

Analysis of Medical Student Plasticity and Stability and the Impact on Burnout and Performance

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➤ **Introduction:** Medical student plasticity and stability are integrated traits of personality that result from the reconstruction of the validated five-factor inventory into a simpler binary model.¹ Plasticity is a combined measure of flexibility, adaptability, and tending to experience positive emotions, while stability is a consolidated measure of conformity, managing impulses and coping with negative emotions.² A dichotomous plasticity-stability construct should provide a reliable personality model with burnout and performance.³

➤ **Purpose:** To analyze the mediator relationship of medical student plasticity-stability (predictors), burnout (mediator), and performance (outcome).

➤ **Methods:** 2017-18 205/500 Med Students

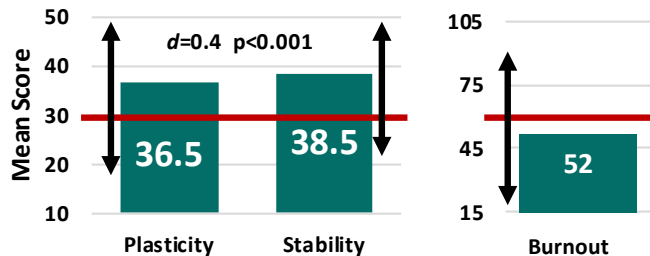
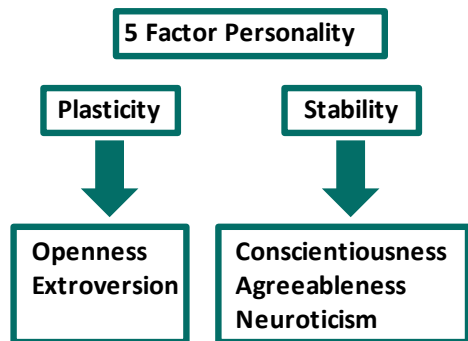


Fig 1: Mean Personality and Burnout Scores

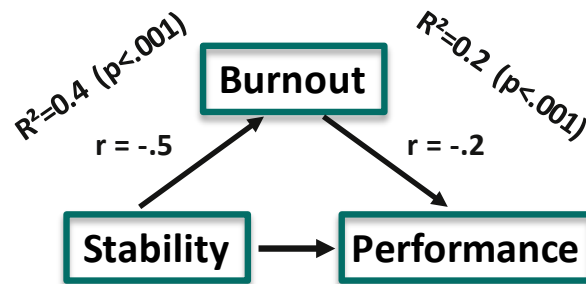


Fig 2: Mediation Model of Personality and Performance with Burnout

Maslach Burnout Inventory

➤ **Discussion:** Medical student stability scores were higher than plasticity scores suggesting that their dispositions towards conformity, managing impulses and coping with negative emotions are greater than flexibility, adaptability, and tending to experience positive emotions. Both traits were associated with burnout, but the relationship for stability was higher than for plasticity. This implies that managing impulses and negative emotions are important traits for lowering burnout. Ultimately, burnout mediated the effects of trait stability on student performance, which indicated that the negative impact of low stability scores on performance can be offset by lower burnout scores.

➤ **Significance:** Medical student personality traits of stability and plasticity were significantly linked to burnout, and stability scores were mediated by burnout on performance.