) (Ashton et al., 2018; Price et al, 2015), potentially leading to negative views of patients and feelings of isolation in dealing with patient aggression. Patient suicide and self-harm also occur at raised levels in secure psychiatric hospital settings (Stewart et al., 2012). Among NHS mental health staff (e.g., nurses, psychiatrists), experiencing patient suicide or self-harm can lead to staff hesitancy to engage patients in the topic in the future, due in part to fear of doing harm (Awenat et al., 2017). Such negative patient-related experiences may also foster a belief that suicide prevention is not part of the professional role.

In light of the work hazards faced by mental health staff in secure settings, it is imperative to gain a sense of staff mental health and well-being. Reflecting this gap in the literature, the National Institute for Health and Care Excellence (NICE, 2018) emphasizes the need to promote mental well-being in the NHS workforce. One key recommendation offered was to assess opportunities to improve and manage employee mental health and well-being. The present investigation serves as a first step in comprehensively assessing staff mental health and well-being.

**Forensic Mental Health Staff Subjective Well-Being and Mental Health**

Psychologists, nurses, social workers, and other healthcare professionals working in inpatient and secure settings are generally at-risk for burnout, low subjective well-being (e.g., unhappiness) and poor mental health (e.g., post-traumatic stress) (Baruch, Swartz, Sirkis, Mirecki, & Barak, 2013; Blau, Tatum, & Goldberg, 2013; Jacobowitz, Moran, Best, & Menash, 2015). Reflecting this trend, NHS and other inpatient settings are often characterized by high staff burnout and turnover (Cleary et al., 2011). The same holds true for outpatient psychotherapy providers in the UK, as estimates of burnout range from about half to two-thirds of such staff (Westwood et al., 2017). Clearly, staff burnout becomes a critical
workforce health challenge requiring attention; among nurses in secure settings burnout is linked with perceptions of barriers (e.g., powerlessness) to positive change in NHS work settings (Laker et al., in press). Review of patient complaint letters further reveals staff burnout may contribute to negative attitudes and poor communication, having downstream negative effects on patient emotional well-being (Hogg et al., 2018). Staff mental health is also a concern (Wilkinson, 2014). For example, NHS doctors are a noted high risk group for mental health problems, also yielding raised job turnover and missed work (Carrieri et al., 2018). Illustrating the complexities of staff health, burnout among hospital nurses even explains the influence of staff depression on patient perceptions of safety (Johnson et al., 2017). The present study examines burnout through the lens of theory-based multi-factorial conceptualization, including both positive (i.e., job enthusiasm) and negative (i.e., psychological exhaustion, indolence, and guilt) subscales assessing domains of burnout (Gil-Monte & Manzano-Garcia, 2015; Gil-Monte & Olivares, 2011). Importantly, this framework has demonstrated utility in classifying burnout among healthcare providers in general psychiatric, correctional and other high stress work settings (e.g., Gil-Monte & Figueiredo-Ferraz, 2013; Gil-Monte, Figueiredo-Ferraz, & Valdez-Bonilla, 2013).

There is a general lack of examination of coping skills as they may relate to staff mental health and subjective well-being in secure psychiatric services. In fact, only one study (Elliott & Daley, 2013) could be located examining both NHS forensic staff well-being and coping. Importantly, they reported forensic staff experienced high levels of work stress and moderate levels of burnout (e.g., depersonalization). Moreover, burnout was positively associated with negative coping strategies of alcohol and cigarette use. The present investigation therefore aims to assess a broad set of coping-related beliefs as they may be associated with staff mental health and subjective well-being.

**Coping among Staff Working with High-Risk Patients**

Engaging in healthy coping (e.g., self-care) is a core recommendation for those working with violent and suicidal patients (Brems & Johnson, 2009; Cramer et al., 2013). A limited literature shows promise of cognitive- and emotion-focused coping frameworks for forensic mental health staff in general.
For instance, mindfulness skills are negatively associated with three domains of burnout among NHS mental health staff (e.g., psychologists, nurses) (Askey-Jones, 2018); moreover, a mindfulness-based intervention demonstrated improvements in burnout. In terms of emotion-focused coping, emotion regulation skills show preliminary moderating effects on mental health in a general sample of Australian working adults (Too & Butterworth, in press). That is, better ability to manage emotions through appraising situations buffered the impact of low control and fairness at work on worker mental health.

The coping literature and how it is applied to forensic psychiatric settings would benefit from theory-informed work. Emotional Labour (Hochschild, 1983) may be a particularly useful theoretical framework to contextualize the association of cognitive and affective coping on mental health and subjective well-being among forensic mental health staff. In brief, this model proposes that workers required to engage with persons in direct contact situations must manage experience and expression of their own emotions in order to accomplish the professional task. Social norms of the setting determine what and how emotions are acceptably expressed. Thus, they must work to manage their experience and expression of emotions so their true emotions are not displayed if they are not congruent with the situation. Management strategies include ‘deep’ (e.g., feeling genuine emotion) and ‘surface’ (e.g., suppression of genuinely experienced feelings) strategies (Delgado et al., 2017). Behavioral health and psychiatric staff are among professional groups required to engage in such emotional management strategies, especially in the context of emotionally-charged situations. As reviewed by Delgado and colleagues (2017), literature suggests that Emotional Labour has been applied considerably in order to understand well-being among nurses, psychologists and other health professionals. Interaction with patients and their families necessitates engagement in both types of management approaches.

Some data exists supporting the application of Emotional Labour to healthcare staff well-being. Overall, ‘deep’ management strategies yield better outcomes (e.g., job satisfaction, connection with patients) for nurses and other healthcare providers (e.g., Golfenshtein & Drach-Zahavy, 2015). On the contrary, ‘surface’ management techniques tend to be associated with negative outcomes (e.g., burnout,
poor mental health) for staff (e.g., Schmidt & Diestel, 2014). A recent systematic review (Delgado et al., 2017) concluded that Emotional Labour explains stress and burnout among nurses, but this pattern may be mitigated by positive factors (e.g., resilience). Echoing this latter idea, emotional intelligence served as a mediator of Emotional Labour and burnout among nurses (Hong & Lee, 2016), suggesting that factors facilitating better management of emotions (e.g., coping-related beliefs) may reduce negative impacts of emotionally-burdening work. Further, experiences of workplace violence mediated the association of Emotional Labour on burnout in a sample of clinical nurses (Kim et al., 2018).

The highly charged work in forensic psychiatric settings fits well within an Emotional Labour framework. Emotional Labour literature is limited, however, with regard to application primarily among nursing staff and testing with a limited scope of coping skills. The present investigation assesses the impact of two emotion-relevant coping perspectives on mental health and subjective well-being in a multidisciplinary sample of secure forensic mental health staff. The approaches used include Coping Self-Efficacy (CSE; Chesney et al., 2006) and Need for Affect (NFA; Maio & Esses, 2001). CSE is comprised of personal beliefs concerning mastery of three coping skills: (1) stopping negative emotions and thoughts, (2) problem-focused coping, and (3) obtaining social support. CSE domains have been widely applied to patient-relevant contexts, such as explaining the relationships between hostility and mental health (Timkova et al., in press), cyber victimization and internalizing mental illness (Trompeter et al., 2018), and child abuse and ADHD (Singer et al., 2016). Within an Emotional Labour framework, CSE may manifest as a mitigating factor of the stresses faced in difficult interpersonal work. NFA is defined as the extent to which one prefers to experience and express positive and negative emotions (Maio & Essess, 2001); it is composed of two subscales: NFA Avoidance (i.e., preference for evading emotional experiences) and NFA Approach (i.e., preference for pursuing and valuing emotional experiences) (Appel et al., 2012). NFA has primarily been applied to understanding risk for suicide in non-clinical samples (Bryson et al., in press; Cramer et al., 2016, 2017), demonstrating a consistent pattern in which NFA Avoidance is associated with elevated suicide risk. In a sample of forensic psychologists, higher NFA
Approach was associated with clinician judgments of higher risk of future violence for offenders in case vignette scenarios (Cramer et al., 2017), raising the potential that an extreme NFA Approach may be a threat to practitioner objectivity. However, the specific role of NFA among forensic mental health staff is still in need of further testing. NFA subscales may reflect proxies for emotion management strategies; NFA Approach maps well onto the concept of ‘deep’ management, whereas NFA Avoidance parallels the idea of ‘surface’ management.

The Present Study

Following recent NICE Guideline recommendations, the present study first aimed to quantify the nature of staff subjective well-being (i.e., life satisfaction, job satisfaction, and burnout), mental health (i.e., symptoms of depression, anxiety, stress, and PTSD) and coping skills (i.e., CSE and NFA) among staff working in secure forensic mental health. Doing so advances prior literature through a comprehensive definition of subjective well-being and application of CSE and NFA to answer novel health related research questions. The second aim of this study was to examine CSE and NFA as drivers of subjective well-being and mental health among forensic mental health staff based in an NHS Trust. These aims hold the potential to significantly enhance NHS workforce health in a number of ways. For example, to the extent subjective well-being and mental health may be poor among forensic mental health staff, service professionals can assist the NHS in improving these domains. Using findings from the present study, enhancement of mental health and well-being can be accomplished in such ways as the provision of therapeutic, supportive and reflective practice services for staff, as well as considering systemic (organizational) prevention approaches to improving the work environment. Additionally, to the extent CSE and NFA drive staff mental health and well-being, staff can assist staff in building positive coping through health education, clinical supervision, and guided reflective practice.

The hypotheses of the present study were:

H1: Forensic mental health staff will demonstrate moderate levels of mental health symptoms.
H2: Forensic mental health staff will demonstrate below mid-point scores of positive indicators (i.e., life satisfaction, enthusiasm for job, and job satisfaction) of subjective well-being.

H3: Forensic mental health staff will demonstrate above mid-point scores on negative indicators (i.e., psychological exhaustion, indolence, and guilt) of subjective well-being.

H4: Accounting for other covariates, CSE domains will be negatively associated with mental health symptoms and positively associated with subjective well-being.

H5: Accounting for other covariates, NFA Avoidance will be positively associated with mental health symptoms and negatively associated with subjective well-being.

Method

Participants. The sample (N=170) consisted of forensic mental health staff from three secure treatment facilities ($M_{age} = 43.53$, $SD = 12.68$). Sex was reported as men ($n = 91$, 54.5%), women ($n = 77$, 45.3%), and one missing. Staff position consisted primarily of nurses or nursing assistants ($n = 134$, 88.9%), with other professions including psychologists ($n = 13$, 7.6%), psychiatrists ($n = 11$, 6.5%), and other ($n = 11$, 6.5%). A total of 39 (22.9%) of the sample had lost a patient to suicide. The sample possessed considerable experience, as demonstrated by years of clinical experience ($M = 16.28$, $SD = 11.23$), years working in a secure setting ($M = 9.16$, $SD = 5.62$), and hours of previous suicide prevention training ($M = 16.83$, $SD = 32.06$).

Measures

Demographics. Participants provided demographic information including: age, sex, years of clinical experience, years working in secure services, discipline (e.g., psychologist, nursing assistant), loss of patient to suicide (i.e., yes/no, and number of hours of previous suicide prevention training).

Coping.

Coping Self-Efficacy (CSE). Participants were assessed with the Coping Self-Efficacy (CSE) scale, which is a 26-item scale measuring one’s ability to perform coping behaviors with life challenges (Chesney et al., 2006). Subscales include: use problem-focused coping, stop unpleasant emotions and
thoughts, and get support from friends and family (Chesney et al., 2006). Internal consistencies have been shown to be satisfactory: use problem-focused coping ($\alpha = .91$), stop unpleasant emotions and thoughts ($\alpha = .91$), get support from friends and family ($\alpha = .80$) (Chesney et al., 2006).

**Need for Affect (NFA).** The Need for Affect Questionnaire-Short Form (NAQ-S; Appel et al., 2012) is a 10-item instrument consisting of statements measuring an individual’s approach towards affect (i.e., preference to experience and express emotions) and avoidance of affect (i.e., preference to evade emotional stimuli and suppress emotional content). The NAQ-S provides two subscales: NFA approach and avoidance. Internal consistencies have been shown to be satisfactory at multiple time-points: NFA approach ($\alpha = .83/.85$) and NFA avoidance ($\alpha = .85/.87$) (Appel et al., 2012).

**Mental Health**

**Internalizing Mental Health Symptoms.** The Depression Anxiety Stress Scales (DASS-21) is a 21-item scale assessing three subscales: depression, anxiety, and stress symptoms (Lovibond & Lovibond, 1995; Osman et al., 2012). The DASS-21 has been shown to have sufficient internal consistency on all subscales: depression ($\alpha = .88$), anxiety ($\alpha = .83$), and stress ($\alpha = .85$) (Osman et al., 2012).

**Post-traumatic Stress Symptoms.** Posttraumatic stress symptoms were assessed with the PTSD checklist-civilian (PCL-C; Blanchard et al., 1996). The PCL-C consists of 17 items measuring total symptoms of PTSD in the civilian population. The PCL-C has been shown to have good internal consistency at initial administration ($\alpha = .94$) and at retest administration ($\alpha = .92$) (Conybeare et al., 2012). Since the PCL-C does not diagnose PTSD the term Post Traumatic Stress (PTS) will be used as an alternative.

**Subjective Well-Bring**

**Satisfaction with Life.** Participant satisfaction with life was assessed with the five-item Satisfaction with Life Scale (SWLS; Diener et al. 1985). The SWLS has been shown to have good internal consistency ($\alpha$ range = .79-.89) across studies in the literature (Pavot & Diener, 1993).
**Burnout.** Participant burnout was assessed with the English version of the Spanish Burnout Inventory (SBI; Gil-Monte & Figueiredo-Ferraz, 2013; Gil-Monte & Manzano-Garcia, 2015; Gil-Monte & Olivares, 2011). Developed and validated on a variety of Spanish and South American healthcare staff samples, the SBI contains 20 items, each rated on a five-point scale (0-4). The SBI contains four subscales of job burnout: (1) Enthusiasm toward job (i.e., professional goals as a source of personal achievement), (2) Psychological Exhaustion (i.e., emotional and physical exhaustion driven by work-related difficulties or problematic individuals), (3) Indolence (i.e., cynicism and apathy in dealing with consumers [e.g., healthcare patients]), and (4) Guilt (i.e., negative work-related attitudes and behaviors) (Gil-Monte & Manzano-Garcia, 2015). Gil-Monte and Olivares Faundez (2011) proffered an English translated version of the SBI. However, to our knowledge, no validation studies exist using the English version. We used the translated version provided by these authors in the present study. SBI subscale internal consistencies have been found to be acceptable in prior literature (Gil-Monte & Manzano-Garcia, 2015): Enthusiasm toward job ($\alpha = .87$), Psychological Exhaustion ($\alpha = .86$), Indolence ($\alpha = .76$), and Guilt ($\alpha = .80$).

**Job Satisfaction.** Job satisfaction was assessed with a ten-question survey developed by research staff and co-author JL. Topics included satisfaction with: (1) overall working conditions, (2) management/leadership, (3) time for self-reflective practice, (4) content of self-reflective practice, (5) derivation of meaning from working with patients, (6) provision of continuing education/training, (7) fear of injury, (8) fear of patient self-directed violence, (9) experience of negative feelings on the job, and (10) overall job satisfaction. A summed total score was used in the current study ($\alpha = .83$).

**Procedure.** The NHS is the government-funded healthcare system of the United Kingdom. One branch of the NHS provides mental health care, including inpatient psychiatric and forensic mental health services. The trust included in this study is the Mersey Care NHS Foundation Trust. Mersey Care provides specialty care for persons with mental illness, learning disabilities, addictions, brain injuries and physical health concerns. Mersey Care also provides secure services for individuals with complex needs,
commonly with forensic or legal system involvement. This study included staff working across three levels of security (high, medium and low secure services). Study sites were three secure psychiatric hospitals with the NHS: One low security site housing male patients only, one medium security site serving male and female patients, and one high secure site treating males only.

A voluntary cross-sectional survey design was utilized in both paper-pencil ($n = 43$) and online ($n = 127$) formats. Multiple formats of data collection were used at the request of the NHS in order to enhance flexibility for staff to participate. The only study inclusion/exclusion criteria concerned status as an employee; specifically, mental health staff from the following disciplines were recruited to participate: nursing assistants, psychiatric nurses, psychologists, psychiatrists, forensic social workers, therapist/rehabilitation workers or psychology assistants. The survey was advertised via posters, email and verbal communications on all staff units at all three sites in order to ensure widespread awareness and access to the survey. Advertisements included information such as study risks (e.g., possible discomfort) and benefits (e.g., possible promotion of awareness or identification of staff strengths and growth areas). No direct incentive was provided for survey participation. A written explanation of the purposes of the study was given to interested staff. Consent was obtained from all participants prior to the administration of the survey and all participants were debriefed upon completion of the study. The study received ethics approval from the two university Human Subjects Review Boards.

**Statistical Analyses.** Descriptive statistics were reported to assess hypotheses 1 through 3 aimed at articulating sample scores for coping, mental health, and subjective well-being. Qualifiers regarding severity of scores are used where they exist in prior literature. Multivariate regression was used for hypotheses 4 and 5 in order to: (a) evaluate predictive models for conceptually and statistically related

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1 A total of 250 paper-pencil surveys were distributed, resulting in a 17% response rate for this subgroup. Online response rate was not calculable. Participant hospital site was not recorded in order to allay concerns regarding confidentiality; as a result, response rates are not calculable stratified by site.

2 Item-level data missingness for measures of interest ranged from 10-18%. Consistent with recommended approaches in the statistical literature (e.g., Enders, 2017; van Ginkel et al., 2019), multiple imputation was used to handle missing data.
sets of dependent measures, (b) control for Type I error through obtaining multivariate omnibus tests (Cohen, Cohen, West, & Aiken, 2003). Therefore, two multivariate models were conducted predicting: (1) mental health (i.e., depression, anxiety, stress, and PTS), and (2) subjective well-being (i.e., burnout subscales, life satisfaction, and job satisfaction). Each model included demographic covariates (i.e., male sex, age, years of clinical experience, years working in secure services, loss of patient to suicide [no/yes], and hours of prior suicide prevention training), as well as main effects for CSE and NFA subscales, entered simultaneously. Univariate main effects are reported only for predictors demonstrating significant multivariate effects. Effect size interpretation was guided by conventions in the statistical literature (Cohen, 1988).

Results

H1 to H3: Mental Health and Subjective Well-Being among Forensic Mental Health Staff. Table 1 contains a summary of internal consistency values, descriptive statistics, and clinical qualifiers (where applicable from the measure validation literature) for coping, mental health and subjective well-being variables of interest. All internal consistency values were acceptable with the exception of SBI Guilt. Staff mean coping scores were notably high; moreover, scores for all three coping skill belief domains were higher among the present sample compared to a development sample of chronic pain patients (Chesney et al., 2006). Also, average scores for affective avoidance and for affective approach were more extreme than validation student samples (Appel et al., 2012), but less so compared to a sample of forensic psychology practitioners (Cramer et al., 2017).

Contrary to H1, as can be seen in Table 1, forensic mental health staff reported non-clinical average scores (Antony et al., 1998; First et al., 1997) in all mental health symptom categories. Also, contrary to H2, average scores for negative indicators of subjective well-being were either neutral/slightly positive (i.e., life satisfaction; Deiner et al., 1985) or mid-range (i.e., job enthusiasm, job satisfaction).

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3 Data collection source (i.e., online vs. paper/pencil format) demonstrated non-significant multivariate effects in both models, and was therefore dropped from final models.
Interestingly, all mean burnout subscale scores in the present sample were lower compared to a sample of European general hospital nurses (Gil-Monte & Manzano-Garcia, 2013). This pattern of scores suggests relatively neutral levels of enthusiasm or satisfaction. In contrast to this pattern and H3 expectations, average scores for negative indicators of subjective well-being were notably low, suggesting small levels of several burnout dimensions.

**H4 & H5: CSE and NFA predicting Staff Mental Health and Subjective Well-Being.**

Table 2 contains a summary of the mental health model multivariate statistics. Age, losing a patient to suicide, NFA Avoidance, and NFA Approach all demonstrated small significant multivariate effects. Despite the significant multivariate main effect of losing a patient to suicide, no significant univariate effects were observed. Age was negatively associated with stress ($B = -1.28$, $seB = 0.43$, $p = .003$, $\eta^2_p = .05$). NFA Avoidance was positively associated with depression ($B = 0.90$, $seB = 0.28$, $p = .002$, $\eta^2_p = .06$), anxiety ($B = 0.69$, $seB = 0.28$, $p = .02$, $\eta^2_p = .04$), stress ($B = 0.87$, $seB = 0.32$, $p = .007$, $\eta^2_p = .05$), and PTS symptoms ($B = 4.07$, $seB = 0.95$, $p < .001$, $\eta^2_p = .10$). NFA Approach was negatively associated with depression ($B = -0.98$, $seB = 0.29$, $p = .001$, $\eta^2_p = .07$), anxiety ($B = -1.11$, $seB = 0.29$, $p < .001$, $\eta^2_p = .09$), stress ($B = -1.05$, $seB = 0.32$, $p = .001$, $\eta^2_p = .06$), and PTS symptoms ($B = -2.65$, $seB = 0.96$, $p = .007$, $\eta^2_p = .05$). Concerning mental health, H4 positing a negative association between CSE and mental health symptoms was largely supported. H5 supposing a positive association between NFA Avoidance and internalizing mental health symptoms was supported.

Table 3 contains a summary of the subjective well-being model multivariate statistics. Age, CSE Problem-Focused Coping, CSE Stopping Negative Thoughts and Emotions, CSE Social Support, NFA Avoidance, and NFA Approach all demonstrated small significant multivariate effects. Age was negatively associated with psychological exhaustion ($B = -1.07$, $seB = 0.37$, $p = .005$, $\eta^2_p = .05$). Despite the significant multivariate effect for CSE Problem-Focused Coping, no significant univariate effects were observed.

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4 G*Power based power analyses using a regression framework ($\alpha = .05$, Power = .80, medium effect size, and 11 predictors) suggest a necessary sample size of 123 participants.
were observed. CSE Stopping Negative Thoughts and Emotions was negatively associated with psychological exhaustion ($B = -1.42$, $seB = 0.48$, $p = .003$, $\eta_p^2 = .05$). CSE Social Support was positively associated with life satisfaction ($B = 1.43$, $seB = 0.72$, $p = .04$, $\eta_p^2 = .02$). NFA Avoidance was positively associated with psychological exhaustion ($B = 1.05$, $seB = 0.27$, $p < .001$, $\eta_p^2 = .08$) and indolence ($B = 0.48$, $seB = 0.23$, $p = .04$, $\eta_p^2 = .03$). NFA Approach was positively associated with life satisfaction ($B = 1.26$, $seB = 0.50$, $p = .01$, $\eta_p^2 = .04$) and job enthusiasm ($B = 1.28$, $seB = 0.36$, $p = .007$, $\eta_p^2 = .08$). H4 positing a negative higher CSE being associated with better well-being was partially supported with respect to Stopping Negative Thoughts and Emotions, as well as Social Support. H5 hypothesizing increased NFA Avoidance being associated with poorer well-being was partially supported in reference to associations with two burnout subscales. Although no hypotheses were made regarding NFA Approach, it was positively associated with healthy subjective well-being.

**Discussion**

Working in secure psychiatric settings brings many well-documented difficulties. These include a lack of resources (Wilson et al., 2018) and an array of patient challenges, such as patient suicide, self-harm, and violence (Ashton et al., 2018; Awenat et al., 2017; Stewart et al., 2012), all of which can negatively impact on mental health staff, contributing to low morale, as well as raised levels of burnout and turnover (Clearly et al., 2011). Given these working conditions, NICE (2018) guidelines called for health assessment for staff. The descriptive findings from our forensic mental health staff health assessment depicts a better picture than hypothesized. Indeed, we observed ‘normal’ (i.e., low, non-clinical) mean scores on measures of depression, anxiety, stress, and PTS symptoms. Moreover, a multifactorial evaluation of burnout (Gil-Monte & Manzano-Garcia, 2015) demonstrated low levels of psychological exhaustion, indolence and guilt. If any modestly concerning pattern emerged, it was a largely neutral trend in positive indicators of job-related and general satisfaction. Any concern regarding modest levels of subjective well-being are countered by an overall picture of positive coping-related beliefs and modest preferences in managing emotions. This group-level assessment does not mean that
no staff experience mental health or burnout concerns; however, the vast majority of participant scores appear to support positive workforce health. It is also important to note that other explanations exist for the overall healthy picture of staff. For instance, job turnover is a documented problem in the NHS and other healthcare settings (Carrieri et al., 2018; Cleary et al., 2011). It may be that the most distressed NHS workers (potential study participants) were absent from work or have left the NHS altogether, thereby missing a critical segment in this snapshot assessment of the staff mental health, coping, and well-being.

While this study answered a critical need to assess health service workforce health, it also aimed to evaluate how coping-related characteristics may impact on staff mental health and subjective well-being. Doing so builds on the minimal literature to date (Askay-Jones, 2018; Elliot & Daley, 2013) noting that unhealthy coping is associated with burnout, and mindfulness may be a promising workplace intervention for forensic mental health staff. Among the present sample, we observed that: (a) thought/emotion stopping beliefs were negatively associated with psychological exhaustion; (b) social support beliefs were positively associated with life satisfaction and job enthusiasm (c) NFA Avoidance was a risk factor for poor mental health and burnout, and; (d) NFA Approach was positively associated with two healthy subjective well-being indicators.

CSE Social Support and Stopping Negative Thoughts and Emotions being associated with positive psychological health and subjective well-being mirror previous literature showing CSE to be linked with positive health in patient and community samples (e.g., Chesney et al., 2006; Cramer, Golom et al., 2017; Trompeter et al., 2018). NFA Avoidance findings, are consistent with a converging pattern in the literature (e.g., Appel et al., 2012; Cramer et al., 2016, 2017a, 2017b) in which preference for evading affective experience and expression is related to negative health. To date, NFA Avoidance has been shown to be associated with neuroticism and suicide risk. Our study adds a range of mental health and burnout symptoms to this growing list of NFA Avoidance correlates. Finally, we tendered no hypotheses regarding NFA Approach in large part due to its lack of testing or confirmed association with indicators of health to date. However, the observed pattern of NFA Approach potentially facilitating positive
subjective well-being makes sense in context. If a staff member in a forensic psychiatric setting is more willing to acknowledge and express affect in the face of emotionally-challenging work, they may in fact experience greater positive emotions, such as meaning and joy. Such a premise is consistent with NFA theory (Maio & Esses, 2001; Appel et al., 2012) which posits that preferences to avoid or approach emotion can apply both to positive and negative affective states. Another positive implication of NFA Approach findings is that, to the extent NHS facilities involve integrated team-based care, willingness to express positive affect may facilitate staff peer-to-peer social and emotional support during times of high work-related stress, as well as amplify positive emotions during times of non-acute work strain.

This study holds implications for workforce health in psychiatric care settings. First, theoretical tenets of an Emotional Labour (Delgado et al., 2017; Hochschild, 1983) perspective applied to this workforce held true. That is, consistent with theory and prior empirical findings, thinking styles concerning problem solving and handling emotions were robustly associated with burnout and mental health. NFA findings mirror Emotional Labour literature (e.g., Delgado et al., 2017; Golfenshtein & Drach-Zahavy, 2015; Schmidt & Diestel, 2014) in that NFA Approach was linked with positive staff outcomes and vice versa for NFA Avoidance. This preliminary set of NFA findings, coupled with broader NFA literature (e.g., Cramer et al., 2016, 2017) concerning suicide and mental health, raise the possibility that NFA may represent Emotional Labour theoretical constructs of deep and surface emotional management. Future research is certainly warranted in the integration of NFA, Emotional Labour, and job-related outcomes (e.g., patient-oriented outcomes) in psychiatric and other settings.

Following from this theoretical validation, present findings highlight staff resilience characteristics as a promising avenue for workforce health prevention program design and evaluation. However, these recommendations should be viewed with caution given the cross-sectional survey methodology and heavily weighted nursing sample; recommendations are tendered with the additional idea that suggestions for program or intervention design warrant empirical testing. Bringing to the forefront matters of challenges in psychiatric care settings (e.g., burnout), and the value of and strategies
for developing healthy coping (e.g., approach to emotional reactions; building coping-related beliefs) can be handled by staff-service professionals from the outset of the professional socialization process for new employees. Such a prevention strategy may better prepare staff for coping with the challenges associated with working in secure settings. Design of empirically-based staff orientation may draw on findings such as those in the present study. With regard to other prevention strategies, approaches such as reflective practice and structured supervision have gained traction in high intensity healthcare settings as preferred methods to enhance workforce health and well-being (e.g., Magaletta & McLearen, 2015; McDermott, Husbands, & Brook-Lewis, 2018). Based on present findings, staff-service professionals, including informed peers, may help guide clinical supervision, consultation, and self-reflective practice as standard approaches. These approaches can feature utilization of concepts and measures of CSE and NFA as tools to foster discussion and promote staff health resilience.

Empowering the workforce in implementing emotion-focused and other resiliency skills and transferring them to others becomes a point of important consideration so that models of ‘experts’ leading the implementation of these skills is avoided and individual staff members become champions of the approach in their own right. Indeed, peer support models of supporting workforce health and well-being are becoming increasingly common in mental health services settings, yet these roles need to be precisely defined (Cronise, Teixeira, Rogers, & Harrington, 2016). As such, peer support staff may be identified and specifically trained to lead reflective practice, consultation or supervision sessions. Content-focused training may center on skills in teaching other workers how attend to mental health and burnout, as well as lead informative discussion concerning the critical role beliefs handling emotions and coping skills may play in maintaining workforce health. We further recommend a multi-level approach to fostering cognitive- and emotion-based coping among all staff within secure service settings; such an approach could involve interventions with individual staff and group-level programming. An additional role staff-service professionals may take the form of training for administrators in order to enhance top-down buy-in to support evidence-based workforce health strategies in the NHS. Training can include findings and
implications from the present investigation to inform new workforce health program design and evaluation.

Certain study limitations temper our conclusions and recommendations for several reasons. First, self-selection bias or perceived demand characteristics, respectively, may partially explain the relatively healthy average scores reported in the present sample. For example, as the study was advertised as supported by the NHS and data collection was offered, in part, during staff reflective supervision/practice times, staff may have felt pressure to participate or respond to survey items in a socially desirable manner. Also, staff experiencing mental health or other difficulties may have avoided participation. As such, findings should be viewed as preliminary and generalizability is limited, necessitating additional follow-up. Also, although the study was widely advertised, the sample consisted primarily of nursing staff and may have suffered from self-selection bias of those innately interested in workforce health issues. Moreover, while we captured broad assessments of coping, mental health, and burnout, we did not evaluate coping- and health-based impacts on actual patient care and outcomes or the factors that could be promoting positive health (e.g. such as pre-existing reflective practice initiatives). Future research should continue to assess prevalence and drivers of workforce health in psychiatric settings, as well as develop and evaluate downstream effects of staff health programming on patient-oriented outcomes. Finally, while most internal consistency values in the present study were acceptable, the low value for the SBI Guilt subscale may have precluded detection of meaningful associations with other variables of interest. This may have to do with the lack of sufficient back translation of the SBI. That is, item content may have been lost in translation, necessitating additional psychometric studies of the SBI in additional English-speaking healthcare and other professional samples.
References


<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>$M$ (SD)</th>
<th>Literature Description</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE Use Problem-Focused Coping</td>
<td>0 to 60</td>
<td>42.56 (10.60)</td>
<td>N/A</td>
<td>.89</td>
</tr>
<tr>
<td>CSE Stop Negative Thoughts and Emotions</td>
<td>0 to 40</td>
<td>27.16 (7.80)</td>
<td>N/A</td>
<td>.90</td>
</tr>
<tr>
<td>CSE Get Social Support</td>
<td>0 to 30</td>
<td>22.20 (5.70)</td>
<td>N/A</td>
<td>.90</td>
</tr>
<tr>
<td>NFA Avoidance</td>
<td>-15 to 15</td>
<td>-4.54 (6.22)</td>
<td>N/A</td>
<td>.81</td>
</tr>
<tr>
<td>NFA Approach</td>
<td>-15 to 15</td>
<td>4.27 (5.37)</td>
<td>N/A</td>
<td>.75</td>
</tr>
<tr>
<td>DASS Depression</td>
<td>0 to 21</td>
<td>3.43 (4.05)</td>
<td>Normal$^a$</td>
<td>.89</td>
</tr>
<tr>
<td>DASS Anxiety</td>
<td>0 to 21</td>
<td>3.09 (4.00)</td>
<td>Normal$^a$</td>
<td>.88</td>
</tr>
<tr>
<td>DASS Stress</td>
<td>0 to 21</td>
<td>5.08 (4.37)</td>
<td>Normal$^a$</td>
<td>.87</td>
</tr>
<tr>
<td>PCLC Post-Traumatic Stress Symptoms</td>
<td>17 to 85</td>
<td>29.94 (13.12)</td>
<td>Normal/Non-clinical$^b$</td>
<td>.95</td>
</tr>
<tr>
<td>Satisfaction with Life</td>
<td>5 to 35</td>
<td>20.99 (6.93)</td>
<td>Neutral to slightly satisfied$^c$</td>
<td>.88</td>
</tr>
<tr>
<td>SBI Enthusiasm for Job</td>
<td>0 to 20</td>
<td>11.06 (4.73)</td>
<td>N/A</td>
<td>.87</td>
</tr>
<tr>
<td>SBI Psychological Exhaustion</td>
<td>0 to 16</td>
<td>5.31 (3.60)</td>
<td>N/A</td>
<td>.82</td>
</tr>
<tr>
<td>SBI Indolence</td>
<td>0 to 24</td>
<td>3.78 (3.01)</td>
<td>N/A</td>
<td>.73</td>
</tr>
<tr>
<td>SBI Guilt</td>
<td>0 to 20</td>
<td>2.32 (2.16)</td>
<td>N/A</td>
<td>.65</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>10 to 50</td>
<td>31.60 (6.40)</td>
<td>N/A</td>
<td>.83</td>
</tr>
</tbody>
</table>

Notes: CSE = Coping Self-Efficacy; NFA = Need for Affect; DASS = Depression, Anxiety and Stress Scale-21; PCLC = Posttraumatic Checklist-Civilian Version; SBI = Spanish Burnout Inventory; M = Mean; SD = Standard deviation; N/A = Not applicable (i.e., scale validation literature does not ascribe qualifiers to scale scores).

$^a$denotes Antony et al., 1998; Henry & Crawford, 2005.

$^b$denotes Conybeare et al., 2012; First et al., 1997.

Table 2. Multivariate Regression Model Statistics for Demographic Covariates and Coping Predicting Mental Health.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Wilks’ $\lambda$</th>
<th>$F$ (df)</th>
<th>$p$-value</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.15</td>
<td>218.73 (4, 154)</td>
<td>&lt; .001</td>
<td>.85</td>
</tr>
<tr>
<td>Male sex</td>
<td>0.94</td>
<td>2.47 (4, 154)</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td><strong>Lost a patient to suicide (Yes)</strong></td>
<td><strong>0.89</strong></td>
<td><strong>4.77 (4, 154)</strong></td>
<td><strong>.001</strong></td>
<td><strong>.11</strong></td>
</tr>
<tr>
<td>Age</td>
<td>0.90</td>
<td>4.30 (4, 154)</td>
<td>.003</td>
<td>.10</td>
</tr>
<tr>
<td>Years clinical experience</td>
<td>0.96</td>
<td>1.72 (4, 154)</td>
<td>.15</td>
<td>.04</td>
</tr>
<tr>
<td>Years working in secure services</td>
<td>0.97</td>
<td>1.12 (4, 154)</td>
<td>.35</td>
<td>.03</td>
</tr>
<tr>
<td>Hours of previous suicide prevention training</td>
<td>0.97</td>
<td>1.10 (4, 154)</td>
<td>.36</td>
<td>.03</td>
</tr>
<tr>
<td>CSE Use Problem-Focused Coping</td>
<td>0.97</td>
<td>1.36 (4, 154)</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>CSE Stop Negative Thoughts and Emotions</td>
<td>0.94</td>
<td>2.31 (4, 154)</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>CSE Use Social Support</td>
<td>0.97</td>
<td>1.27 (4, 154)</td>
<td>.28</td>
<td>.03</td>
</tr>
<tr>
<td><strong>NFA Avoidance</strong></td>
<td><strong>0.89</strong></td>
<td><strong>4.84 (4, 154)</strong></td>
<td><strong>.001</strong></td>
<td><strong>.11</strong></td>
</tr>
<tr>
<td>NFA Approach</td>
<td>0.91</td>
<td>3.96 (4, 154)</td>
<td>.004</td>
<td>.09</td>
</tr>
</tbody>
</table>

Notes: CSE = Coping Self-Efficacy; NFA = Need for Affect; Gender = Female reference group; **Bold** font denotes significant multivariate predictor.
Table 3. Multivariate Regression Model Statistics for Demographic Covariates and Coping Predicting Subjective Well-Being.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Wilks’ $\lambda$</th>
<th>$F$ (df)</th>
<th>$p$-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.02</td>
<td>1068.41 (6, 152)</td>
<td>&lt; .001</td>
<td>.98</td>
</tr>
<tr>
<td>Male sex</td>
<td>0.93</td>
<td>1.78 (6, 152)</td>
<td>.11</td>
<td>.07</td>
</tr>
<tr>
<td>Lost a patient to suicide? (Yes)</td>
<td>0.97</td>
<td>0.87 (6, 152)</td>
<td>.52</td>
<td>.03</td>
</tr>
<tr>
<td>Age</td>
<td><strong>0.91</strong></td>
<td><strong>2.43 (6, 152)</strong></td>
<td>.03</td>
<td><strong>.09</strong></td>
</tr>
<tr>
<td>Years clinical experience</td>
<td>0.98</td>
<td>0.55 (6, 152)</td>
<td>.77</td>
<td>.02</td>
</tr>
<tr>
<td>Years working in secure services</td>
<td>0.95</td>
<td>1.37 (6, 152)</td>
<td>.23</td>
<td>.05</td>
</tr>
<tr>
<td>Hours of previous suicide prevention training</td>
<td>0.94</td>
<td>1.74 (6, 152)</td>
<td>.11</td>
<td>.06</td>
</tr>
<tr>
<td>CSE Use Problem-Focused Coping</td>
<td><strong>0.91</strong></td>
<td><strong>2.35 (6, 152)</strong></td>
<td>.03</td>
<td><strong>.08</strong></td>
</tr>
<tr>
<td>CSE Stop Negative Thoughts and Emotions</td>
<td>0.92</td>
<td>2.23 (6, 152)</td>
<td>.04</td>
<td><strong>.08</strong></td>
</tr>
<tr>
<td>CSE Use Social Support</td>
<td>0.90</td>
<td>2.65 (6, 152)</td>
<td>.02</td>
<td><strong>.09</strong></td>
</tr>
<tr>
<td>NFA Avoidance</td>
<td>0.88</td>
<td>3.45 (6, 152)</td>
<td>.003</td>
<td>.12</td>
</tr>
<tr>
<td>NFA Approach</td>
<td><strong>0.89</strong></td>
<td><strong>3.09 (6, 152)</strong></td>
<td>.007</td>
<td><strong>.11</strong></td>
</tr>
</tbody>
</table>

Notes: CSE = Coping Self-Efficacy; NFA = Need for Affect; Gender = Female reference group; **Bold** font denotes significant multivariate predictor.