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Examining boredom: Different causes for different coping profiles

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ABSTRACT

Research has shown that boredom impedes students' academic functioning. Although recent studies have identified varying causes of boredom in school settings and the effectiveness of cognitive-approach coping in managing this negative emotion, little is known about how the perceived causes of boredom relate to coping with boredom. According to the contextual approach to coping, certain forms of coping may be linked to different situational causes of boredom. Therefore, the purposes of this study were twofold: First, we examined university students' strategies to cope with boredom using person-centered data analytical approach. Second, we evaluated how the identified boredom coping profiles differed according to particular causes of boredom using a variable-centered data analytical approach. We identified three boredom coping profiles consistent with previous findings —Reappraisers, Criticizers, and Evaders. Significant differences in eight antecedents to boredom were found among the three profiles. We discuss the implications of the findings for instructors and students.

Although students' learning motivation and emotions have long been a major focus in educational research, only recently has academic boredom—one of the most common emotions—received attention in the literature (e.g., Acee et al., 2010; Daniels et al., 2008; Goetz et al., 2014; Kanevsky & Keighley, 2003). In our own work, (Daniels, 2010; Tze, 2011) almost 40% of undergraduate students reported being bored in class at some point. Moreover, boredom experienced in academic contexts has been shown to be a debilitating emotion that adversely influences students' educational development (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Pekrun, Hall, Goetz, & Perry, 2014). In particular, the effects of boredom extend well beyond a transient negative affective experience (Barnett, 2005) and are associated with lower academic attainment (Pekrun et al., 2010), dropping out of school (Wegner, Flisher, Chikobvu, Lombard, & King, 2008) and juvenile delinquency (Newberry & Duncan, 2001).

Given the accumulating evidence, researchers and educators have begun to consider what causes boredom and how students cope with it. The factors contributing to boredom represent variations of control and value appraisals such as a lack of control, choice, challenge, and meaning (e.g., Acee et al., 2010; Kanevsky & Keighley, 2003; Tze, Daniels, & Klassen, 2014). In turn, not all strategies to cope with boredom are equal and some students cope with boredom better than others (Nett, Goetz, & Daniels, 2010; Nett, Goetz, & Hall, 2011; Tze, Daniels, Klassen, & Li, 2013). Despite recent attention to the causes of boredom and ways to cope with this emotion in separate studies, investigations have not taken into account the relationships between causes of and ways to cope with boredom. Research has shown that the effectiveness of any particular approach to coping depends on the circumstances that provoked the need to cope in the first place (Aldwin, 2007). For boredom specifically, linking causes and coping would allow teachers to better design course curriculum to minimize problematic causes of students' boredom and would allow interventions to increase students' abilities to cope with boredom triggered by specific causes. Therefore, the purposes of this study were to identify university students' boredom coping profiles, and to examine how these profiles differ according to perceived causes of boredom.

1.1. Academic boredom

Academic boredom can be defined as a multidimensional emotion, involving an unpleasant feeling (affective), low-arousal (physiological), a desire to leave the boring situation (motivational), and a perception of slowness in time (cognitive) (Pekrun, 2006). Because of the multidimensional nature of boredom, it is considered a unique emotion that differs from simply a lack of interest (Pekrun et al., 2010). In particular, Goetz and Hall (2014) discuss that the unpleasant feeling and inclination to withdraw from a situation distinguish boredom from a lack of interest, which typically is not associated with these affective and motivational sensations.

1.2. Causes of boredom

Because of the negative impact of boredom on learning researchers turned their attention to factors that contribute to the experience of boredom. Goetz and Hall (2014) divide potential antecedents of boredom into three broad categories: the environment (e.g., monotony,

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isolation, repetition, etc.); the person (e.g., low control/value, boredom proneness, etc.); and the environment/person fit (e.g., too high/too low difficulty, etc.). We adhere to Pekrun's (2006) control-value theory of emotion that suggests boredom occurs when students experience a lack of control that is either far beyond or below their abilities (Goetz, Pekrun, Hall, & Haag, 2006) and they do not perceive value in their academic tasks (Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011). These control and value appraisals are based on students' assessments of the environment and their personality factors, thus mapping onto the categories identified by Goetz and Hall (2014). For instance, when paired with low value of the content, students who perceive listening to didactic lectures as very low control will likely experience boredom in that class. This would be even more likely for individuals high on boredom proneness, a personality factor that inclines an individual to appraise a situation as boring (e.g., Farmer & Sundberg, 1986; Mann & Robinson, 2009).

Given both environment and person factors appear to contribute to the experience of boredom, Daschmann, Goetz, and Stupnisky (2011) developed the Precursors to Boredom Scales (PBS) in order to evaluate multiple causes of boredom in school settings. Building on other work addressing potential antecedents to boredom (e.g., Loukidou, Loan-Clarke, & Daniels, 2009; Martin, Sadlo, & Stew, 2006), Daschmann et al. identified eight discrete factors that contribute to boredom: being over-challenged, being under-challenged, being bored by an unchanging routine, not finding meaning in learning, having better things to do than be in class, disliking the teacher, feeling uninvolved, and being bored in general. The first seven reasons pertain to environmental factors that can be appraised as either supporting or hindering control and value. The final cause, general boredom tendency, was included to refer to dispositional causes of boredom (e.g., Farmer & Sundberg, 1986; Vodanovich & Kass, 1990).

Next, Daschmann et al. (2011) examined how the eight distinguishable causes of boredom related to teachers' instructional quality and students' achievement. Seven of the eight causes correlated negatively with effective instructional qualities, reflective of the situational basis for boredom. For example, boredom due to lack of involvement showed the strongest negative correlation with student-adaptive instruction, $r = -.69$, and general boredom tendency showed the smallest negative correlation with the same construct, $r = -.30$. Interestingly, boredom due to under-challenge demonstrated a significant positive relationship with student-adaptive instruction, $r = .26$, and with math grades, $r = .44$, among middle-school students in Germany. Using a validated English version of the PBS, Tze, Daniels, Klassen (2014) found that only over-challenge, lack of meaning, opportunity costs, and general boredom tendency, but not other causes of boredom, were negatively related to university students' self-efficacy for self-regulated learning. In addition to the PBS, researchers have shown that boredom may be caused by a cycle of low achievement (Pekrun et al., 2014) and warded off by high perceptions of autonomy-support (Tze, Klassen, & Daniels, 2014) and supportive teacher characteristics (Goetz, Lüdtkec, Nett, Kellera, & Lipneviche, 2013). These reports provide some guidance on the major contributors of boredom rooted in appraisals of the environment and thus may shape the effectiveness of certain coping strategies.

1.3. Boredom coping strategies

It is important to identify effective boredom coping strategies for instances when, despite trying to reduce the causes of boredom, students nonetheless experience the emotion. Based on Holahan's framework of coping with stress (Holahan, Moos, & Schaefer, 1996), Nett et al. (2010) developed the Boredom Coping Scale (BCS) from a sample of Grades 5–10 German students. The BCS consists of four categories: cognitive-approach, behavioral-approach, cognitive-avoidance, and behavioral-avoidance coping. Cognitive-approach coping involves increasing control/value appraisals of boring situations, and behavioral-approach coping involves taking action to alter boring situations thereby increasing control/value. Cognitive-avoidance and behavioral-avoidance strategies involve cognitive and physical disengagement, respectively, from boring situations. Cognitive-approach strategies were negatively related to frequency of boredom and positively associated with value in learning (Nett et al., 2010, 2011); whereas, both cognitive-avoidance and behavioral-avoidance coping were positively related to the occurrence of boredom and negatively related to effort in learning.

Students likely combine various coping strategies to manage their boredom because coping strategies are not mutually exclusive. Nett et al. (2010) used latent profile analysis and identified three groups of students: Reappraisers, Criticizers, and Evaders. Reappraisers primarily endorsed cognitive-approach strategies and Criticizers predominantly adopted behavioral-approach coping; whereas, Evaders preferred cognitive-avoidance and behavioral-avoidance strategies. In subsequent work Nett et al. (2011) found only the Reappraiser and Evader profiles. Tze, Klassen, Daniels, Li, and Zhang (2013) also found slightly different coping profiles for Canadian and Chinese students. Specifically, the Reappraiser and Criticizer profiles emerged for Canadian university students but there was no Evader profile. The Evader profile was common for Chinese students along with two additional coping profiles: Infrequent Copers who were low on all coping strategies and Reformers who were high on all strategies except behavioral-avoidance. In Nett et al. (2010, 2011) the Reappraiser profile was consistently the most adaptive as evidenced by lower boredom, sustained interest and effort, and higher levels of agreeableness and conscientiousness. In contrast, Reappraisers and Criticizers did not differ in their perceptions of boredom in Tze, Klassen, Daniels et al.'s (2013) research and Criticizers actually reported significantly more intrinsic motivation than Reappraisers. One reason for these differences in effectiveness between profiles may be their appraisals for the cause of boredom in the first place.

1.4. Theoretical rationale of the present study

The purpose of this study was to investigate the extent to which students' boredom coping profiles may depend on perceived causes of boredom. Borrowing from the research literature on stress, we argue that causes and coping are linked in theory because "more transitory situation-based factors shape people's choices of coping responses" (Holahan et al., 1996, p. 25; see also Lazarus & Folkman, 1984). Because precursors to boredom reflect students' subjective control and value appraisals of their learning environment, they may indeed function as a situational influence on coping. Imagine for example the following two students in the same course: One student feels bored because the teacher does not make the meaning of the content explicit but can cope by cognitively engaging and creating meaning himself. In contrast, the second student feels bored because she does the same thing in class everyday and copes by not attending. To explore these ideas we used person-centered analytical approach to identify university students' boredom coping profiles. We hypothesized that the three coping profiles—Reappraisers, Criticizers, and Evaders—found in Nett et al. (2010) would emerge in our university student sample. We also examined differences between boredom coping profiles and antecedents to boredom. Specifically, we hypothesized that each identified coping profile would vary in the extent to which it emerged in response to different precursors to boredom.

2. Method

2.1. Participants and procedure

A total of 446 students registered at a Canadian University were recruited through a participant pool in the Faculty of Education in exchange for research credit. Participants were made aware of the participation pool in their first class and instructed to sign up for a study