

Appendix 1. Components of Survey Instrument

Mental Health Continuum-Short Form (MHC-SF)

- a 14-item measure of individual social, emotional, and psychological mental health domains, with high internal consistency (>0.80)¹ and clinical relevance.²
- Similar to standard diagnostic criteria for depression, the MHC-SF items are scored according to the frequency with which respondents experience each symptom of positive mental health.
- Per convention, categorical designations are not limited to a specific numeric cut-off. Rather, ‘flourishing’ represents experiencing high positive functioning and high positive emotions ‘every day’ or ‘almost every day’. Scores can also be treated continuously.³

Cognitive Affective Mindfulness Scale-Revised (CAMS-R)

- a 10-item measure of both dispositional and trained mindfulness in the form of attention, present-focus, awareness, and acceptance, with internal consistency (0.7-0.74)⁴ and a calculated global score sensitive to mindfulness training.⁵
- Higher CAMS-R scores are associated with lower odds of distress in surgical trainees.^{4,6}

Abbreviated Maslach Burnout Inventory (aMBI)

- a 9-item validated screen⁷ for high emotional exhaustion, depersonalization, and personal accomplishment, each associated with multiple negative sequelae in surgical trainees.^{6,8,9,10}

Cohen’s Perceived Stress Scale (PSS)

- a 10-item widely-used measure of stress, with high internal consistency (>0.80)^{11,12} and normative data for men and women aged 18-34.
- High PSS scores correlate with cognitive impairment, missed work and disability.¹³

Spielberger’s State Trait Anxiety Index (STAI)

- a 6-item measure of subjective feelings (e.g., apprehension, tension) and autonomic arousal,¹⁴⁻¹⁸ correlated with state anxiety. In surgical trainees during real-life and simulated trauma scenarios the STAI has high internal consistency (0.92).¹⁹

Patient Health Questionnaire-8 (PHQ-8)

- an 8-item rigorously evaluated depression screening tool²⁰ with high internal consistency (0.88).²¹
- A total score of ≥ 10 is correlated with increased use of clinical resources.²

Swedish Demand-Control-Support Questionnaire (DCSQ)

- a 16-item measure of job strain with good internal consistency (0.7-0.85)²² rooted in Job Demand-Resource theory. Subdomains exist for Demand, Control and Support.
- High workplace demand and low control are known risks for job strain, while high workplace control and social support are shown to decrease risk and mitigate the effects of demand.^{22,23}
- ‘High’ subdomain designations are defined as scores within the upper third of the total possible score.²²

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