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Contributions of Personality and Interests to Explaining the Educational Aspirations of College Students

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This study extends prior work by examining how a different model of personality beyond the Big Five and interest are predictive of an important criterion variable, educational aspirations. This is the first study to investigate personality-interest convergence by examining the newly revised 2003 California Psychological Inventory with the 1994 Strong Interest Inventory. In general, the authors found that those personality scales and interest scales that were more related or applicable to educational aspirations were moderately correlated with level of educational aspirations. Also, hierarchical regression results showed that specific dimensions of personality and interests are related to college students’ plans for future scholarly work. Similarly, the current study found that components of one’s personality and interest may relate to aspiring to higher levels of education.

Keywords: educational aspirations, personality, interests

In the past decade, conceptual and empirical work has redefined how vocational researchers view personality and interest. Consensus is emerging that they are both partly inherited (e.g., Betsworth et al., 1994; Gottfredson, 1999; Swanson, 1999; Tellegen et al., 1988; Waller, Lykken, & Tellegen, 1995), with heritability estimates around 40% to 50%. Moreover, there seems to be empirical evidence that they are not redundant of one another yet share meaningful overlap (Barrick, Mount, & Gupta, 2003; Larson, Rottinghaus, & Borgen, 2002; Staggs, 2003). Finally, there has also been speculation that personality and interest along with ability may develop at the same time, with personality reflecting more “deep” traits and interest reflecting more “surface” traits (e.g., Ackerman &
Heggestad, 1997; Barrick et al., 2003). Researchers are conceptualizing both constructs as key individual difference attributes that impact a wide array of life and work outcomes by influencing effort, motivation, choices, and time on task (e.g., Borgen, 1999; Mount, Barrick, Scullen, & Rounds, 2002).

The purpose of this article is twofold. First, this article will add to the growing empirical examination of personality-interest overlap by using a widely used but underresearched personality inventory, the California Psychological Inventory (CPI; Gough, 2002). In fact, this study will introduce the newest revision of the CPI with a college sample. Second, this article will examine how personality and interest predict a key learning outcome, educational aspirations. We hypothesize that the personality and interest scales that emphasize a tendency toward seeking more education will be more highly correlated with educational aspirations. For example, high scores on the CPI Achievement Via Independence Scale are indicative of intelligent people who have a drive to do well in unstructured settings. Also, high scorers on Strong Interest Inventory (SII) Learning Environment Scale tend to be people who enjoy learning via reading books rather than learning primarily through hands-on applications. Our rationale behind these hypotheses is that college students whose personality and interests most likely will necessitate higher levels of educational aspirations to meet career goals will be more likely to endorse higher levels of educational aspirations.

Vocational Interests and Personality Overlap

Many studies have looked at the interest-personality overlap using versions of the SII (Harmon, Hansen, Borgen, & Hammer, 1994) and measures of personality such as the NEO-Personality Inventory-Revised (NEO-PI-R; Carless, 1999; Costa & McCrae, 1992; Gottfredson, Jones, & Holland, 1993; Tokar & Swanson, 1995). Currently, three meta-analyses have synthesized the relations between personality and interest, namely, the personality-interest meta-analyses of the Big Five and the Big Six by Larson et al. (2002) and Barrick et al. (2003) and the meta-analyses of the Big Three and the Big Six (Staggs, 2003). These three articles empirically synthesize a large part of the work on vocational interests and personality relevant to this study.

Larson et al.’s (2002) study looked at the Big Six (interests, i.e., realistic, investigative, artistic, social, enterprising, and conventional [RIASEC]) as operationalized by the Self-Directed Search (SDS), the SII (Harmon et al., 1994), and the Vocational Preference Inventory (VPI) and the Big Five (personality, i.e., neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness [NEOAC]) as measured by versions of the NEO-PI-R. Larson et al. conducted meta-analyses of the correlation matrices of the previously mentioned measures of the Big Five and Big Six. In the analyses, 12 studies were located and used. The substantial relations were openness to experience correlated .48 with
artistic and .28 with investigative, extraversion correlated .31 with social and .41 with enterprising, and agreeableness correlated .19 with social. However, other results were present in the meta-analyses that were not found in the literature, such as the NEO-PI-R and SDS relations between enterprising and conscientiousness (.29), between enterprising and neuroticism (–.24), and between social and openness (.22). Also, a relationship was found between conventional and conscientiousness (.29) for women and men who took the SDS and for men who took the SII (Larson et al., 2002).

Barrick et al.’s (2003) meta-analyses with a more inclusive set of studies reported similar findings. Both meta-analyses reported no meaningful overlap with neuroticism or realistic interests. Also, both found few meaningful sex differences. In sum, they both found that the Big Five and the Big Six are not redundant but share overlap that varies across the domains. Larson et al. (2002) suggested reordering the NEOAC personality dimensions to NOAEC to reveal the strongest links with the RIASEC. Larson et al. and Barrick et al. recommended that other personality models be considered as we attempt to understand the overlap between these constructs. Staggs (2003) advanced this line of inquiry by conducting meta-analyses with the Big Six and a competing model of personality to the Big Five, namely the Big Three, measured with the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982; Tellegen & Waller, in press). Staggs confirmed the prior meta-analyses but also uncovered undetected relations between personality and interest. She confirmed the substantial relation of artistic interests with openness to experience (MPQ absorption), enterprising interests with extraversion (MPQ social potency), and social interests with positive affectivity. She uncovered the overlap of realistic interests with harm avoidance, an MPQ primary scale with low scores reflecting a tendency to seek out excitement and danger.

This study extends this prior work by examining the overlap of personality and vocational interest by using a different measure of personality, the CPI with the SII. For more than 40 years, the CPI has been studied and applied in a variety of contexts in conjunction with countless other measures. Today, the CPI is one of the most common personality measures for normal populations used by counselors (e.g., Bubenzer, Zimpfer, & Mahrle, 1990). Based on folk concepts of adaptive behaviors, the CPI is expected to have a number of scales related to vocational interests and educational behaviors. In the past, the CPI has been examined along with interests in predicting performance of anesthesiology residents (Gough, Bradley, & McDonald, 1991), predicting success in a Coast Guard program (Stevens, Hemstreet, & Gardner, 1989), and predicting success in a nursing program (Dyer, 1987). Although earlier studies have examined the CPI and interests, very few have reported correlation matrices. In addition, this study is one of the first to use the newest revision of the CPI in published research.
Moving Beyond the Overlap: Predicting Important Outcomes

Although the examination of personality and interest is important theoretically, it is perhaps more practically important to examine the usefulness of personality and interest in their ability to predict meaningful criterion variables. As Borgen (1999) proposed, the four dynamic constructs of personality and interests along with self-efficacy and values are fundamental aspects of the person that interact in meaningful ways to determine outcomes. These outcomes were organized by Borgen into the following four domains: loving, learning, working, and playing. Vocational psychology has examined certain combinations of these variables, but not all areas have received equal attention. In this study, we sought to further the conceptual understanding of how personality and interest predicted a key criterion variable associated with learning, namely, educational aspirations.

Education is the pathway to careers for many people, especially college students, who vary widely in the level of education they plan to attain. Many careers such as law, medicine, and psychology require education beyond the 4-year college degree. Students aspiring to education beyond the 4-year college degree differ from others on a range of central psychological variables. For example, Rottinghaus, Lindley, Green, and Borgen (2002) found that college students with different levels of educational aspirations differed substantially on key dimensions of personality, self-efficacy, and interests. Rottinghaus et al. measured personality using the Big Five model (Costa & McCrae, 1992). This study expands on the Rottinghaus et al. work by using the CPI in combination with the SII. We explored the relation between level of educational aspirations to personality and interests and investigated the extent to which level of educational aspirations was explained by personality and interests. Although educational goals and aspirations have been widely examined in the literature (e.g., Chung, Loeb, & Gonzo, 1996; Dai, 1996; Kim, Rendon, & Valadez, 1998; Liu, 1998; Marjoribanks, 1997; McWhirter, Crothers, & Rasheed, 2000; McWhirter, Hackett, & Bandalos, 1998; Qian & Blair, 1999; Rojewski & Yang, 1997), only the Rottinghaus et al. study included personality as a predictor.

In short, the current study contributes in several important ways to the literature. First, this study furthers the work by Rottinghaus and colleagues (2002) by looking at how a different model of personality beyond the Big Five and interest are predictive of an important criterion variable, educational aspirations. Second, this is the first study to investigate personality-interest convergence by examining the newly revised CPI and the SII. Finally, we are providing validity data for the newly revised CPI.
METHOD

Samples

Data were collected from 188 students taking part in an extra credit opportunity for their introductory psychology coursework at a large upper-Midwestern university. There were 109 women and 79 men in this sample. The age range of the sample was 18 to 50 years with a mean age of 20.07 (SD = 2.42). The ethnicity of the sample was 87.2% Caucasian, 6.9% African American, 2.1% Asian or Pacific Islander, 1.6% Hispanic, and 1.6% American Indian. Participants’ year in college was as follows: 61.2% freshmen, 27.1% sophomores, 6.9% juniors, and 4.8% seniors. Most participants were single (94.7%); 80.9% of the sample had declared a major.

Procedures

Participants were given an opportunity to sign up for large group sessions on participation sheets detailing the date, time, and location of the study. Furthermore, the sheet informed participants how many extra credits the experiment was worth. The expected time for packet completion was 90 minutes, which was noted on both the sign-up sheet and announced by the investigator administering the measures.

At the beginning of the session, the investigator handed out the packets and read the informed consent statement to the participants. Next, the instructions to the participants asked them to answer the inventory questions to the best of their knowledge. After completion of the packet, participants dropped off their packet to the investigator in exchange for the research credits.

Measures

California Psychological Inventory (Gough, 2002). The CPI is a 260-item personality inventory composed of 20 folk scales and 3 vector scales. This CPI version is a new, shorter form than the original CPI and is designed to be more efficient and user friendly than past versions. The CPI was constructed with the idea that personality would be measured in terms of everyday language rather than abstract lingo or professional jargon. For example, the Dominance Scale repre-
sents to what degree a person is assertive and task oriented and should be consistent with and predictive of how that individual’s family and friends would describe him or her. Thus, 20 scales of the CPI are called *folk scales* to represent the terminology most persons use in day-to-day life (Gough & Bradley, 1996). The 3 vector scales portray the dimensions of introversion versus extroversion, societal norm favoring versus norm disfavoring, and level of self-actualization (Gough & Bradley, 1996). See the third edition of the *California Psychological Inventory Manual* (Gough & Bradley, 1996) for names and descriptions of these scales.

These folk scales were constructed using two different methods. First, most of the scales were derived from the empirical, contrasted-groups approach where groups of individuals exhibiting the trait being measured were compared to a normal population. Second, some scales were formed using the rational approach by examining the items’ internal consistency within each scale and selecting items on the basis of high alphas. However, a few of the scales evolved through a combination of the two methods. This new version of the CPI reflects the streamlining of the item content of all scales.

It is important to note that the folk scales are not orthogonal to one another. In measuring traits, some traits will have some overlap with other traits, and this is reflected in the item overlap of the CPI scales. For example, it is expected that independence and empathy are linked and in fact have correlated at .53 for men and at .58 for women in a sample of college sophomores (Gough & Bradley, 1996). Information on the internal consistency reliability for the 20 folk scales showed that Cronbach alphas consistently ranged from .51 to .83 and ranged from .60 to .79 for the 3 vector scales. For more reliability and validity information, see the *Spectrum CPI 260 Instrument* (Gough, 2002).

**Strong Interest Inventory.** The SII is a 317-item measure that assesses vocational interests (Harmon et al., 1994), organized by Holland’s RIASEC model (Holland, 1997). Also known as the Big Six factors, RIASEC describes six categories of person-environment fit. In theory, an individual will select an occupation based on how the work environment matches his or her own personal interests. Largely, the SII measures the Big Six through six corresponding scales termed the *General Occupational Scales* (GOTs). Underlying these six general categories are the 25 Basic Interest Scales (BISs), which pull apart specific elements of the GOTs for further information on the individual’s vocational interests. Information on the internal consistency reliability for the six GOTs showed that Cronbach alphas consistently ranged from .90 to .94 (Harmon et al., 1994).

The 1994 SII revision introduced four Personal Styles Scales (PSSs) as general orientations to working and living. These are work style, learning environment, leadership, and risk taking/adventure. The Learning Environment Personal Style Scale was expected to be an important predictor of level of educational aspirations. It was designed to differentiate people at different levels of education, as shown by Harmon et al. (1994). Rottinghaus et al. (2002) also showed that the Learning Environment Scale of the SII is a potent differentiator of college stu-
dents planning different levels of education. We also used the remaining content scales of the SII, namely six General Occupational Themes and 25 Basic Interest Scales. Cronbach alphas for the PSSs ranged from .78 to .91, and alphas for the BISs ranged from .74 to .94 (Harmon et al., 1994). For more reliability and validity information, see the Strong Interest Inventory: Applications and Technical Guide (Harmon et al., 1994).

Level of Educational Aspirations

Participants reported the following four levels of educational aspirations: some college \((n = 26)\), bachelor’s degree \((n = 81)\), master’s degree \((n = 51)\), and professional degree, including JD, MD, and PhD \((n = 30)\).

RESULTS

Preliminary Analyses

Means and standard deviations of the CPI scales for men and women were examined (see Table 1). The threshold for meaningful results was based on the following two criteria: (a) finding statistical significance in conducting the \(t\) tests after making a Bonferroni adjustment and (b) setting a limit that the difference between means must be at least one half standard deviation to be meaningful. Based on these criteria, men and women differed significantly on sensitivity by one standard deviation \((p < .001)\). Nine significant differences were found; women and men were significantly different on capacity for status, sociability, social presence, responsibility, socialization, communality, tolerance, and achievement via conformance \((p < .01)\) by approximately one half standard deviation. Because of these multiple sex differences on a number of the CPI scales, a decision was made to include sex in the subsequent analyses.

In addition, means and standard deviations of the SII scales for the total sample, men, and women were examined (see Table 2). A Bonferroni adjustment was made \((p < .01)\), and again results were meaningful if they were both statistically significant and were meaningful differences by sex of more than one half standard deviation. Scores for men were more than one standard deviation higher on realistic and more than one half standard deviation less on social \((p < .001)\).

Personality-Interest Overlap

Correlation matrices of the SII GOTs and the CPI scales are presented in Tables 3 and 4 for women and men, respectively. For women, correlations ranged from absolute values of .01 to .35. Of the correlations for women, there were 22
significant relations based on the criteria of statistical significance at the .01 level and the meaningfulness represented in correlations above .18. Hence, the largest relationship was the positive and moderate correlation between investigative and insightfulness (.33), which was followed by the positive and moderate relationship between artistic and empathy (.30). Realistic had small negative relations with socialization (−.18) and sensitivity (−.26). Investigative had small to moderate positive relations with four scales (responsibility, achievement via independence, conceptual fluency, and insightfulness). Artistic had small to moderate positive relations with the interpersonal scales (dominance, capacity for status, sociability, social presence, self-acceptance, independence, and empathy) and a
small negative relationship with Vector 1 (–.24). Social had small positive relations with dominance (.19) and self-acceptance (.22). Enterprising had a small negative relationship with self-control (–.20). Conventional correlated moderately and negatively with some of the more interpersonal scales (sociability, social presence, independence, and empathy).

For men, the correlations ranged from absolute values of .01 to .38. There were 11 significant relations based on the criteria of statistical significance ($p < .05$) and the meaningfulness represented in correlations above .21. Here, the threshold for statistical significance was raised from .01 to .05 as the small sample size for men would result in loss of power if the .01 cut-off level were maintained. The largest relationship was the negative and moderate relationship between realistic and sensitivity (–.38). Investigative had a small relationship with insightfulness (.21), and artistic had a small relationship with sensitivity (.26). Social seemed to have minimal relations with the CPI scales. Furthermore, enterprising had small to moderate negative relations with four personality scales (socialization, self-control, good impression, and Vector 1). Finally, conventional had small negative relations with some of the more interpersonal scales (social presence, self-acceptance, and independence), with significant correlations ranging from –.22 to –.25.

### Predicting Educational Aspirations

Correlations were computed relating the level of educational aspirations with relevant CPI and SII scales by sex and are presented in Table 5.1 These scales were selected based on prior research linking them to learning outcomes (e.g., Gough, 2002; Harmon et al., 1994; Rottinghaus et al., 2002).

The Learning Environment Scale showed the highest correlation, $r = .28$. Figure 1 shows level of educational aspiration for SII learning environment per-
sonal style. There is a strong linear trend, but the effect seems to be more prominent for men. Figure 2 shows level of educational aspiration by gender for CPI insightfulness. This figure shows a strong linear trend that is very similar for women and men.

A hierarchical regression was run with level of educational aspirations as the predictor, and the following were criterion variables: gender, CPI achievement via independence, CPI conceptual fluency, CPI insightfulness, SII investigative GOT, and PSS learning environment. The set of predictor variables collectively

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Correlations Between Strong Interest Inventory (SII) Scales and the California Psychological Inventory (CPI) Scales for Men (N = 90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SII Scales</td>
<td></td>
</tr>
<tr>
<td>CPI Scale</td>
<td>Realistic</td>
</tr>
<tr>
<td>Dominance</td>
<td>-0.06</td>
</tr>
<tr>
<td>Capacity for status</td>
<td>-0.05</td>
</tr>
<tr>
<td>Sociability</td>
<td>-0.03</td>
</tr>
<tr>
<td>Social presence</td>
<td>0.01</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.01</td>
</tr>
<tr>
<td>Independence</td>
<td>0.01</td>
</tr>
<tr>
<td>Empathy</td>
<td>-0.03</td>
</tr>
<tr>
<td>Responsibility</td>
<td>-0.12</td>
</tr>
<tr>
<td>Socialization</td>
<td>-0.12</td>
</tr>
<tr>
<td>Self-control</td>
<td>-0.11</td>
</tr>
<tr>
<td>Good impression</td>
<td>-0.10</td>
</tr>
<tr>
<td>Communality</td>
<td>0.09</td>
</tr>
<tr>
<td>Well-being</td>
<td>-0.05</td>
</tr>
<tr>
<td>Tolerance</td>
<td>-0.16</td>
</tr>
<tr>
<td>Achievement via conformance</td>
<td>-0.07</td>
</tr>
<tr>
<td>Achievement via independence</td>
<td>0.02</td>
</tr>
<tr>
<td>Conceptual fluency</td>
<td>-0.09</td>
</tr>
<tr>
<td>Insightfulness</td>
<td>-0.03</td>
</tr>
<tr>
<td>Flexibility</td>
<td>-0.12</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-0.38</td>
</tr>
<tr>
<td>Vector 1</td>
<td>0.03</td>
</tr>
<tr>
<td>Vector 2</td>
<td>0.11</td>
</tr>
<tr>
<td>Vector 3</td>
<td>-0.18</td>
</tr>
</tbody>
</table>

Note. Significant correlations are in bold. Absolute values above .21 are significant at p < .05; absolute values above .27 are significant at p < .01; absolute values above .34 are significant at p < .001.
accounted for 17% of the variance in the level of educational aspirations, with an R of .41. See Table 6 for a summary of the hierarchical regression analysis.

### Comparison of CPI Scores With Norm Group

The data collected for the current study were compared to the Consulting Psychologists Press (CPP) normed random sample of CPI-260 administrations (N = 6,000) (Gough, 2002). Comparisons of the means and standard deviations.
of the two samples were compared using $t$ tests with a Bonferroni adjustment. Again, significant results met both criteria of statistical significance ($p < .001$) and meaningfulness (differences above one half standard deviation). Of the 23 scales, 19 were significantly different ($p < .001$), with the current study’s means consistently lower than the CPP sample’s means. Of the scales, 11 were different by approximately one standard deviation, and 8 of the scales were different by approximately half a standard deviation.

Although the current sample’s means were consistently lower than the CPP sample, it seemed as though the current sample’s means were more normal than the CPP sample’s means. Because all means were based on raw scores that were standardized to have a mean of 50 and a standard deviation of 10, the current study’s sample had means and standard deviations that were closer to that standardization than the CPP sample.

**DISCUSSION**

**Convergence Between Personality and Interests: Specific Theoretical Trends**

Several relations were found that supported previous findings regarding Big Five personality and vocational interests convergence. First, the current study’s
Level of Educational Aspirations

*Figure 1.* Level of educational aspirations and strong learning environment personal style by gender.

Level of Educational Aspirations

*Figure 2.* Level of educational aspirations and California Psychological Inventory insightfulness by gender.
findings regarding the relation of investigative interests with the CPI scales of responsibility (.30), achievement via independence (.20), and conceptual fluency (.25) for women and the relation of investigative interests with insightfulness for both sexes (women: \( r = .33 \); men: \( r = .21 \)) were similar to the findings of the relation of investigative with openness (\( r = .28 \)). These CPI scales describe persons who are perceptive, like freedom to pursue their goals, are resourceful, and are insightful. These traits are reflected in the tendency for people high on openness to be intellectually curious and independent thinkers.

Second, there was some convergence between the meta-analytic findings of Larson et al. (2002) in openness to experience with artistic interests (.48) and the current study’s findings. According to Costa and McCrae (1992), “open individuals are curious about both inner and outer worlds” and are described as “being attentive to inner feeling,” independent thinkers, and unconventional. There is modest overlap of artistic interests with the CPI personality traits of dominance (.21), capacity for status (.35), sociability (.26), social presence (.24), self-acceptance (.22), independence (.19), empathy (.30), and Vector 1 (–.24) for women and sensitivity (.26) for men. These CPI scales measure the domains of self-assurance and interpersonal tendencies. The tendencies of enjoying many interests or being versatile, independent, sensitive, or tuned into others feelings were mostly similar to the description of openness. The other attributes of being “talkative,” confident, and “outgoing” reflect more extraversion themes. The more modest relations found in this study could be due to the group contrast method by which the CPI scales were constructed.

Third, the findings of modest positive relations between social interests and CPI scales of dominance (.19) and self-acceptance (.22) for women were again similar to the Larson et al. (2002) relation of .31 between social and extraversion. Dominance and self-acceptance reflect the more outgoing and extraverted con-

<table>
<thead>
<tr>
<th>Predictor</th>
<th>R</th>
<th>( R^2 )</th>
<th>( \Delta R^2 )</th>
<th>( F ) Value for Change in ( R^2 )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.20</td>
<td>.04</td>
<td>.04</td>
<td>7.44</td>
<td>.01</td>
</tr>
<tr>
<td>CPI Achievment via independence</td>
<td>.23</td>
<td>.05</td>
<td>.01</td>
<td>2.50</td>
<td>.12</td>
</tr>
<tr>
<td>Conceptual fluency</td>
<td>.28</td>
<td>.08</td>
<td>.03</td>
<td>5.09</td>
<td>.03</td>
</tr>
<tr>
<td>Insightfulness</td>
<td>.32</td>
<td>.10</td>
<td>.02</td>
<td>4.58</td>
<td>.03</td>
</tr>
<tr>
<td>SII Investigative</td>
<td>.38</td>
<td>.14</td>
<td>.04</td>
<td>9.25</td>
<td>.01</td>
</tr>
<tr>
<td>Learning environment</td>
<td>.41</td>
<td>.17</td>
<td>.02</td>
<td>4.91</td>
<td>.03</td>
</tr>
</tbody>
</table>
tent of all the CPI scales and fit in well with the Big Five dimension of extraversion, where people high on extraversion were described as assertive, talkative, and upbeat (Costa & McCrae, 1992). Dominant people were described as assertive and self-acceptance people as talkative, and these adjectives obviously reflect the very essence of extraversion.

Fourth, the current study’s finding of the negative relation between enterprising and self-control (women: $r = -0.20$; men: $r = 0.26$) for both sexes and enterprising and socialization ($-0.21$) and good impression ($-0.22$) for men also fit with the Larson et al. (2002) finding concerning the relation between enterprising and extraversion ($0.41$). People who scored high on extraversion were described as talkative, liking excitement, or were not at all reserved. This was similar to people who saw themselves as low on self-control, which involved impulsivity and a preference for adventure, or who shared emotions with others. Also, the extraversion description matched the ideology behind the negative relations enterprising had with socialization (men who were not concerned with social rules) and good impression (men who were not concerned with what others thought of them).

Regarding those relations that were uncommon, the most remarkable relations theoretically were those found between CPI personality dimensions socialization and sensitivity and the realistic theme. Previously, few studies have found much of a relation between the Big Five personality dimensions and realistic interests. In fact, Larson et al. (2002) and Barrick et al. (2003) found few realistic relations in their meta-analyses. However, Staggs, Larson, and Borgen (2003) did find some overlap between the MPQ primary personality scales and realistic interests. Staggs et al. found that realistic interests correlated negatively with the MPQ Social Closeness Scale (SC) and Stress Reaction Scale (SR). A person low on SC has been described as being unsociable, whereas a person low on SR has been described as being insensitive (Staggs et al., 2003). These MPQ traits were very similar to the CPI traits of sensitivity (sensitivity) and acceptance of social rules (socialization).

**Interest and Personality Combined Predict Educational Aspirations**

In general, the results found here reflect the relations we expected to find theoretically. We expected that those personality scales and interest scales that were more related or applicable to educational aspirations would have been moderately correlated with level of educational aspirations. We also found the hierarchical regression results showed that specific dimensions of personality and interests are related to college students’ plans for future scholarly work. Students who aspire to graduate degrees tend to be higher on personality dimensions of insightfulness, tolerance, and conceptual fluency and have higher interests on the SII scales for learning environment and investigative GOT. This influence of personality and interest on educational aspirations complements the Rottinghaus et al. (2002) findings that college students with different levels of educational
aspirations differed substantially on key dimensions of personality, self-efficacy, and interests. Similarly, the current study found that components of one’s personality and interest may relate to aspiring to higher levels of education. For personality, people who were more insightful and perceptive, more tolerant of others, or more efficient thinkers were more likely to endorse higher levels of educational aspirations. Regarding interest, those who endorsed more interest in learning through reading books and listening to lectures rather than learning through hands-on experiences or liked to figure out solutions to problems through exploring information were more likely to have a higher level of educational aspirations.

This study shared some similarities with the Rottinghaus et al. (2002) study in that both predict educational aspirations from some combination of personality and interest. They were different in that this study used the CPI rather than the Big Five and used only selected interest scales instead of the entire RIASEC. Yet both studies showed that educational aspirations could be significantly predicted by some combination of personality and interest.

Scale Validation

Regarding the new CPI, it was largely comparable to the previous version with a few exceptions. This study drew from a population of college students whose means and standard deviations were on average significantly lower than the CPP normative sample. The current study’s sample exhibited lower means and standard deviations from the CPP sample on most of the folk and vector scales. This trend most likely reflects the differences in vocational development and work experience between the samples.

Limitations and Future Directions

One limitation involved in this study was the lack of prior studies to guide hypotheses and to compare results with. More research is needed in looking at the vocational interests and personality overlap. This study was the first study to have looked at the personality-interest-educational aspirations domain with the CPI-260, and further research with this measure of normal personality is necessary to gain a clearer sense of these relations.

Also, we recognize that it is necessary to expand our measurement of educational aspirations beyond the one item used to capture that construct in this study. Future work should aim for using other methods or more items to measure these variables. In addition, another limitation of the current study was the lack of generalizability of this sample to other populations besides college students. Also, the population sampled was largely of Caucasian ethnicity, which also may limit this study’s generalizability. Future studies should address vocational interests and personality convergence with the college population as well.
as other populations. Obviously, these results need to be replicated to have further support for the relations found in the current study. A clearer picture is needed on interest-personality overlap with this instrument and all populations.

Conclusions

These results show that specific dimensions of personality and interests are related to college students’ plans for future scholarly work. Those aspiring to graduate degrees tend to be higher on the personality dimensions of insightfulness, tolerance, and conceptual fluency. They also have higher interests on the SII scales for learning environment and the investigative GOT. This research complements the Rottinghaus et al. (2002) study, showing the important influences of personality and interests on college students’ educational aspirations. Moreover, there does seem to be modest overlap of the CPI and the SII, particularly with indices of extraversion and enterprising and with artistic and openness. Finally, the revised CPI with college students reflects somewhat lower means than the adult normative sample.

NOTE

1. The correlations of level of educational aspirations with all the California Psychiatric Inventory scales and Strong Interest Inventory scales are available from the first author.

REFERENCES

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