

Only some personality traits relate to motivation to learn



Stephanie N. McMichael ^{a,b}, Tara S. Hackel ^a, Martin H. Jones, Ph.D. ^a

^a University of New Mexico

^b Sandia National Laboratories



ABSTRACT

For over 50 years there has been conflict regarding the relationship between academic motivation and personality traits (Fiske, 2008; Komarraju & Karua, 2005; Matthews, et al., 2006). The present study examines this disparity using current academic motivation theories. This study also replicates its own findings two weeks later. Certain personality traits may correspond with motivational self-beliefs, but these results were not consistent.

INTRODUCTION

Theories suggest conflicting relationships between personality traits and academic motivation. One theory suggests that more intrinsically motivated people hold certain personality traits, which enable persistence (Hazrati – Viari et al., 2012; Komarraju & Karua, 2005), whereas other research shows that a relationship does not exist (Matthews et al., 2006). Rather, suggesting that academic motivation may correspond with past academic experience, affective states, or socio-contextual influences (Fiske, 2008).

There are some methodologic concerns linking personality traits with academic motivation. Prior research typically uses a general definition of intrinsic motivation, though a general definition is no longer widely accepted (Pintrich, 2003). Instead, academic intrinsic motivation consists of multiple psychological constructs simultaneously affecting a student's desire to learn. The current study utilizes achievement goals and self-efficacy.

Achievement goal theory suggests that individuals hold mastery and performance goals that include approach and avoid factors. Mastery-approach refer to students' desire to develop their intellectual abilities, and performance goals are the desire for outperforming others or demonstrating competency (Ames, 1992). Efficacious self-beliefs are domain-specific perceptions about one's capacity to succeed (Bandura, 1986). The current study will compare these motivational constructs to the five most common studied personality traits: neuroticism (anxiety, hostility), extroversion (enthusiasm, social), agreeableness (trusting, cooperative), openness (autonomous, nonconforming), and conscientiousness (organized, purposeful).

This study hopes to address these disparities by extending previous findings with current academic motivational theories, and replicates its own results two weeks later to test for reliability within our own findings.

METHODS

Participants

The study included 2 waves of data collection 14 days apart. In wave 1 and wave 2, participants were undergraduate, pre-service teachers.

Wave 1 data included 205 participants ($N_{\text{women}} = 156$; $N_{\text{men}} = 48$; $N_{\text{other gender}} = 1$). 92 participants reported Non-Hispanic/White (45%), 69 Hispanic/Latino/a (34%), and 44 other ethnicities (21%). Ages ranged from 18 to 63 years old ($M = 24$ years old). Wave 2 data included 162 participants ($N_{\text{women}} = 126$; $N_{\text{men}} = 36$).

Wave 2 included 150 participants from wave 1 (73% retention rate) and 12 new participants (7% of second wave participants). Wave 2's participants self-reported as 72 non-Hispanic/White (44%), 59 Hispanic/Latino/a (36%), and 31 other ethnicities (20%). Ages were from 18 to 63 years old ($M = 24$ years old).

Measures

Participants reported their self-rating of their personality from the Little Big-5 Questionnaire (Little & Wanner, 1996). This included 43 items to measure participants' neuroticism, openness, agreeableness, conscientiousness, and extraversion.

Three scales from the Pattern of Adaptive Learning Scales measured students' achievement goals: mastery approach, performance-approach, and performance-avoid (Midgley et al., 2000).

This study measured academic self-efficacy and teacher efficacy. Five questions from PALS assessed students' academic self-efficacy. Self-perceptions of effective classroom management were measured with the Teachers' sense of efficacy scale (Fives & Buehl).

RESULTS

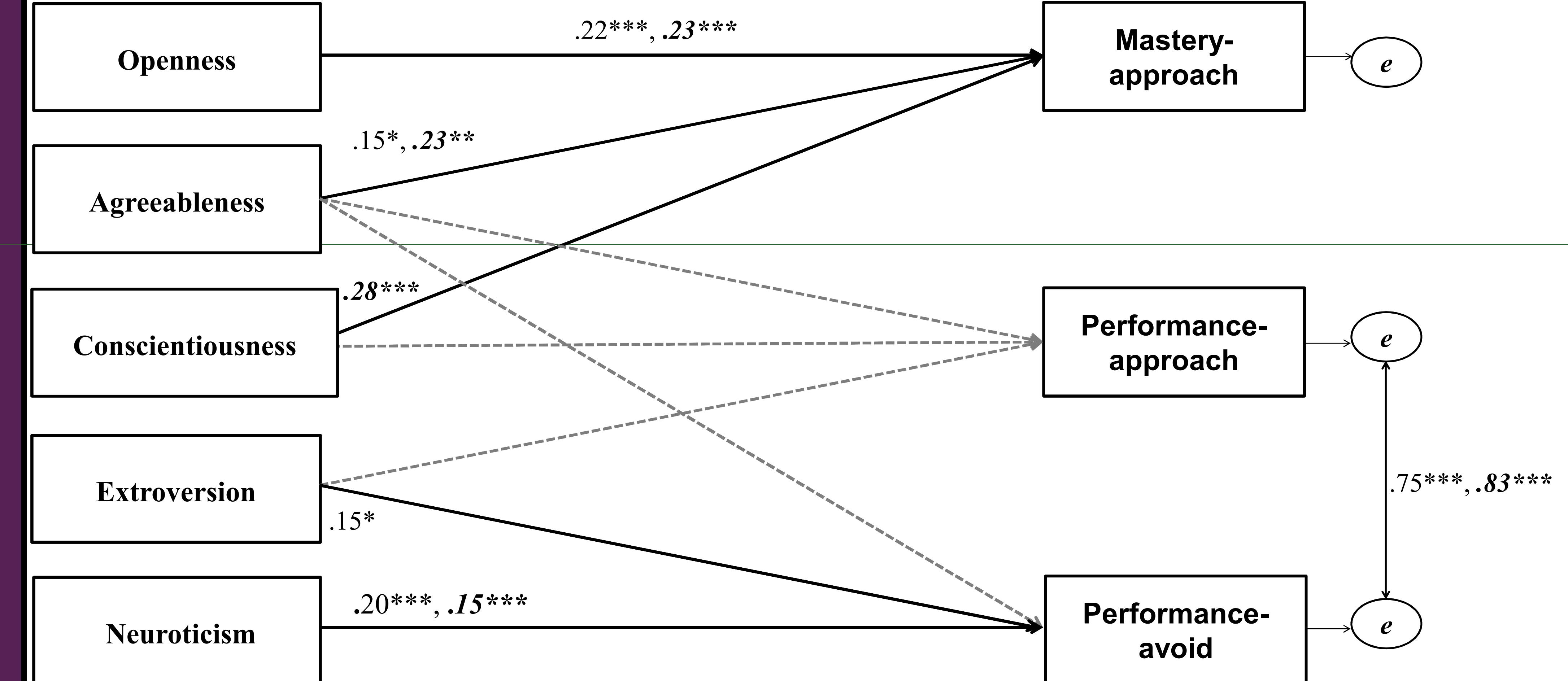


Figure 1. Path analysis between personality and achievement goals. Non-italicized coefficients are from wave 1. Italicized and bolded coefficients are from wave 2.

* $p < .05$, ** $p < .01$, *** $p < .001$

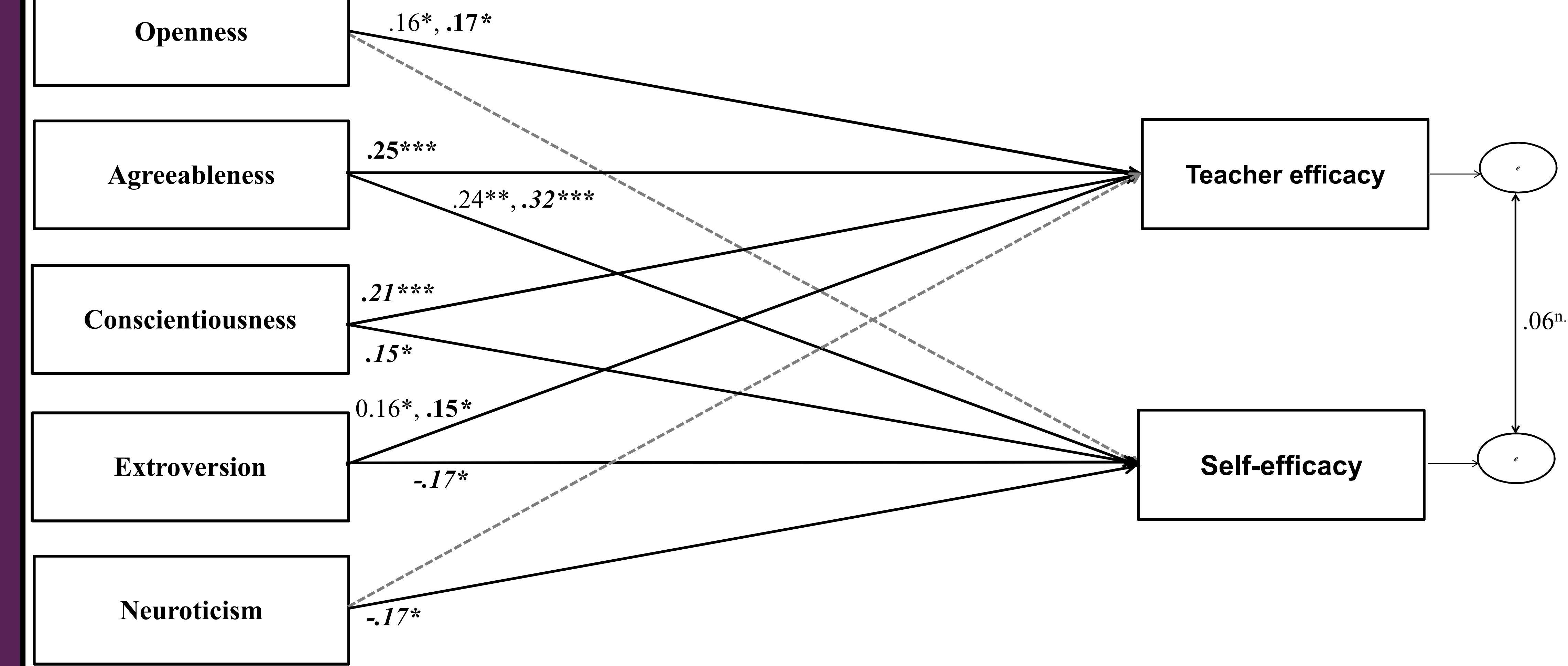


Figure 2. Path analysis between personality and efficacious beliefs. Non-italicized coefficients are from wave 1. Italicized and bolded coefficients are from wave 2.

* $p < .05$, ** $p < .01$, *** $p < .001$

DISCUSSION

This study hoped to both replicate and extend previous research on how personality relates to academic motivation. Results suggest that achievement goals, teacher efficacy, and self-efficacy may have slight relationships with personality traits. Still, given the scarcity of replication within our own study, we are quite hesitant to suggest that academic motivation may be strongly linked with students' own personality traits. Some of the pathways between personality with achievement goals and self-efficacy were replicated: neuroticism with performance-avoid goals and openness and agreeableness with mastery-approach goals. Results from the present study provide little support that personality corresponds with self-efficacy since only 38% of the paths were replicated at both time points. The study's results offers additional evidence that academic motivation is generally domain-specific and malleable.