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## Personality and Career Success: Concurrent and Longitudinal Relations

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### Abstract

The present research addresses the dynamic transaction between extrinsic (occupational prestige, income) and intrinsic (job satisfaction) career success and the Five-Factor Model of personality. Participants ( $N = 731$ ) completed a comprehensive measure of personality and reported their job title, annual income, and job satisfaction; a subset of these participants ( $n = 302$ ) provided the same information approximately 10 years later. Measured concurrently, emotionally stable and conscientious participants reported higher incomes and job satisfaction. Longitudinal analyses revealed that, among younger participants, higher income at baseline predicted decreases in Neuroticism and baseline Extraversion predicted increases in income across the 10 years. Results suggest that the mutual influence of career success and personality is limited to income and occurs early in the career.

### Keywords

Personality; Five-Factor Model; Occupations; Income; Job Satisfaction

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A long and rich sociological literature details the antecedents and correlates of successful careers. Not surprisingly, research in this tradition has focused primarily on sociological factors, such as demographics (Miech, Eaton, & Liang, 2003), human capital factors (e.g., education), and industrial/organizational variables (Ng, Eby, Sorensen, & Feldman, 2005; Rosenfeld, 1992). Building on this foundation, psychologists have identified psychological antecedents of occupational success and career trajectories (Judge & Hurst, 2007; Lyubomirsky, King, & Diener, 2005). Perhaps one of psychologists' most important contributions to this literature has been approaching career success from a dispositional perspective. That is, characteristics about the person may, in part, shape his/her career trajectory. Personality in particular has been associated with a host of objective and subjective occupational outcomes, such as job performance (Barrick & Mount, 1991) and satisfaction (Judge, Heller, & Mount, 2002).

Jobs, however, are more than just a source of income; they often become a core aspect of identity, enabling the development of new skills and the forging of enduring attachments. Thus, it is of interest to ask whether there is a dynamic transaction between personality and career success that shapes career trajectories and personality development across adulthood. And indeed, both extrinsic and intrinsic aspects of career success have been implicated in personality change (e.g., Roberts, Caspi, & Moffitt, 2003; Scollon & Diener, 2006). The present research focuses on the reciprocal relation between personality and three markers of career success – occupational prestige, personal income, and job satisfaction – over a 10-year period. Specifically, we use a two-wave panel design, a comprehensive measure of personality traits, and three commonly-agreed on markers of career success to address their concurrent and longitudinal relations within the framework of the Five-Factor Model (FFM) of personality.

The FFM is an empirically-derived model of personality that characterizes the individual's emotional, interpersonal, experiential, attitudinal, and motivational style along five broad dimensions: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness (McCrae & Costa, 2003). These five higher-order dimensions are comprised of lower-level components, or facets. Multiple lines of research demonstrate that these factors and facets are heritable (Jang, Livesley, & Vernon, 1996), universal (McCrae, Terracciano et al., 2005), and generally stable across the lifespan (Roberts & DelVecchio, 2000). We now briefly define career success and summarize its association with these personality traits.

Although often an ambiguous concept, in the occupational literature career success is typically classified into either extrinsic (objective) or intrinsic (subjective) outcomes (Judge, Higgins, Thoresen, & Barrick, 1999; Ng et al., 2005). Extrinsic career success is marked by objective and observable criteria, such as pay and ascendancy, whereas intrinsic career success is marked by the individual's subjective evaluation of the job, such as job satisfaction. We focus on two markers of extrinsic success, occupational prestige and income, and one marker of intrinsic success, job satisfaction. Other characteristics of occupations, such as the latitude to make decisions or the physical hazards on the job, undoubtedly also share mutual relations with personality over time, but in the current research we are most concerned with the dynamic transaction between personality and extrinsic and intrinsic rewards of the job.

Occupational prestige refers to societal perceptions of job power and authority and thus reflects the social standing of a particular occupation (Korman, Mahler, & Omran, 1983). Prestige has been operationalized in many ways, from personal opinions to weighted combinations of the individual's occupation, house type, and dwelling area (Nam & Boyd, 2004). To bring consistency and objectivity to the measurement of occupational prestige, Nam and colleagues developed an objective measure of prestige that is a combination of the average education needed to be employed in a specified occupation and that occupation's average income (Nam & Boyd, 2004; Nam, & Powers, 1983; Nam & Powers, 1968). Prestige scores are based on education and income data from the census; thus, for any given individual, her prestige score is based on her job title, not her own level of education or personal income. To get at the individual's own career success we include another common indicator of extrinsic career success, personal income.

Extrinsic career success has been most consistently linked to Neuroticism; the relation between career success and the four other traits is less straightforward. Individuals high in Neuroticism tend to make less money (Gelissen & de Graaf, 2006; Judge et al., 1999; Nyhus & Pons, 2005), be employed in lower levels of management (Moutafi, Furnham, & Crump, 2007), and, if they do become CEOs, earn lower salaries (Boudreau, Boswell, & Judge, 2001). Extraverts fare better, obtaining more promotions (Boudreau et al., 2001; Seibert &

Kraimer, 2001) and higher positions in management (Moutafi et al., 2007). Extraversion, however, has been found to be positively related (Gelissen & de Graaf, 2006), negatively related (Nyhus & Pons, 2005), and unrelated (Boudreau et al., 2001) to income. Openness has been both positively (Mueller & Plug, 2006) and negatively (Gelissen & de Graaf, 2006; Seibert & Kraimer, 2001) associated with financial success; other evidence suggests that it is unrelated to extrinsic career success (Judge et al., 1999), managerial level (Moutafi et al., 2007), or promotions (Seibert & Kraimer, 2001). Agreeableness is associated with lower extrinsic career success (Boudreau et al., 2001), including lower wages (Nyhus & Pons, 2005), but not all find this relation (Seibert & Kraimer, 2001). Finally, Conscientiousness is unrelated to extrinsic career success (Boudreau et al., 2001), salary and promotions (Seibert & Kraimer, 2001), and hourly wage (Nyhus & Pons, 2005). The mixed findings in the literature may be due, in part, to differences in the association between personality and extrinsic career success cross-sectionally and longitudinally; we examine this possibility in the current study.

In contrast to extrinsic career success, intrinsic career success is subjective and generally refers to the personal satisfaction one derives from the job. The most consistent relations between personality and job satisfaction tend to be for Neuroticism and Extraversion: extraverted individuals enjoy their jobs, individuals high in Neuroticism do not (Judge et al., 2002; Scollon & Diener, 2006; Seibert & Kraimer, 2001). The findings are less robust for the remaining three traits, but suggest that agreeable and conscientious individuals have higher job satisfaction, whereas Openness tends to be unrelated (Judge et al., 2002).

Moving beyond concurrent relations, which only offer a snapshot of the relation between two variables, longitudinal research has sought to examine the dynamic transaction between personality and career success. Judge and Hurst (2008), for example, highlight the role of stable individual differences in both extrinsic and intrinsic career trajectories. Over an approximately 25-year time period, individuals with positive core self-evaluations (low Neuroticism) increased in occupational prestige, income, and job satisfaction at a faster rate than individuals with negative core self-evaluations. Judge and Hurst (2008) emphasize that the pace and form of career trajectories are shaped, in part, by stable characteristics about the person.

Other longitudinal research that focuses more specifically on the Big Five personality traits and career success has relied primarily on prospective studies in which personality measured in childhood (Judge et al., 1999) or adolescence (Roberts et al., 2003) is used to predict career success in adulthood. For example, Neuroticism and Agreeableness measured in childhood are associated with lower extrinsic career success, whereas childhood Extraversion and Conscientiousness are associated with higher success (Judge et al., 1999). Negative and Positive Emotionality measured at age 18 are associated with lower and higher occupational attainment, respectively, by age 26 and decreases in Negative Emotionality and increases in Positive Emotionality across this time period are associated with greater occupational attainment at age 26 (Roberts et al., 2003).

Career success and personality development continue to be associated throughout adulthood. For example, men with a self-directed personal orientation (Conscientiousness) earn higher salaries over a ten-year span (Kohn & Schooler, 1982) and increases in emotional stability across middle adulthood are associated with self-perceived meaningful jobs (Brousseau & Prince, 1981). In a small sample of educated women, greater career success between ages 27 and 43 was associated with increases in agency and norm-adherence (Roberts, 1997). Scollon and Diener (2006) found that as job satisfaction increased, Neuroticism decreased and Extraversion increased, regardless of the stage of the individual's career. These studies offer support for the mutual influence of both extrinsic and intrinsic aspects of career

success and some personality traits across the individual's time in the workforce. In the present research, we seek to broaden this foundation to examine the dynamic transaction between career success and all five FFM personality traits across middle adulthood.

The present research has three goals: (1) to examine the concurrent relations between career success and personality using three independent markers of success and a comprehensive measure of personality, (2) to examine their longitudinal relation by testing whether personality predicts career trajectories or whether career success predicts changes in personality or both, and (3) to examine whether these longitudinal associations vary by age. Measured concurrently, we expect Neuroticism and Agreeableness to be related negatively to occupational prestige and income, Openness to be associated positively with prestige, because of its association with education (Costa & McCrae, 1992), but unrelated to income, and Conscientiousness to be associated positively with income, but unrelated to prestige. We also expect that emotionally stable, extraverted, agreeable, and conscientious individuals will report more job satisfaction. We construe the facet-level analyses as exploratory. The longitudinal predictions are less clear-cut, but we generally predict that any longitudinal associations will be in the same direction as the concurrent ones. For example, if there is a negative concurrent and longitudinal effect of Neuroticism and prestige, we expect that Neuroticism will predict decreases in career success or career success will predict decreases in Neuroticism (Roberts et al., 2003). Finally, as young adulthood is more of a time of flux, in both personality and work life, and therefore more susceptible to outside influences, we expect the longitudinal relations to be confined primarily to younger adults.

## Method

### Participants and Procedure

Participants are drawn from the Baltimore Epidemiologic Catchment Area (ECA) study. The ECA, a multiwave cohort study of household residents in East Baltimore, began in 1981 as part of a national, five site study (L. N. Robins & Regier, 1991). In the present analyses, we focus on participants employed full-time during the year prior to the assessment in 1993 (Eaton et al., 1997) and/or the follow-up assessment in 2004–2005 (Eaton, Kalaydjian, Scharfstein, Mezuk, & Ding, 2007) and who had valid personality and occupational prestige measures. A total of 731 participants met these criteria: 181 participants from the baseline assessment only, 248 participants from the follow-up assessment only, and 302 from both assessments. Income and job satisfaction were available for a subset of these participants (income: concurrent  $n = 631$ , longitudinal  $n = 242$ ; job satisfaction: concurrent  $n = 719$ , longitudinal  $n = 302$ ; prestige scores were available for all participants). For the concurrent analyses, we use the data at follow-up for those participants who did not have baseline data. Demographic information and descriptive statistics are given in Table 1.

### Measures

**Personality**—At both assessments, participants completed the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), a 240-item questionnaire measure of the five major domains of personality: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Each major domain contains six facet scales which provide a comprehensive and detailed assessment of normal adult personality in terms of emotional, interpersonal, experiential, attitudinal, and motivational styles. Respondents responded on a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Raw scores were converted to T-scores ( $M = 50$ ,  $SD = 10$ ) using the combined-sex norms for adults reported in the Manual. Internal consistency coefficients for the self-report ratings range from .86 to .95 for the domain scales and from .56 to .90 for the facet scales in the normative sample (Costa & McCrae, 1992).

**Occupational prestige**—Each occupation was matched with its Nam-Powers-Boyd prestige rating. This census-specific rating is based on education levels and income for each occupation, relative to all other occupations assessed in the census. Ratings range from 0 to 100 and can be interpreted as a percentile. For example, an occupation's score of 56 indicates that 56% of the working population in the US falls below that occupation in terms of education and income (Nam & Boyd, 2004). In the present research, the Nam-Powers-Boyd occupational prestige scores are based on the 1990 census for baseline and the 2000 census for follow-up.

**Personal income**—Participants indicated their total personal income for the previous year before taxes, including salaries, wages, social security, welfare, and any other source of income. Participants were presented with ranges and indicated which range represented their income. We recoded each increment to the midpoint of the range. For example, participants who indicated that their income fell into the \$20,000–\$24,999 range were recoded to \$22,500. Because income showed the typical right skew, we took the natural log to normalize the distribution. The correlation between raw and transformed income was .85.

**Job satisfaction**—At both assessments, participants were asked, “Are you satisfied with your job?” Responses were made on a four-point scale ranging from 1 (*not at all satisfied*) to 4 (*very satisfied*).

### Statistical Overview

For the longitudinal analyses, we used cross-lagged models (Ferrer & McArdle, 2003; Joreskog, 1979) to test how personality and career success mutually influence each other over time. We specified each manifest variable at follow-up as a function of three components: (1) an autoregression ( $\beta$ ), representing the effect of the same variable at baseline; (2) a cross-lagged regression ( $\gamma$ ), representing the effect of the other variable at baseline; and (3) a residual ( $d$ ), which is allowed to correlate with the residual of the other variable (see Figure 1). To evaluate how well each model conformed to the data, we used multiple measures of fit, including the traditional  $\chi^2$  test, the Root Mean Square Error of Approximation (RMSEA), and the Comparative Fit Index (CFI).

In both the concurrent and longitudinal analyses, we control for sex, ethnicity, age, and education to account for inequities in employment across these groups (Miech et al., 2003). Finally, to balance concerns over Type I and Type II errors, we set the alpha level at  $p < .01$  and rely on Cohen's (1992) guidelines for interpreting small ( $r = .10$ ), medium ( $r = .30$ ) and large ( $r = .50$ ) effect sizes. We focus on effects that are at least small in magnitude.

## Results

### Concurrent Relations

Consistent with previous research (Judge et al., 1999), occupational prestige and income were only moderately correlated ( $r = .25$ ,  $p < .01$ ). Job satisfaction, in contrast, was uncorrelated with both prestige and income ( $r_s = .04$  and  $.10$ , respectively, both *ns*). Table 2 shows the correlations between factor- and facet-level personality and the three markers of career success.

Contrary to expectations, only Openness correlated with prestige and this relation did not hold when controlling for sex, ethnicity, age, and education; none of the other factors were associated with prestige. At the facet level, after including the control variables, (low) N3: Depression, A1: Trust, and C1: Competence were associated with employment in higher prestige occupations.

In contrast to occupational prestige, we found stronger relations between income and personality. Participants high in Neuroticism reported lower annual incomes, whereas those high in Conscientiousness reported earning more. Both relations held when controlling for sex, ethnicity, age, and education. Agreeable participants reported lower incomes, but this relation did not hold when the control variables were included. Neither Extraversion nor Openness was related to income at the factor level. Consistent with the factor-level findings, three facets of Neuroticism (N1: Anxiety, N3: Depression, and N6: Vulnerability) correlated negatively with income and four facets of Conscientiousness (C1: Competence, C3: Dutifulness, C4: Achievement Striving, and C5: Self-Discipline) correlated positively with income. Although unrelated at the factor level, both E3: Assertiveness and E4: Activity correlated positively with income. Finally, participants who daydream (O1: Fantasy) and appreciate art and beauty (O2: Aesthetics) reported lower incomes.

Turning to intrinsic career success, emotionally stable and conscientious participants reported greater satisfaction with their jobs. Although extraverts reported greater job satisfaction, this relation did not hold when the control variables were included. After controlling for sex, ethnicity, age, and education, job satisfaction correlated negatively with all facets of Neuroticism and O1: Fantasy and positively with E3: Assertiveness, E4: Activity, E6: Positive Emotions, and all facets of Conscientiousness (except C2: Order and C6: Deliberation).

### Longitudinal Relations

Both personality and our markers of career success were moderately stable across the 10 years studied: retest correlations ranged from .66 (Conscientiousness) to .76 (Openness) for personality; the retest correlation was .64 for both occupational prestige and income and .26 for job satisfaction. We used cross-lagged models (described above) to test whether personality predicted change in career success over the 10-year interval and, likewise, whether these markers predicted change in personality, controlling for baseline career success and personality, their concurrent relations, and sex, ethnicity, age, and education. Table 3 shows the cross-lagged relations between the three markers of career success and factor-level personality.

With our conservative significance level, we found only one domain-level association (see Figure 1): Participants with higher incomes at baseline decreased in Neuroticism ( $\gamma = -.19$ ,  $p < .01$ ;  $\chi^2(1) = 2.14$ , *ns*, RMSEA = .069, CFI = .997) over the 10 years between baseline and follow-up. In contrast to previous research (e.g., Scollon & Diener, 2006), we did not find that job satisfaction predicted decreases in Neuroticism across this time frame. Prestige did not predict any change in domain-level personality, nor did personality predict change in any of the markers of career success. Finally, none of the correlations between the *d* parameters, sometimes interpreted as correlated change, were significant.

Because the longitudinal analyses were more exploratory in nature, for the factor-level analyses, we examined the relations when we relaxed the significance level to  $p < .05$ . Using this less-stringent criterion, a few additional prospective findings emerged. First, participants high in Neuroticism were employed in less prestigious careers ( $\gamma = -.10$ ,  $p < .05$ ;  $\chi^2(1) = 4.54$ ,  $p < .05$ , RMSEA = .108, CFI = .993) and were less satisfied with their jobs at follow-up ( $\gamma = -.12$ ,  $p < .05$ ;  $\chi^2(1) = 1.33$ , *ns*, RMSEA = .030, CFI = .999). In addition, similar to income, participants in higher prestige occupations decreased in Neuroticism between baseline and follow-up ( $\gamma = -.11$ ,  $p < .05$ ;  $\chi^2(1) = 5.60$ , *ns*, RMSEA = .123, CFI = .991). Finally, individuals in higher prestige occupations at baseline increased in Agreeableness by follow-up ( $\gamma = .10$ ,  $p < .05$ ;  $\chi^2(1) = .94$ , *ns*, RMSEA = .000, CFI = 1.00).

At the facet level, the effect of income on Neuroticism held for three facets: N2: Angry Hostility ( $\gamma = -.18, p < .01; \chi^2(1) = 1.02, ns, RMSEA = .01, CFI = 1.00$ ), N3: Depression ( $\gamma = -.16, p < .01; \chi^2(1) = .35, ns, RMSEA = .00, CFI = 1.00$ ), and N5: Impulsiveness ( $\gamma = -.18, p < .01; \chi^2(1) = .89, ns, RMSEA = .00, CFI = 1.00$ ). Higher incomes at baseline were also associated with increases in C3: Dutifulness ( $\gamma = .19, p < .01; \chi^2(1) = .57, ns, RMSEA = .00, CFI = 1.00$ ). In addition, those employed in higher prestige occupations at baseline decreased in N6: Vulnerability ( $\gamma = -.17, p < .01; \chi^2(1) = 1.22, ns, RMSEA = .027, CFI = 1.00$ ), and increased in A5: Modesty ( $\gamma = .18, p < .01; \chi^2(1) = .30, ns, RMSEA = .000, CFI = 1.00$ ) over time. Job satisfaction did not predict change in any of the facets.

Facet-level analyses revealed that only N2: Angry Hostility was associated with change in occupational prestige: Those prone to experience anger and frustration are employed in less prestigious occupations over time ( $\gamma = -.15, p < .01; \chi^2(1) = 3.59, ns, RMSEA = .093, CFI = .994$ ). None of the other facets predicted change in career success at  $p < .01$ .

Finally, because our sample represents a broad range of ages, it may be the case that the effect of career success on personality (and vice versa) has different effects at different stages of the lifespan. To address this issue, we tested age as a moderator of the longitudinal associations between our three markers of career success and domain-level personality. We divided participants into those who were  $\leq 40$  years old ( $n = 142$ ; range = 30 to 40) and those  $\geq 41$  years old ( $n = 162$ ; range 41 to 62) at baseline. Using a multiple group analysis, we tested whether each cross-lagged parameter should be either estimated freely or constrained to be equal across the two age groups. A model with freely estimated cross-lagged parameters that fits the data better than a model with cross-lagged parameters constrained to be equal (defined as  $\Delta\chi^2/\Delta df$ ) indicates a significant moderating effect of age.

We found two such effects for income. First, the impact of income on Neuroticism held for younger ( $\gamma = .37, p < .01$ ), but not older ( $\gamma = -.09, ns$ ), participants ( $\Delta\chi^2(1) = 10.80, p < .01$ ). Second, for younger participants, higher Extraversion at baseline predicted increases in income across the 10-year period ( $\gamma = .18, p < .01$ ); Extraversion was unrelated to changes in income for older participants ( $\gamma = -.08, ns; \Delta\chi^2(1) = 7.62, p < .01$ ). Age did not moderate personality and prestige or job satisfaction.

## Discussion

The dynamic transaction between occupational experiences and characteristics of the individual has long been of interest to sociologists and psychologists alike (e.g., Kohn & Schooler, 1982; Roberts et al., 2003). The present research addressed this transaction in the context of the individual's intrinsic and extrinsic career success and his/her standing on the five dimensions of the FFM. Measured concurrently, controlling for sex, ethnicity, age, and education, domain-level personality was associated with income and job satisfaction, but not prestige: Emotionally stable and conscientious participants reported earning higher incomes and reported more satisfaction with their jobs. Our longitudinal analyses revealed that, among younger participants, earning a higher income at baseline predicted decreases in Neuroticism across the 10 years between baseline and follow-up and higher levels of Extraversion predicted increases in income over this time period.

Personality has often been argued to be relatively stable, with change occurring because of natural age-related brain maturation and changes in gene expression across the lifespan or because of alterations in brain chemistry and structure due to extreme or traumatic environmental events (McCrae & Costa, 2003). Others have argued that the environment, especially investing in social institutions such as work and marriage, has a significant role in personality development across the lifespan (e.g., Roberts, Wood, & Smith, 2005). The

present findings implicate one such aspect of the environment in personality development: those who earn higher incomes decrease on Neuroticism. This finding is contrary to conceptualizations of the FFM that assert that the environment will have little effect on trait change (McCrae & Costa, 2003). It is of note, however, that it is simply the material reward of the job that contributes to personality development, not how much one enjoys his job or the everyday realities of the working environment (Sutin & Costa, 2008).

Money may not buy happiness or well-being (Diener & Biswas-Diener, 2002; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2006) but it may decrease dispositional proneness to negative affects and emotional distress. In particular, those who earn more money show decreases in their susceptibility to anger, frustration, and bitterness, their proneness to depression, and their inability to control urges and cravings. Not having the means to provide for basic needs may produce a great deal of anxiety and feelings of worthlessness; thus it may not be surprising that financial independence reduces such depression and anxiety. This effect of income on Neuroticism, however, appears to only hold true at the beginning stages of the career.

Likewise, the effect of Extraversion on income may only exert its influence early in the individual's career. Our findings are consistent with Granovetter's (2005) sociological work, which shows that people are more likely to get their first job through "weak ties" (e.g., a friend of a friend) in their social network than through "strong ties" (e.g., a brother or sister). Extraverts, because of their large social networks, are likely to have more weak ties than non-extraverted individuals and thus more job advancement opportunities. The power of weak ties, however, diminishes with age, consistent with our finding that Extraversion's influence on income appears to be stronger earlier in the career. As individuals progress in their careers, however, contacts made at previous jobs become a richer source of information for employment opportunities than casual social contacts (Granovetter, 1995). These connections may eclipse the advantage of the extended social networks that extraverted individuals enjoy, thus diminishing the effect of Extraversion on income over time. In addition, although individuals who are assertive by nature may be more likely to ask for raises or actively seek better paying job opportunities, as individuals progress through their careers, other factors, such as ability or early accomplishments, may become more important to job advancement than Extraversion.

More generally, personality may shape the daily experience on the job (Sutin & Costa, 2008), but not its outcome/rewards. Over time, personality influences individuals' working environments, such as their latitude to make decisions, their opportunities to utilize skills, and their physical working conditions; these job characteristics, however, do not reciprocally shape personality (Sutin & Costa, 2008). It may be the monetary reward of the job, rather than either the subjective evaluation of the job or the environmental working conditions, that contributes to personality development in adulthood.

### Limitations and Future Directions

The present research offered several advancements over previous research, including a diverse sample and fully cross-lagged design, yet limitations need to be addressed. First, future research could use non self-reported income and a more comprehensive measure of job satisfaction. Although self-presentation biases could have influenced how our participants responded to the income item, previous research has shown that differences between self and archival reports of salary are about 1% (Judge, Cable, Boudreau, & Bretz, 1995), thus alleviating such concerns. In addition, we used a single-item job satisfaction measure. Single-item measures can be reliable and valid (R. W. Robins, Hendin, & Trzesniewski, 2001) and similar single-item measures have been used with success in other



longitudinal work (e.g., Judge & Hurst, 2008), but future work would benefit from an established multi-item measure.

Second, a multi-panel longitudinal study to test the trajectory of change and mutual influence of personality and career success would provide a stronger test of the transaction between the two. With only two assessments, our cross-lagged models could not take time between assessments into account or address the shape of the trajectory of change (e.g., to distinguish between linear and quadratic change). In addition, although cross-lagged effects can help evaluate alternative causal hypotheses, they cannot rule out the possibility that a third variable, such as changes in health or relationship status, influences both variables, creating a spurious correlation between the two.

Third, larger samples from a broader range of occupations would allow for tests of whether certain personality traits are rewarded or punished in different occupations. For example, extraverted individuals may excel in occupations where interpersonal interactions are mandatory, such as in sales (Barrick & Mount, 1991). Our community sample, although representing diverse occupations, was not large enough to test for such occupation-specific effects.

In sum, both personality and career success have been hypothesized to mutually influence each other across the lifespan. Our research suggests that this dynamic transaction may be limited to income and may only occur early in the career when both personality and careers are in a state of flux. Research that advances this study's methodology (e.g., more assessments, varying time lags) is needed to help substantiate the current findings.

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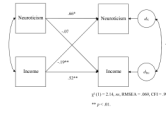
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**Figure 1.** Cross-lagged model of the effect of income on Neuroticism. Cross-lagged paths between income and Neuroticism control for all antecedent factors and control variables (sex, ethnicity, age, education).

**Table 1**

## Descriptive Statistics for Demographics, Career Success, and Personality Variables

	Concurrent	Longitudinal sample at follow-up
Demographics		
Age	46.63 (9.04)	52.38 (6.40)
Gender (female)	59%	59%
Ethnicity (Caucasian)	62%	67%
Education	12.93 (2.30)	13.34 (2.19)
Career Success		
Occupational prestige	55.13 (24.31)	58.15 (24.07)
Income	34,225.51 (25,075.12)	48,796.11 (32,519.84)
Job satisfaction	3.47 (.71)	3.58 (.64)
Personality		
Neuroticism	49.12 (9.68)	49.62 (9.07)
Extraversion	49.85 (8.39)	49.66 (8.50)
Openness	47.15 (8.81)	46.48 (8.38)
Agreeableness	49.84 (9.80)	48.29 (9.67)
Conscientiousness	49.00 (9.21)	49.98 (8.89)

*Note.* Standard deviations are shown in parentheses.  $N = 731$  for concurrent sample and  $N = 302$  for longitudinal sample ( $ns = 631$  and  $242$  for income and  $ns = 719$  and  $302$  for job satisfaction).

**Table 2**

## Concurrent Correlations between Personality and Career Success

	Extrinsic		Intrinsic
	Prestige	Log Income	Job satisfaction
Neuroticism	-.09	-.17** <i>a</i>	-.19** <i>a</i>
Extraversion	.05	.04	.11**
Openness	.18**	.07	-.09
Agreeableness	-.07	-.11**	.03
Conscientiousness	.05	.11** <i>a</i>	.11** <i>a</i>
Facets			
N1: Anxiety	-.10**	-.16** <i>a</i>	-.12** <i>a</i>
N2: Angry hostility	-.05	-.10	-.16** <i>a</i>
N3: Depression	-.13** <i>a</i>	-.14** <i>a</i>	-.21** <i>a</i>
N4: Self-consciousness	-.05	-.09	-.16** <i>a</i>
N5: Impulsiveness	.01	-.04	-.09 <i>a</i>
N6: Vulnerability	-.08	-.16** <i>a</i>	-.16** <i>a</i>
E1: Warmth	.02	-.01	.09
E2: Gregariousness	-.01	-.02	.08
E3: Assertiveness	.14**	.22** <i>a</i>	.09 <i>a</i>
E4: Activity	.17**	.16** <i>a</i>	.11** <i>a</i>
E5: Excitement-seeking	.01	.09	.03
E6: Positive emotions	.08	.04	.10** <i>a</i>
O1: Fantasy	.14**	.06 <i>a</i>	-.14** <i>a</i>
O2: Aesthetics	.02	-.09 <i>a</i>	-.08
O3: Feelings	.19**	.05	-.08
O4: Actions	.10**	.02	.02
O5: Ideas	.11**	.12**	-.02
O6: Values	.18**	.07	.00
A1: Trust	.16** <i>a</i>	.11**	.10**
A2: Straightforwardness	-.06	-.07	.04
A3: Altruism	-.04	-.02	.06
A4: Compliance	-.02	-.03	.08
A5: Modesty	-.04	-.05	.01
A6: Tender-mindedness	-.12**	-.14**	-.01
C1: Competence	.18** <i>a</i>	.20** <i>a</i>	.17** <i>a</i>
C2: Order	.02	.00	.08
C3: Dutifulness	.04	.15** <i>a</i>	.14** <i>a</i>

	Extrinsic		Intrinsic
	Prestige	Log Income	Job satisfaction
C4: Achievement striving	.09	.14** <i>a</i>	.11** <i>a</i>
C5: Self-discipline	.03	.09 <i>a</i>	.18** <i>a</i>
C6: Deliberation	-.03	.03	.03

Note.  $n = 731$  for prestige,  $n = 631$  for income, and  $n = 719$  for job satisfaction.

<sup>a</sup>Significant after controlling for sex, ethnicity, age, and education in a regression analysis.

\*\*  
 $p < .01$ .

**Table 3**

## Personality-Career Success Cross-lagged Analyses

	Personality on Career Success	Career Success on Personality	$r_{\text{residuals}}$
Occupational Prestige			
Neuroticism	-.10*	-.11*	-.04
Extraversion	-.03	-.07	.03
Openness	-.02	-.01	.02
Agreeableness	.05	.10*	.01
Conscientiousness	.03	-.01	.09
Personal Income			
Neuroticism	-.07	-.19**	-.04
Extraversion	.05	-.02	-.04
Openness	-.08	.03	.02
Agreeableness	-.01	.08	-.09
Conscientiousness	-.02	.01	.00
Job Satisfaction			
Neuroticism	-.12*	-.05	-.05
Extraversion	.08	.01	.04
Openness	.00	-.04	.03
Agreeableness	.09	-.01	-.03
Conscientiousness	.03	.04	-.06

Note.  $n = 302$  for prestige,  $n = 242$  for income, and  $n = 302$  for job satisfaction.

\*  $p < .05$ .

\*\*  $p < .01$ .