Based on a growing evidence base suggesting mindfulness practices may improve psychological functioning, recent decades have seen a surge in mindfulness interventions and the use of technology as a means for teaching them. The primary purpose of this study was to examine the effects of four weeks of (twice weekly) training sessions using two computer-based strategies for teaching mindfulness-related skills to adolescents: Breath Counting Training (BCT; Levinson et al., 2014) and Self-Compassion Training (SCT; Weng et al., 2013; Alberston, Neff, and Dill-Shackleford, 2014). Twenty adolescents (M age = 17.30; 40% male, 55% female, 5% gender neutral; 60% African American, 15% Multi-Racial/Ethnic, 15% Euro-American, and 10% Latinx) recruited from an alternative high school were randomly assigned to one of four conditions: (1) BCT for four sessions, followed by four sessions of
SCT, (2) SCT for four sessions, followed by four sessions of BCT, (3) BCT for eight sessions, or (4) SCT for eight sessions. Subjective ratings of current mindful awareness and self-compassion were taken at the conclusion of each 10-15 minute session. The Child and Adolescent Mindfulness Measure (CAMM; Greco, Baer, & Smith, 2011) and the Self-Compassion Scale Short-Form (SCS; Raes, Pommier, Neff, and Gucht, 2011) were collected prior to participation, prior to each session, and at post-intervention. The Depression Anxiety and Stress Scale-21 (DASS; Lovibond & Lovibond, 1995) was collected at the beginning, middle, and conclusion of participation. Both BCT and SCT sessions were associated with moderate and equal levels of immediate post-session felt experience of mindful awareness and self-compassion. Eight sessions of BCT, SCT, or their combination was associated with improvements on the CAMM and SCS, but not the DASS-21. Receipt of BCT versus SCT did not produce reliably differential effects on overall mindfulness or self-compassion. Individual level analysis showed significant variability in responses across conditions and participants. While unique in their focus, both computerized trainings—breath counting vs. self-compassion—showed some promise in promoting the acquisition and practice of mindfulness skills by teens. However, unlike in other reports in the literature, receipt of mindfulness training was not associated with reductions in psychological distress. It is possible that 4 weeks (8 brief sessions offered twice weekly) and lack of home practice is insufficient to produce a recognizable global change in coping. Consistent with this interpretation, despite regular attendance and engagement during the twice weekly proctored meetings, out of school practice with the training materials did not reliably occur.