Mediating Effect of Academic Self-Efficacy on the Relationship between Academic Stress and Academic Burnout in Chinese Adolescents

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Abstract

The current study investigated how academic stress, academic burnout, and academic self-efficacy relate to each other; in addition, this study examined the mediating effects of academic self-efficacy on the relationship between academic stress and academic burnout of Chinese adolescents. A total of 412 students attending third-grade from two different middle schools (ninth-grade in the United States) located in Jiading District of Shanghai participated in the final analysis. By using structural equation modeling (SEM) and the maximum likelihood estimation procedures of AMOS 20.0, the latent variable measurement models were confirmed. The results and conclusions of this study are summarized as follows. A positive correlation between academic stress and academic burnout was soundly supported by this study. Meanwhile, both academic stress and academic burnout indicated negative correlations with academic self-efficacy. The modeling indicated that academic self-efficacy has a partial mediating process and a direct effect on the relationship between academic stress and academic burnout. Thus, academic stress and academic burnout were significantly weaker when academic self-efficacy was higher. In the field of education and curriculum, these results are applicable for restructuring or developing Chinese middle school curriculum utilizing useful methods for adolescents to develop their academic self-efficacy.

Keywords

academic stress, academic self-efficacy, academic burnout, Chinese adolescent students, mediating effects

Introduction

Adolescence is generally viewed as a transitional period between childhood and adulthood. In this period, adolescents generally experience much stress or feel pressure at achieving various developmental tasks and acquiring appropriate skills and resources to become socially mature individuals (Compas et al., 2001; Hicks & Heastie, 2008). Specifically, accomplishing educational requirements is one of the most significant challenges that adolescent students confront during this period and the heightened academic requirements and demands are very likely to stress adolescent students. The stresses caused by excessive academic demands may be called “academic stress,” or as learners’ mental and emotional pressure, frustration, conflicts, suppression, or anxiety that arise due...
to school performance, inappropriate workloads, examinations, and academic grades within household, school, and social environments (Kim & Kim, 2004; Lin & Huang, 2014; Yusoff, 2010). In addition, academic stress can be defined in relation to high academic self-expectations or high academic expectations from parents and teachers (Ang & Huan, 2006).

Academic or school-related stresses are a common concern of adolescents in societies globally because adolescents spend most of their time in school environments (Byrne et al., 2007; Kaplan et al., 2005; Lee et al., 2010; Lee et al., 2013; Schrami et al., 2011). Academic stress, however, is the most significant source of adolescents’ stress in Asian countries such as China, Hong Kong, Japan, Korea, Singapore, and Taiwan that traditionally assign a high value to education; parents’ excessive education fever and high expectations about children’s academic achievement exist due to the educational system focusing only on college entrance examinations (Ang et al., 2007; Huan et al., 2008; Lee et al., 2010; Liu & Lu, 2011; Tan & Yates, 2011). In particular, academic stress and pressure that Chinese adolescents experience may be even more intense than their counterparts in Western and other Asian countries (Liu & Lu, 2011; Wu & Sun, 2008). According to research investigating the level of academic stress among adolescents in China, Japan, Korea, and the United States, China had the highest level of academic stress of adolescent students among four countries. Moreover, it was reported that Chinese adolescents under academic stress had more emotional problems than their counterparts in three other countries (China Youth & Children Research Center, 2010).

When adolescents perceive excessive academic stresses, they may react to the stresses physically and psychologically (Yoo et al., 2014). It has been well documented that academic stress adversely affects adolescents’ well-being and leads to a variety of negative manifestations of academic stress including problematic behaviors (Lee & Larson, 2000; Shek, 1995), and mental distress (Lee et al., 2009; Liao & Wei, 2014; Liu & Lu, 2012; MacGeorge et al., 2005; Ying & Liese, 1991). Moreover, some studies support that excessive academic stress is a main factor predicting adolescent students’ psychological distress about academic performance such as academic burnout symptoms (Jo et al., 2013; Shin & Yu, 2014) and intrinsic motivation (Liu, 2015).

As an interesting outcome variable of this study, academic burnout originated from the concept of “burnout” which was first used by Freudenberger (1974), explaining a phenomenon in individuals who repeatedly experienced frustration, skepticism, and fatigue think less of themselves and lose their motivation. The concept of burnout is generally defined as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (Maslach & Jackson, 1986, p. 1). Initially, studies of the burnout concept were restricted to groups of human service professionals such as teachers and nurses (Cedoline, 1982; Friedman, 2003; Skovholt, 2001). Later, this concept has been expansively adopted in other occupational fields outside human service (e.g., businesspersons; Grskyewicz & Buttner, 1992; Jang, 2007; Lee, 2008).

More recently, a growing body of research has investigated burnout among students because academic activities and demands such as attending class, completing school assignments, and passing examinations can be regarded as students’ work (Balogun et al., 1996; Jo et al., 2013; Lee et al., 2009; Lee et al., 2013; Lin & Huang, 2014; Salmela-Aro & Tynkkynen, 2012; Schaufeli et al., 2002; Shin, 2015; Yang, 2004; Walburg, 2014; Zhang et al., 2007). That is, students can experience burnout when they are overwhelmed by their excessive academic workload and may lose interest in study due to their sense of inadequacy or incompetence (Kim et al., 2010; Shin & Yu, 2014). Malakh-Pines, Aronson, and Kafry (1981) examined college students’ burnout and found that they had middle to upper levels of burnout. Researchers regard this kind of burnout as “academic burnout.” Academic burnout is defined by three components: feeling exhausted because of academic demands (exhaustion), having a cynical and detached attitude toward school tasks (cynicism), and feeling incompetent or inadequate as a student (inefficacy; Salmela-Aro & Tynkkynen, 2012; Schaufeli et al., 2002). Given that students are very likely to be vulnerable to academic burnout, it is important to examine the academic burnout syndrome predicted by the impact of excessive academic stress in a group of students.

Plenty of studies have described that academic burnout of students is caused by academic stress (Walburg, 2014). At a college level, the findings of previous studies suggested that academic