Associations Between Surgical Expectations and the Internalizing Scales of the MMPI-2-RF
Sarah Kline, Katy W. Martin-Fernandez, M.A., Yossef S. Ben-Porath, Ph.D., & Andrew R. Block, Ph.D.

Background: Previous research suggests there is an association between psychopathology and surgical outcomes in chronic back pain patients (Block, Marek, Ben-Porath, & Kukal, 2017). However, there has been little research examining presurgical psychopathology and surgical expectations. A patient experiencing psychological distress with low expectations for surgery may be less likely to adhere to treatment and subsequently have a poor surgical outcome. Therefore, understanding this relationship between psychopathology and surgical expectations may lead to early identification of patients at risk for poorer surgical outcomes. This study examined scores on the MMPI-2-RF internalizing scales and surgical expectations of chronic back pain patients during a presurgical evaluation.

Method: This study included 1150 chronic back pain patients from a large southwestern academic spine center. Participants were composed of 53.4% females with a mean age of 49.76 years (SD=12.783). Participants were administered the MMPI-2-RF (Ben-Porath & Tellegen, 2008/2011) and the Pain and Spine Surgery Evaluation Survey (PASSS; unpublished) as part of a routine presurgical evaluation. The MMPI-2-RF is a 338-item self-report measure that assesses personality and psychopathology. The PASSS is an 18-item self-report measure containing questions about expectations for surgery. Zero-order correlations were examined between internalizing scales on the MMPI-2-RF and questions on the PASSS pertaining to expectations of successful surgery results, levels of pain, lifestyle interference from pain, and needing pain medication.

Results and Discussion: Problems associated with emotional and internalizing dysfunction, demoralization, low positive emotions, suicidal and death ideation, feelings of helplessness and hopelessness, self-doubt, stress and worry, and anxiety were negatively associated with the expectation of achieving successful surgery results. Problems associated with emotional and internalizing dysfunction, demoralization, low positive emotions, suicidal and death ideation, feelings of helplessness and hopelessness, self-doubt, and stress and worry were positively associated with expectations of pain interfering with their lifestyle, needing pain medication, and experiencing higher pain levels after surgery. The current investigation demonstrates that patients with poor surgical expectations reported increased problems related to emotional and internalizing dysfunction.