Mindfulness and self-regulation in at-risk adolescents: The role of self-efficacy

Zimmerman (1990) described self-regulated learners as individuals who are self-aware and active participants in their own learning. Self-regulated learners have high self-efficacy and seek out opportunities to learn through self-observation, self-evaluation, and self-improvement. Students who are high in self-regulation also achieve greater academic success. This may be more critical to students attending alternative schools, “last chance” schools for students who are at risk of dropping out of traditional school settings. The aim of this study is to examine possible factors that might influence the self-regulation of at-risk adolescents at an alternative high school.

In this study we observed self-regulation through the lens of self-efficacy because unless people believe that they are able to self-regulate, it is unlikely that they will attempt to do so (Bandura, 1997). The first step in self-regulation is self-awareness. We believe that mindfulness, operationalized as nonjudgmental awareness of the present moment, could play a key role in self-regulation by facilitating self-awareness. Although some have examined how mindfulness relates to self-regulation, few have observed the possible effects of mindfulness on beliefs about self-regulation.

The aim of our study was to examine how students in an alternative school setting reported their mindfulness and self-efficacy for self-regulation. Specifically, we examined how students report their mindful awareness and whether this, and students’ self-efficacy for self-regulation, differed as a function of students’ gender and grade level. We then examined the relationship between mindfulness and four types of self-efficacy for self-regulation.
Method

Participants in this study were 115 adolescents in Grades 9-12 (\(M_{\text{age}} = 16.81\); 37% girls) attending an alternative high school in the southeastern US. The sample was 75.7% White, 16.5% African American, and 7.8% other races/ethnicities. Students were asked to fill out online surveys in Spring 2015 semester.

Student levels of mindfulness were measured using the Child and Adolescent Mindfulness Measure (CAMM), a 10-item self-report questionnaire that assesses present-moment awareness and nonjudgmental, non-avoidant responses to thoughts and feelings (Greco, Baer, & Smith, 2011; \(\alpha = .82\)). School self-regulatory self-efficacy was measured using a 10-item self-report questionnaire (\(\alpha = .88\)) created with Bandura’s (2006) guidelines for constructing self-efficacy scales, and measures students’ perceived ability to direct their attention and complete school-related tasks. Coping self-efficacy was measured using the Coping Self-Efficacy Scale (Chesney et al., 2006), which assessed three factors: use of problem-focused coping (6 items, \(\alpha = .88\)), ability to stop unpleasant emotions and thoughts (4 items, \(\alpha = .92\)), and ability to get support from friends and family (3 items, \(\alpha = .80\)).

Descriptive statistics were used to observe how students reported their mindfulness and self-efficacy for self-regulation. An independent samples \(t\) test was used to determine whether students’ reported scores differed by gender. One-way analysis of variance (ANOVA) was calculated to observe mean differences in the variables by grade level. Correlation coefficients were calculated to examine the relationships among mindfulness, self-regulatory self-efficacy, and three types of coping self-efficacy.
Results

We found no statistically significant gender differences for any variable. The results of the one-way ANOVA and post-hoc test showed that there was a statistically significant difference between grades 10 and 11 for self-efficacy for coping with unpleasant thoughts and emotions $F(4,110) = 2.506, p = .046$. There were no statistically significant differences by grade level for other variables.

School self-regulatory self-efficacy had strong positive correlations with every factor of coping self-efficacy. Mindfulness was significantly, positively correlated with the problem-focused coping factor of the coping self-efficacy scale ($r = .187, p = .041$), but was not significantly correlated with any other variable.

Discussion

The results of this study were surprising and did not follow the pattern of previous literature. The lack of significant gender differences was surprising in the context of previous research, which has documented gender differences in emotion expression, academic achievement and self-regulation in children (Matthews, Ponitz, & Morrison, 2009).

Students’ reported levels of mindfulness were positively, significantly correlated with only one other variable, problem-focused coping self-efficacy. That mindfulness is related to increased confidence in one’s ability to solve problems is consistent with prior findings. However, many researchers have suggested that self-regulation and increased ability in coping with negative emotions are the mechanisms behind why mindfulness exhibits this relationship (Brown & Ryan, 2003; Coffey, Hartman, & Fredrickson, 2010). Possible limitations of this study are the small sample and lack of racial diversity. Future research should observe measures of academic success, such as grade point average, as well as examining students over time.
References


