

Mental Health Best Practices in NCAA: The Bidirectional Relationship between Mental Toughness and Self-Compassion

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ABSTRACT

Based on National Collegiate Athletic Association (NCAA) reports, student-athletes' well-being is compromised by sub-clinical issues of mental health (MH) disorders, such as depression and anxiety. Preliminary data have shown a positive relationship between mental toughness (MT) and MH, self-compassion (SC) and MH, and SC and MT. To date, possible indirect causal relationships between these three constructs have not been investigated. **PURPOSE:** To confirm the three aforementioned relationships in NCAA athletes and explore the mediation role of MT and SC on the SC-MH and MT-MH relationships, respectively. Hypotheses: (1) MT will correlate positively with MH, (2) SC will correlate positively with MH, (3) MT will correlate positively with SC, (4) MT will mediate the SC-MH relationship, and (5) SC will mediate the MT-MH relationship. **METHODS:** The Mental Toughness Index, the Self-Compassion Scale, and the Mental Health Continuum-Short Form were uploaded on Qualtrics. NCAA athletes were invited to participate via email. The sample ($n=466$) was predominantly Division III, White, female, freshmen, soccer players, and in-season ($M_{age}=19.8$, $SD=1.8$). The analysis consisted of two parts. In the first, bivariate correlations were computed among MT, SC, and MH. In the second, a structural equation model was constructed to test the bidirectional relationship between MT and SC, where MT and SC also had direct effects on MH. All analyses were completed in R. **RESULTS:** The findings showed a positive relationship between MT and MH ($r=0.371$, $p<0.001$), MT and SC ($r=0.461$, $p<0.001$), and SC and MH ($r=0.533$, $p<0.001$). Therefore, evidence for hypotheses 1, 2, and 3 was found. In the bidirectional model, MT was found to be associated with higher SC levels (Unstd. Est = 0.29, SE = 0.068, Std. Est = 0.60), SC was predictive of lower levels of MT (Unstd. Est = -0.49, SE = 0.036, Std. Est = -0.24), and both main effects of MT and SC on MH were positive. Given both directional paths, MT to SC and SC to MT, were significant, we found evidence for hypotheses 4 and 5. **CONCLUSION:** Our positive correlation results are in accordance with Gucciardi, Hanton, and Fleming (2017), Neff, Rude, and Kirkpatrick (2007), Wilson, Bennett, Mosewich, Faulkner, and Crocker (2018), and Ales, Kurzum, Deal, and Stamatis (2018). The full bidirectional model analysis revealed that MT is associated with increases in SC and increases in both MT and SC are associated with increases in MH. Therefore and concerning updating mental health best practices, both MT and SC psychological skill training can potentially increase MH levels. However, to most appropriately increase athletes' MH, stakeholders should prioritize MT, over and above SC, but not to its detriment. Possible limitations include self-assessment and athletes representing three institutions only. Similar, larger-scale research projects are needed in the future.