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The relationship between the big five personality traits and academic motivation

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Abstract

Understanding the relationship between personality characteristics and academic motivation may be central to developing more effective teaching strategies. The current research examined the relationship between the Big Five personality traits and individual differences in college students' academic motivation. Individuals (172 undergraduates) were asked to complete the NEO Five Factor Inventory (Costa & Mc-Crae, 1992) and the Academic Motivations Inventory (AMI; Moen & Doyle, 1977). Results revealed a complex pattern of significant relationships between the Big Five traits and the 16 subscales of the AMI. Stepwise (forward) multiple regressions further clarified the relationships between personality and three core factors of the AMI (engagement, achievement, and avoidance). Specifically, engagement was best explained by Openness to experience and Extraversion. Achievement was best explained by Conscientiousness, Neuroticism, and Openness to experience. Finally, avoidance was best explained by Neuroticism, Extraversion, and by an inverse relationship with Conscientiousness and Openness to experience. Results are interpreted in terms of creating an appropriate fit between teaching modalities and individual differences in students' academic motivation due to personality traits. Directions for future research and educational practice are considered.
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Keywords: Big five; Personality traits; Academic motivation

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1. Introduction

Individuals differ in their learning styles and educational preferences. These individual differences provide important clues about how best to design educational offerings. Students also differ in the level of motivation they display in the classroom. Some approach learning opportunities with enthusiasm and an intrinsic desire to know more while others seem bored and uninterested. There are various factors, both personal and contextual, that explain these differences (Stipek, 2002). While a number of studies have examined individual differences in learning styles, thinking styles, academic achievement, and academic success, few have focused on individual differences in academic motivation. Yet, academic motivation is a key determinant of academic performance and deserves closer attention (Linnenbrink & Pintrich, 2002). The current research was designed to examine how the Big Five personality traits may relate to individual differences in academic motivation.

1.1. Theoretical background

Several general perspectives on learning suggest reasons why personality should relate to motivation. First, research has demonstrated that students can be either intrinsically or extrinsically motivated, with some students displaying intellectual curiosity and others remaining disengaged (Deci & Ryan, 1985). Second, research on individual differences in learning styles (e.g., Biggs, 1993) suggests that students approach learning with either a surface, deep, or achieving style. Third, Dweck and Leggett (1988) have offered a theory suggesting implicit theories of intelligence influence students' academic performance goals. Similarly, Elliot and McGregor (1999) have emphasized that anxiety can affect learning goals and performance. Finally, research regarding multiple types of intelligence (e.g., Gardner, 1983; Sternberg, Torff, & Grigorenko, 1998) suggests that students who are taught in a way that matches their abilities are likely to achieve at higher levels. These views converge to suggest that the degree of match between the academic environment and student learning preferences related to personality should be related to academic motivation.

1.2. Literature review

While a number of studies have examined individual differences in academic performance, most have focused on academic achievement rather than motivation. Moreover, much of the existing motivation research has focused on elementary, middle, and high school students rather than college students. The relevant research on academic issues that may be related to personality and motivation in college students has focused on: (a) personality and academic performance, (b) personality and learning styles, and (c) personality and motivation.

Personality and academic performance. Prior research indicates that the Big Five traits (Neuroticism, Extraversion, Openness, Conscientiousness, and Agreeableness) reflect core aspects of human personality and have strong influences on behavior (Costa & McCrae, 1992). Some studies have specifically examined the role of the Big Five in predicting academic success. Conscientiousness has consistently and positively predicted examination performance (Chamorro-Premuzic & Furnham, 2003), as well as grade point average (GPA) and academic success (Busato, Prins,