

CHAPTER 11

Personality, Career Development, and Occupational Attainment

STEVEN D. BROWN AND ANDREAS HIRSCHI

RESearch on PERSONALITY AND its relation to life outcomes is a vibrant field of inquiry with important implications for career development practice. An increasing number of studies have shown that people's relatively enduring personality traits relate to a variety of career and work-related outcomes. In a meta-analytic review, Roberts, Kuncel, Shiner, Caspi, and Goldberg (2007) found that personality traits explained unique variance in both long-term unemployment rates and occupational stability over and above intelligence and socioeconomic status, both of which had already been found to be important predictors of these work outcomes. In another meta-analysis of predictors of career success, Ng, Eby, Sorensen, and Feldman (2005) found that personality traits predicted other indices of occupational attainment as well, including salary, number of promotions, and career satisfaction. Although current research (e.g., Roberts et al., 2007) also suggests that personality traits explain only a small percentage of variance in these career outcomes, their contributions are still substantial enough (alone and when compared to the variance accounted for by other factors) to warrant consideration in career development and counseling.

This chapter discusses what we currently know about normal personality and its role in career development, choice making, and occupational attainment. We begin by providing an overview of different perspectives on the role of personality in career development and then discuss the structure of normal personality, focusing specifically on five major personality traits (known as the Big 5) that have been studied extensively in the literature. We then review research that has linked the Big 5 personality traits with career outcomes across the life span and conclude with

a set of counseling and preventive implications that can be derived from the research.

PERSPECTIVES ON THE RELATION OF PERSONALITY AND LIFE OUTCOMES

There are two basic models of how to explain relations between personality and career and life outcomes. The *trait* perspective (McCrae et al., 2000) focuses on the stability of traits and posits that traits represent endogenous basic tendencies of thinking, feeling, and acting that are shaped largely by biology and lead to characteristic ways of adapting to the different environmental settings in which individuals interact. Thus, extraversion, as a trait that is largely inherited and biologically determined, leads people to think, feel, and act in particular ways in their natural environments (e.g., to feel comfortable in and approach social situations versus feeling uncomfortable and avoiding them). This perspective is supported by research showing significant genetic and limited environmental (e.g., parental) influences on traits, similar manifestations of traits across cultures, and temporal stability of traits (McCrae et al., 2000).

A different perspective is proposed by the *plasticity* model of personality change, which posits that traits are fairly stable aspects of people's personalities but that personality change is possible and, indeed, probable. According to this view, personality is completely shaped neither by biology nor by the environment. Rather, personality development is a by-product of a dynamic interaction between persons and their environments that results in both trait stability and change (Caspi, Roberts, & Shiner, 2005). According to this perspective, much of the stability in adult personality can indeed be explained by genetic factors. However, personality traits also show significant stability over time due to niche-building processes; people are passive victims of neither their environments nor their genes and actively create, seek out, and remain in environments that are congruent with their traits. Thus, trait stability (more on this later in the chapter) is a function of both biology and niche building.

However, as we will also see later, traits are not entirely stable because not only do people select environments that are correspondent with their personalities (niche building) but also environments, once entered, have an impact on people's personalities. This perspective is supported by meta-analytic research showing significant normative changes in personality until about the age of 50, with major changes seeming to occur in early adulthood rather than in adolescence (Roberts & Del Vecchio, 2000; Roberts, Walton, & Viechtbauer, 2006). Other research has shown that occupational attainment

among men is associated with increases in dependability, responsibility, independence, and success motivation (Elder, 1969). Among women, it has been found that participation in the labor force is associated with increases in dominance, independence, and self-confidence (Clausen & Gilens, 1990; Roberts, 1997).

In sum, it is likely that personality traits play several roles in the career development process. In particular, (a) traits represent specific biological temperaments that affect how people think, feel, and act in their careers and work lives; (b) people actively seek out educational and work environments that correspond to and reinforce their personalities; (c) people shape their environments to better fit their personality traits; and (d) people react to and change their traits based on environmental experiences.

THE STRUCTURE AND STABILITY OF NORMAL PERSONALITY

Although research on personality has a long history dating back to at least World War I with the development of the Woodworth Personal Data Sheet, this history has been quite checkered until the past 30 or so years. A major problem that beset early personality research was the lack of a clear theoretical structure that could parsimoniously account for the covariation found among a large and ever growing number of personality traits. Looking back at past personality research in industrial and organizational psychology, Hogan and Roberts (2000) concluded: "There are thousands of personality measures in the published literature" (p. 6) and that the research was "in conceptual disarray, with no overarching theoretical paradigm" (p. 7).

Fortunately, findings have converged over the past 30 or so years to suggest that five major personality constructs or traits, referred to as the Big 5, may be sufficient to describe the basic dimensions of normal personality (Mount & Barrick, 1995). These five traits (commonly labeled *neuroticism* or *emotional stability*, *extraversion*, *openness*, *agreeableness*, and *conscientiousness*) have been found via factor analyses of nearly every major personality inventory (e.g., Costa & McCrae, 1985, 1986) and through study of trait adjectives in a variety of languages (Goldberg, 1990). They also emerge in both self-reports and in observer ratings (e.g., spouses, peers, teachers, and guidance counselors) (e.g., Costa & McCrae, 1985). Finally, large-scale meta-analyses have shown that these five traits may also generalize across cultures (e.g., Salgado, 1997) and predict many important life outcomes, including work choice, performance and satisfaction, and occupational attainment and success. In the remainder of this section, we first define each of the five traits. We then summarize data on the stability of these traits and the implications of stability data for practice.

NEUROTICISM OR EMOTIONAL STABILITY

Neuroticism generally refers to a lack of positive adjustment and emotional stability and is associated with the experience of a wide variety of negative emotions (e.g., sadness, anxiety, guilt). People high in neuroticism (or low on emotional stability) tend also to report themselves to be self-conscious and vulnerable and may respond impulsively in their lives (Costa & McCrae, 1992). Evidence suggests that neurotic individuals are especially attentive to the negative consequences of their (and others') actions and choices, are especially affected by negative events, perceive events as more negative than do people lower on this trait, and often display less satisfaction with their lives and more indecision than those who score lower on this dimension (e.g., Suls & Martin, 2005). By contrast, those who score low on measures of neuroticism tend to be emotionally stable, calm, relaxed, and capable of facing stressful situations without becoming rattled (Costa & McCrae, 1992).

EXTRAVERSION

Extraverts tend to be socially oriented (e.g., warm and gregarious), active (e.g., adventuresome and assertive), and surgent (e.g., dominant and ambitious). Additionally, extraverts tend to report greater levels of positive emotionality (e.g., happiness, joy) and to have larger friendship networks than introverts (e.g., Watson & Clark, 1997). Some investigators (e.g., Roberts et al., 2006) have suggested that extraversion is defined primarily by two lower-order trait complexes having to do with social dominance (e.g., dominance, assertiveness, and self-confidence in social contexts) and social vitality (e.g., sociability, gregariousness, energy level, and positive affect). Regardless of how lower-order traits (i.e., facets) are clustered, most conceptions of extraversion include warmth, gregariousness, assertiveness, activeness, excitement seeking, and positive emotionality as core facets (Costa & McCrae, 1992). Introverts (i.e., those scoring low on a measure of extraversion) tend to be reserved (but not necessarily unfriendly), lack the energy that more extraverted individuals display, and prefer being alone to being with others (Costa & McCrae, 1992).

It is important to note at this juncture that neuroticism and extraversion both contain affective dimensions: For neuroticism, it is a tendency to experience negative emotion across time and situations; for extraversion, it is the tendency to experience positive emotions. Parallel research on the structure of human emotions has suggested that two dimensions (positive affectivity and negative affectivity) provide a comprehensive way to understand human temperament (Watson & Tellegen, 1985). Individuals predisposed to display high levels of positive affectivity (PA) generally report experiencing a variety of positive emotions (e.g., joy, happiness, excitement, enthusiasm), and

those predisposed to negative affectivity (NA) report experiencing a variety of negative emotions (e.g., anxiety, guilt, fear, anger). These two dimensions of affective temperament have also been found to be mostly independent (Watson & Tellegen, 1985), with the low end of PA being associated with feelings of boredom, lack of excitement, and dullness (rather than negative emotion). Those low on NA tend to report being calm and relaxed (but not necessarily happy or elated). NA has been found to correlate highly with neuroticism and may represent the affective dimension of this trait, while PA may represent the affective dimension of extraversion.

OPENNESS

Open individuals tend to be imaginative and curious, original and flexible in their thinking, broadminded and liberal, receptive to their feelings and emotions, appreciative of art and beauty, and often see themselves as non-conformists (Costa & McCrae, 1992). They actively seek out new experiences, see such experiences as opportunities for growth (rather than as challenges to their self-esteem), and are comfortable in ambiguous situations. There is also evidence (DeNeve & Cooper, 1998) that those high in openness experience emotions (whether positive or negative) more intensely than those who are less open. Those scoring low on measures of openness tend to be more conventional and conservative, prefer familiar to novel situations, and experience their emotions less intensely than do more open individuals (Costa & McCrae, 1992).

AGREEABLENESS

Agreeable individuals tend to be cooperative versus competitive with others and trusting versus cynical about the motives of others. They tend to be straightforward and deferent in their interactions with others and describe themselves (and are described by others) as caring, empathic, good-natured, forgiving, and tolerant (Costa & McCrae, 1992). Agreeableness also seems to be defined by a high motivation to achieve interpersonal intimacy (McCrae & Costa, 1991) and to get along with others in pleasant and satisfying relationships (Organ & Lingl, 1995). Agreeable individuals are also altruistic and willing to assist others in need of help versus being self-centered and reluctant to get involved in the problems of others (Costa & McCrae, 1992).

CONSCIENTIOUSNESS

Conscientiousness seems to be described by three primary facets: achievement orientation (e.g., being goal directed, hardworking, and persistent),

at 26 and to report greater financial solvency. These findings provide support for other data we discuss later in the chapter (and have already mentioned) that personality is an important predictor of a variety of different work outcomes.

The second set of findings, however, points to possible mechanisms for personality change, namely, that occupational attainment, job satisfaction, and financial security may be sources of personality change. This study replicated the types of normative changes that we discussed earlier: that traits associated with emotional stability, extraversion, and conscientiousness tended to increase over the course of the study. However, occupational attainment, job satisfaction, and financial security seemed to accelerate these changes. In other words, young adults who had achieved occupational success and satisfaction and financial security showed more pronounced increases in emotional stability, extraversion, and conscientiousness than did those who had not achieved the same types of occupational and financial success at 26.

These findings suggest to us that helping adolescents and young adults achieve occupationally and find satisfying jobs may affect their personality development. It is true that certain personality traits have the potential to set people on a course for a less than satisfying occupational future. However, it might also be true that effective career counseling can, to some degree, help people fit their personalities more seamlessly into their work (i.e., find their niches) and, in the long run, change their life courses and grow their personalities. This is an important topic for further research, and many chapters in this book provide readers with excellent suggestions for improving career intervention effectiveness. We turn next to a discussion of the role of personality in career development across the life span.

THE RELATIONS OF PERSONALITY TO CAREER OUTCOMES ACROSS THE LIFE SPAN

Most theories of career development (see Hartung, Chapter 4; Savickas, Chapter 6, this volume) suggest that the ability to implement a sound vocational choice (find one's niche, as it were) and subsequently adjust to one's work is a developmental process that begins in childhood and accelerates during the adolescent and young adult years. Major developmental tasks of adolescence and young adulthood involve (a) exploring one's self and the occupational world, (b) crystallizing interests and forming a vocational identity, (c) developing educational and occupational aspirations, (d) engaging in career planning, and (e) specifying an initial occupational choice. In

addition, engagement in these developmental tasks seems to require that people possess the confidence as well as the skills to accomplish them successfully. Tasks of subsequent developmental periods involve implementing a choice (i.e., finding a job or completing necessary education) and achieving satisfaction and success at work. In this section, we review research relevant to each of these major developmental tasks, starting with tasks involved in the exploration stage of career development. We also review research on the relationship between personality and career confidence (i.e., self-efficacy beliefs in being able to accomplish these developmental tasks). We then review research on the role of personality in later development periods, including job finding, work satisfaction and performance, and occupational attainment.

PERSONALITY AND CAREER EXPLORATION

Personality traits are related to the degree to which adolescents engage in career exploration activities. The most consistent findings reveal that conscientiousness, extraversion, and emotional stability are implicated in the career exploration process among high school and college students, with the strongest effects attributed to conscientiousness (Reed, Bruch, & Haase, 2004; Rogers & Creed, 2011; Rogers, Creed, & Ian Glendon, 2008). In particular, it appears that students who are more goal directed, achievement oriented, organized, and planful tend to engage more actively in career exploration activities than do those who are less conscientious. In addition, the relation of extraversion to exploration may be due to the fact that extraverts tend to have more energy and tend to be more proactive in their lives than those who are less extraverted (McCrae & Costa, 1999). Extraverted students may also feel more comfortable seeking information from others as part of career exploration than do less extraverted students. Finally, career exploration entails self-reflection and environmental exploration (Zikic & Hall, 2009) that might be anxiety provoking to less emotionally stable youngsters. Research also suggests that more versus less neurotic individuals tend to use a variety of avoidance strategies to cope with anxiety (e.g., Brown et al., 2012). Thus, avoiding exploration activities, although less adaptive in the long run, might in the short run allow less emotionally stable students to cope with the anxiety elicited by the exploration process.

PERSONALITY AND VOCATIONAL INTERESTS

Personality seems to be related to the types of interests that people develop, as well as to their overall levels of vocational interests. Many empirical

studies have established that vocational interest types, as represented by Holland's RIASEC model (Nauta, Chapter 3, this volume), are distinct from, but meaningfully related to, basic personality traits (Mount, Barrick, Scullen, & Rounds, 2005). For example, two meta-analyses have found consistent relationships among several Big 5 personality traits and RIASEC interest types (Barrick, Mount, & Gupta, 2003; Larson, Rottinghaus, & Borgen, 2002). Both studies found that extraversion was related to Social and Enterprising interests and that openness was related to Artistic and Investigative interests. Somewhat less consistent were findings linking agreeableness with Social interests and conscientious with Conventional interests. There is some evidence, however, that agreeableness might serve to differentiate between those with Social versus Enterprising interests (Costa, McCrae, & Holland, 1984). That is, although both Enterprising and Social types (in Holland's schema) tend to score above average on various measures of extraversion, Social individuals (e.g., counselors, teachers) tend to score higher on measures of agreeableness than do more Enterprising types (e.g., salespeople and politicians). Meanwhile, Sullivan and Hansen (2004) found that different facets of openness may distinguish between those having Artistic and Investigative interests. Investigative interests were related positively to openness to ideas (and negatively to openness to feelings), and Artistic interests showed the strongest associations with an openness facet reflecting a deep appreciation for art and beauty (aesthetics).

In addition to the content of individuals' interests (i.e., the fields in which people express their interests), personality also tends to be related to the absolute levels of interests that people display (i.e., their interest profile elevation; Bullock & Reardon, 2005; Darcy & Tracey, 2003). The most consistent finding is that openness is positively related to profile elevation (Ackerman & Heggestad, 1997; Costa et al., 1984; De Fruyt & Mervielde, 1997; Fuller, Holland, & Johnston, 1999; Gottfredson & Jones, 1993; Hirschi, 2009; Holland, Johnston, & Asama, 1994). Other studies have found that neuroticism relates negatively to interest profile elevation (Ackerman & Heggestad, 1997; De Fruyt & Mervielde, 1997; Fuller et al., 1999; Holland et al., 1994).

In other words, adolescents' level of openness to new experiences and ideas may be reflected in their vocational interests—more open individuals report higher levels of interest in all RIASEC areas than do persons who are less open. There are also data to suggest that such profile elevation provides people with greater flexibility in their choices because of their interest and comfort in a variety of different types of occupational settings (Darcy & Tracey, 2003). A high level of neuroticism may have the opposite effect; it may result in lower levels of interest across interest areas and less flexibility in arriving at a satisfying career choice.

PERSONALITY AND VOCATIONAL IDENTITY DEVELOPMENT

Vocational identity is a central construct of several extant theories (see Nauta, Chapter 3; Hartung, Chapter 4; and Savickas, Chapter 6, this volume) and can be defined as the development of a coherent view of oneself as a worker. Achieving a clearly defined vocational identity involves understanding how important work is vis-à-vis other roles; developing a clear perception of one's vocational interests, abilities, goals, and values; and linking this self-knowledge with career roles. A well-developed vocational identity is commonly assumed to be a cornerstone of successful career development and to be essential to mastering other career development tasks (see Skorikov & Vondracek, 2007, for a review).

A number of studies have revealed that vocational identity achievement is related to personality traits. For example, high school and college students who have achieved a clear and coherent vocational identity report lower levels of neuroticism and higher levels in conscientiousness, extraversion, openness, and agreeableness (e.g., Clancy & Dollinger, 1993; Luyckx, Soenens, & Goossens, 2006). In an exemplary longitudinal study of female Belgian undergraduates, Luyckx and colleagues (2006) showed that personality traits and identity development were reciprocally related with traits having an effect on identity development and also that success in identity development affected subsequent personality traits. Consistent with other research that we have already reviewed, conscientiousness predicted an increase in identity achievement, and identity achievement, in turn, predicted increases in conscientiousness. This study, like those discussed earlier in the chapter, suggests another avenue for personality change—by helping students and young adults in the identity development process.

PERSONALITY AND EDUCATIONAL AND CAREER ASPIRATIONS

Educational and career aspirations are important components of career development and are stressed in Super's theory of career development (Hartung, Chapter 4, this volume) and social cognitive career theory (Lent, Chapter 5, this volume). Longitudinal studies have also shown that educational and career aspirations relate to later educational and career attainment (Schoon & Parsons, 2002). Moreover, research indicates that the educational and career aspirations of high school and college students may be meaningfully related to certain personality traits.

One trait that has been repeatedly shown to relate to higher educational aspirations is openness. Several studies with college students (Gasser, Larson, & Borgen, 2004; Rottinghaus, Lindley, Green, & Borgen, 2002) and secondary students (Salami, 2008) have reported that students with higher levels of openness (i.e., those who tend to be insightful, intellectual, and

open-minded) have higher educational goals than their classmates who are lower on this trait. Hirschi (2010) investigated career aspirations in relation to traits from a different perspective by coding aspirations of Swiss adolescents according to the content dimensions of things versus people and data versus ideas (Prediger, 1982). The results of this 1-year longitudinal study showed that extraversion related negatively to the development of career goals involving dealing with things (e.g., mechanic) and positively to the development of goals involving dealing with people (e.g., retail sales). Openness related negatively to the development of goals dealing with data (e.g., office clerk) and positively to goals involving working with ideas (e.g., graphic designer). In sum, although more research is needed to establish how traits are related to career aspirations, students' personalities seem to be related to both the level and content of their aspirations. Openness seems to relate to the levels of aspirations reported by both high school and college students, and other personality traits relate more to the content of students' aspirations.

PERSONALITY AND CAREER PLANNING

Only a few studies have investigated the relation of personality traits to the degree to which students engage in career planning (e.g., set short- and long-term goals for themselves and develop coherent plans for acquiring necessary education and training and entering occupations of choice). Rogers and Creed (2011) and Hirschi, Niles, and Akos (2011) showed that neuroticism was negatively related to career planning among groups of Australian high school and Swiss secondary students, respectively. It has also been found that high school and college students higher in extraversion, conscientiousness, and openness (e.g., Rogers & Creed, 2011) report engaging in more career planning, with conscientiousness once again emerging as the strongest predictor. These findings seem to suggest that less emotionally stable students may avoid career planning activities like they avoid earlier career exploration activities. These findings also suggest, similar to the findings for career exploration, that more organized, achievement-oriented, goal-directed (conscientious), open, and extraverted students are more likely to engage actively in the developmental task of planning for their future careers than students who are less conscientious, open, and extraverted.

PERSONALITY AND CAREER DECIDEDNESS

The relation of personality to career decidedness has been frequently studied in the vocational psychology and career development literatures. One of the most consistent findings is that neuroticism and its related traits (i.e., trait

negative affectivity, trait anxiety, depression, dysfunctional thinking) are negatively related to levels of career decidedness (Feldman, 2003; Hirschi et al., 2011; Lounsbury, Hutchens, & Loveland, 2005; Lucas & Wanberg, 1995; Saunders, Peterson, Sampson, & Reardon, 2000). In a meta-analysis, Brown and Rector (2008) also showed that these traits correlated highly with indices of chronic indecision (i.e., the degree to which persons report long-term difficulties with making decisions). It therefore appears that people who report low emotional stability and related traits have more difficulties in reaching a career decision and may also have difficulties making a variety of other types of decisions as well (e.g., which school to attend, whether to make a romantic commitment).

Other personality traits, although less frequently investigated, have also been found to relate to career decidedness. Several studies have reported that conscientiousness, agreeableness, and extraversion all relate positively to career decidedness among high school and college students (Jin, Watkins, & Yuen, 2009; Lounsbury et al., 2005; Wang, Jome, Hasse, & Bruch, 2006), with the effect sizes obtained for conscientiousness rivaling those obtained for neuroticism. Hence, it appears that adolescents and young adults who are generally more reliable, careful, organized, self-disciplined, open, and extraverted are not only likely to explore and plan more than their less conscientious, extraverted, and open peers but are also more likely to arrive at a career decision more efficiently.

Although more research is needed before we can make strong inferences about the relation of Big 5 traits to career development tasks, evidence seems to be emerging that a core set of traits seems to facilitate adolescents' and young adults' career development. Specifically, emotional stability, extraversion, and conscientiousness seem to be associated with more active career exploration and planning, more coherent vocational identities, higher levels of educational and vocational aspirations, and greater levels of career decidedness. In addition, openness seems to relate to career choice flexibility (i.e., breadth of interests), career exploration, and career planning. These traits, it will be recalled, were also identified as core traits related to occupational attainment and financial success by Roberts and colleagues (2003) and therefore have important implications for promoting career success across the life course.

PERSONALITY AND CAREER CONFIDENCE

Research has also shown that successful completion of career development tasks requires that people not only have the skills to complete them but also the confidence (or self-efficacy beliefs) that they are personally capable of doing what is required to be successful (see Lent, Chapter 5, this volume).

One of the most frequently studied types of self-efficacy beliefs that have been associated with personality are career decision-making self-efficacy beliefs (i.e., the confidence that one can do what is necessary to make successful vocational decisions). Neuroticism has been found to be negatively related to career decision-making self-efficacy among high school (Rogers et al., 2008) and college students (Hartman & Betz, 2007; Wang et al., 2006). Cross-sectional (Schyns & von Collani, 2002), longitudinal (Spurk & Abele, 2011), and meta-analytic (Judge & Ilies, 2002) studies have also found that neuroticism is related negatively to work self-efficacy, that is, the confidence in successfully mastering a variety of work-related tasks and challenges. Neuroticism seems also to be negatively related to confidence in successful performance across different occupational areas (Hartman & Betz, 2007; Nauta, 2004; Schaub & Tokar, 2005). Collectively, these findings suggest that less emotionally stable individuals not only may question their abilities to make career decisions but also may display less confidence than more emotionally stable individuals in their abilities to be successful in a variety of different occupations.

Besides neuroticism, conscientiousness has also been found to predict career confidence. Meta-analyses (e.g., Judge & Ilies, 2002) have found significant positive relations between conscientiousness and both work and academic self-efficacy beliefs, even after controlling for the positive effects of general cognitive ability on self-efficacy beliefs. Other studies have reported positive relations between conscientiousness and career decision-making self-efficacy among undergraduate (Hartman & Betz, 2007), graduate (Jin et al., 2009), and high school students (Rogers et al., 2008). Finally, several studies have found that extraversion also is a positive predictor of career and academic self-efficacy. More extraverted students and working adults have shown more work and academic self-efficacy in a meta-analysis (Judge & Ilies, 2002), more vocational self-efficacy in a 2-year longitudinal study among German university graduates (Spurk & Abele, 2011), and more career decision-making self-efficacy among U.S. college students (Hartman & Betz, 2007; Wang et al., 2006). Once again, we find that the core constellation of emotional stability, extraversion, and conscientiousness relates not only to career development task success but also to the confidence that students and young adults have in their abilities to complete these tasks.

PERSONALITY, JOB FINDING, WORK ADJUSTMENT, AND OCCUPATIONAL ATTAINMENT

The relationships of the Big 5 personality traits to job-finding success, work satisfaction, and job satisfactoriness (performance) are reviewed in other

chapters (see Jome & Phillips, Chapter 21; Lent & Brown, Chapter 22, this volume) and therefore are only summarized briefly in this section. We also discuss some of the research cited earlier on the role of personality in occupational attainment.

Personality and job-finding success. In general, research reveals that two of the Big 5 personality traits—extraversion and conscientiousness—seem to be related to job-finding success (see Jome & Phillips, Chapter 21). In addition, meta-analyses (e.g., Kanfer, Wanberg, & Kantrowitz, 2001) have suggested that these two personality traits may affect job search success via two avenues. First, both extraversion and conscientiousness seem to have direct effects on success at finding a job, perhaps because conscientious and extraverted people tend to perform better in employment interviews than their less conscientious and more introverted peers (more conscientious job seekers also probably submit more well-developed resumes and other materials). Second, these traits also seem to affect job-finding success via their influences on the intensity and effort that job seekers put into the job search process. Conscientious job seekers are organized and planful, tend to set goals for their job search efforts, and persevere in the face of setbacks, and more extraverted persons tend to be more comfortable (and self-efficacious) in using their social networks as sources of job leads. Thus, conscientiousness and extraversion may give persons a competitive advantage when they are seeking jobs. People displaying higher levels of these two traits tend to work harder in the job search process, organize their efforts better, develop goals to direct their job search efforts, and make use of more resources in the job search process (especially interpersonal resources in the case of extraverts). They may also feel more comfortable and efficacious in job interviews and may display in the interview characteristics that employers seek from potential employees.

Personality and job satisfaction and satisfactoriness. Lent and Brown (Chapter 22, this volume) reviewed findings on the relationships between personality traits and job satisfaction and satisfactoriness. The former (job satisfaction) represents employees' satisfaction with (liking of) their jobs. The latter (job satisfactoriness) reflects employers' satisfaction with their employees. Job satisfaction is typically assessed via employee self-reports, and job satisfactoriness is typically measured by supervisor performance appraisals. Meta-analyses (e.g., Heller, Watson, & Ilies, 2004; Judge, Heller, & Mount, 2002) have suggested that emotional stability, extraversion, and conscientiousness yield small (conscientiousness) to moderate (emotional stability and extraversion) correlations with job satisfaction.

In terms of job satisfactoriness, supervisor performance appraisals seem to be influenced by at least three different types of employee behaviors: task performance, organizational citizenship behaviors, and counterproductive work behaviors (see Lent & Brown, Chapter 22, this volume). Task performance represents how well employees perform the job duties prescribed by their job descriptions; organizational citizenship behaviors refer to extra-role behaviors that contribute to organizational goals (e.g., helping and cooperating with others, showing commitment to the organization; see Borman, 2004). Organizational citizenship behavior also includes behaviors that challenge the status quo and offer innovative suggestions for organizational improvement (see Van Dyne & LePine, 1998). Counterproductive work behaviors (as the name implies) detract from the organization's goals and mission and can include gossiping and spreading rumors about coworkers, engaging in actions that harass or harm others, taking extra-long breaks, and violating security procedures (see Rotundo & Sackett, 2002).

Meta-analytic investigations have shown that conscientiousness is related to various indices of task performance (e.g., Barrick & Mount, 1991) as well as to organizational citizenship and counterproductive work behaviors (e.g., Chiaburu, Oh, Berry, Li, & Gardner, 2011). Others of the Big 5 personality traits have also been implicated in organizational citizenship and counterproductive work behaviors. For example, Chiaburu and colleagues (2011) found that openness and agreeableness (and conscientiousness) were related to cooperative types of organizational citizenship behavior, and extraversion and openness (and conscientiousness) related to status quo-challenging types of organizational citizenship behaviors. Thus, as Lent and Brown (Chapter 22, this volume) summarized, it appears that employees who are dispositionally cooperative (agreeable) and open to new experiences and ideas (open) may be more likely to engage in the cooperative types of citizenship behaviors that are valued during performance appraisals. Persons who are outgoing and assertive (extraversion) and open to change (openness) may be more likely than less extraverted and open employees to effectively challenge the status quo when such behavior is called for. Conscientious employees (those who are goal directed, organized, planful, and achievement oriented) seem to have an advantage over less conscientious employees in all major performance domains that are considered by supervisors in employee appraisals.

Personality and occupational attainment. Large-scale prospective studies suggest that personality traits are not only related to employees' satisfaction and performance but also to their long-range occupational attainments (e.g., Roberts et al., 2003, 2007). The results of Roberts and colleagues' (2003)

study, presented earlier in the section on the stability of the Big 5, suggested that levels of emotional stability, extraversion, and conscientiousness displayed at age 18 predicted participants' subsequent (at age 26) levels of job satisfaction, employment success, and financial stability.

Roberts and colleagues (2007) meta-analytically combined the results of large-scale longitudinal studies on the relationships between the Big 5 personality traits and success in three important domains of human functioning: work, relationships, and health. Their analyses suggested that childhood levels of emotional stability, extraversion, agreeableness, and conscientiousness predicted attained occupational status 46 years later, even after controlling for childhood intelligence (Judge, Higgins, Thoresen, & Barrick, 1999). Further, Roberts and colleagues (2007) found that these Big 5 traits collectively accounted for as much variance in occupational attainment as intelligence and socioeconomic status.

Roberts and colleagues (2007) cited several processes that might explain how personality relates to occupational attainment. These processes include (a) niche finding (i.e., successful people find jobs that fit with their dispositions and personalities), (b) recruitment effects (e.g., people are selected into jobs and given preferential treatment on the basis of their personality characteristics), (c) environmental shaping (e.g., successful people change their work environments to better fit their personalities), (d) attrition effects (i.e., less well-fitting employees leave, or are asked to leave, the work setting), and (e) direct effects of personality on performance (e.g., certain personality characteristics like conscientiousness naturally give rise to higher levels of achievement via goal setting, self-efficacy, and perseverance, and people who possess these characteristics will achieve more at school and at work). The reader is referred to Roberts and colleagues (2007) for a more complete discussion of these processes. However, these findings clearly suggest that the Big 5 traits (especially emotional stability, extraversion, and conscientiousness and in certain conditions openness and agreeableness) relate in important ways to career development, choice, adjustment, and attainment across the life span. We next turn to the counseling, developmental, and preventive implications of these findings.

COUNSELING, DEVELOPMENTAL, AND PREVENTIVE IMPLICATIONS

It should be clear from our review that personality traits can influence, to some degree, persons' success at negotiating major tasks of career development and in finding satisfaction and success in their work environments. These data indicate that people's levels of emotional stability, extraversion, and conscientiousness are related positively to nearly every career-related outcome, including (a) engagement in career exploration and planning

activities; (b) development of a vocational identity; (c) facility at, and perceived efficacy in, making career decisions; and (d) subsequent levels of job satisfaction and occupational attainment. Neuroticism is also related negatively to the breadth of interests that adolescents and young adults display, and openness seems to have the opposite effect, that is, to broaden interests. Conscientiousness (along with extraversion) is also implicated in individuals' job-finding success, as well as in their work performance (i.e., task performance, organizational citizenship behaviors, and counterproductive work behaviors). Finally, several personality traits are also related to the content of persons' interests. Extraverted versus less extraverted people tend to display social and enterprising interests, and openness is associated with interests in artistic and investigative occupations. Agreeableness may serve to differentiate between interests in social versus enterprising occupations, and certain facets of openness may differentiate interests in artistic versus investigative occupations.

Although research (e.g., Roberts et al., 2007) also shows that personality traits account for only small amounts of variance in career outcomes (other aspects of the person and his or her context are also important), we find the data sufficiently compelling that we typically ask clients early in counseling (before or after the first session) to complete a measure of the Big 5 personality traits like the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992; see Rottinghaus & Hauser, Chapter 17, this volume). We then use the information provided by this assessment in two ways. First, we use personality information as another source of data to understand clients' presenting problems and help them, if necessary, find good-fitting occupations (i.e., help them find their niches). Second, we use the data to help us structure counseling to be most useful for clients.

ENHANCING UNDERSTANDING OF CLIENTS' PRESENTING CONCERNS AND NICHE FINDING

Research on career counseling applications of personality data is amazingly sparse and often not entirely helpful. We cite available research whenever possible in this section but mainly rely on our clinical experiences when drawing counseling implications. We have found that personality data can be useful by enabling career counselors to gain a fuller understanding of clients' presenting concerns (e.g., needing to make or remake a choice, find a job, achieve greater satisfaction or satisfactoriness at work). Information on clients' personalities, we think, may also provide a vehicle for incorporating preventive goals into career counseling.

In relation to establishing preventive goals, we have found it helpful to provide clients with opportunities to learn strategies to manage the effects

of their personalities on their lives. To accomplish such preventive tasks, we prefer, despite the data on trait stability, to view traits as a set of specific behaviors that, like most other behaviors, can be broken down into smaller segments and altered through observation and practice (see also Lent & Brown, Chapter 22, this volume). In other words, our experiences suggest that persons can learn to behave in trait-inconsistent ways when called for by the demands of their environments if counseling (a) helps them gain insights into how their personalities can affect the types of decisions they make and the experiences they have and (b) provides a safe environment in which to learn and practice trait-inconsistent behaviors. Although we have no empirical data to support this position, we illustrate in the remainder of this section strategies that we have used to promote the acquisition and use of trait-inconsistent behaviors. The reader is referred to Brown, Ryan, and McPartland (1996) and Lent and Brown (Chapter 22, this volume) for additional strategies.

Using personality data to gain a fuller understanding of clients' presenting concerns. Neuroticism, conscientiousness, and openness represent traits that can affect clients' abilities to make decisions and achieve satisfaction and success at work. They thus represent three good examples of how an understanding of clients' personalities can inform career counseling practice. They also provide examples of our prevention focus, that is, how we work to help clients learn to manage their personalities in their everyday interactions with their work and nonwork environments.

Although the exact mechanisms by which neuroticism influences decision-making abilities and job satisfaction are not fully understood, two central paths of influence that we have already discussed may be via the tendencies of more versus less neurotic individuals to (a) focus on the negative aspects of themselves, their choices, and environments and (b) use various avoidance strategies to cope with the anxiety and other negative feelings occasioned by such a style (see Brown et al., 2012). Thus, clients who score high (e.g., one standard deviation or more above the mean) on a measure of neuroticism may have trouble deciding on an educational or career option and see more negative than positive consequences associated with most options they have considered. As a result, such clients may have considered only a small number of occupational options and may even have settled on a less than optimal option as an avoidance strategy. Similarly, clients who are seeking help for problems of job satisfaction may, if they also score high on a neuroticism scale, view the conditions of their work environments (e.g., the amount of work required of them, the support they receive from supervisors and fellow workers, the clarity of their work roles) to be more troublesome than do less neurotic clients (see Lent & Brown, Chapter 22, this volume).

If assessment and interview results converge to confirm that neuroticism contributes to clients' choice-making problems, we typically discuss this with them and help them consider and weigh more carefully the positive consequences of various choice options. We also have them consider options they might have eliminated from consideration earlier in their lives and discuss with them their reasons for eliminating these options. We employ similar strategies with job-dissatisfied clients—help them consider the degree to which their negative cognitive style may color perceptions at work, evaluate the validity of these perceptions, and consider the validity of alternative ways of viewing their work environments (see Lent & Brown, Chapter 22, this volume).

For both types of clients (those seeking to make a choice and those experiencing work dissatisfaction), we also try to help them understand how their natural tendencies to focus on and magnify the negative aspects of their choices, jobs, and other aspects of life might have caused them difficulties in the past. We then suggest that this cognitive style can be managed by learning how to use these tendencies as cues to refocus their attention on more positive possibilities. We also assign homework between sessions to practice this set of skills to resolve the problem that brought clients to counseling (choice or dissatisfaction problems) and in other situations (e.g., relationships) they encounter. Although these strategies are unlikely to change clients' personalities substantially, they can provide clients with a set of skills they can use to manage the negative consequences of their personality traits (e.g., neuroticism) in the future (see Brown et al., 1996).

Conscientiousness is another personality trait that can influence the decision-making process. It can also influence clients' success in finding jobs and their performance appraisals at work. Clients who enter with decision-making problems and concomitant low levels of conscientiousness often need more help from counselors than others in gathering and processing information that will inform their decisions. They will also probably need more help and support in carrying out these tasks than more conscientious clients. Counselors working with clients experiencing performance problems at work and low levels of conscientiousness may need first to explore with clients the degree to which specific aspects of conscientiousness (e.g., lack of goal directedness or organization, poor time management or follow-through) may be contributing to unsatisfactory performance appraisals. We then help clients consider how they might alter these behaviors at work and whether their level of conscientiousness has contributed to other difficulties they have experienced in their lives. One focus of counseling becomes helping clients set goals to behave in more conscientious ways at work and in other areas of their lives. Although motivation to engage in such counter-trait behavior may be low for less conscientious clients, reframing such behavior

as alterable with practice may increase clients' motivation to enact such behaviors in work settings and elsewhere.

Clients with problems in the job search process may also need special assistance from counselors if they also display low levels of conscientiousness or extraversion. Specifically, they may need help (a) setting job search goals and actively pursuing these goals (conscientiousness) and (b) acquiring the self-efficacy beliefs, skills, and comfort required to access and make effective use of their social networks (extraversion). Such clients may also need more help in preparing for employment interviews than will more conscientious and extraverted clients. In these cases, too, we try to help clients consider how their levels of conscientiousness and introversion might have affected other areas of their lives and to develop strategies to manage trait-driven tendencies in the future.

Finally, clients scoring high on measures of openness may also seek help from career counselors, especially for issues involved in making or remaking career decisions. Although openness can provide people with greater decision-making flexibility because of their rather wide-ranging interests, it can also lead to decision-making confusion precisely for the same reason (i.e., wide-ranging interests). Thus, we have occasionally seen clients exhibiting high levels of openness who were seeking help to choose from a large number of occupational possibilities. We typically take a two-pronged approach in working with these clients. We first try to normalize their decision-making confusion by discussing with them how their levels of openness probably contribute to their current predicament, but that being highly open also has a number of more positive consequences (e.g., excitement about exploring new ideas, enthusiasm for trying on new roles and experiences, and heightened flexibility). We then provide assistance in decision making by supplementing vocational interest data with other sources of information (e.g., needs and values, abilities, role salience, lifestyle considerations, avocational interests). The outcome is often the identification of a best-fitting set of occupations for further exploration and a discussion about how clients can implement their wide-ranging interests in leisure and volunteer pursuits.

Using personality data to enrich niche-finding efforts. Clients' levels of extraversion and conscientiousness, as well as their openness and agreeableness, may also provide diagnostic information for helping clients identify good-fitting occupational possibilities. Extraversion, as we have previously discussed, is related to interest in social and enterprising activities and occupations. Thus, clients who display above-average levels of extraversion may be directed to consider these more people-oriented occupations. Their level of

agreeableness may then allow them to distinguish among people-oriented occupations. Persons displaying above-average levels of agreeableness may prefer social occupations (i.e., occupations involving helping and teaching that typically attract cooperative, sympathetic, and empathic individuals), while those scoring lower on a measure of agreeableness may find enterprising occupations more satisfying (i.e., occupations involving selling and persuading that attract more competitive individuals).

Openness, as we previously discussed, seems also to be related to client interests. Open individuals seem to be attracted to investigative and artistic occupations that allow for creativity, intellectual stimulation, and autonomy; those who are less open may prefer more conventional occupations that involve concrete work tasks. There is also evidence that different facets of openness differentiate investigative and artistic occupations: People with investigative interests (e.g., scientists) may be more open to new ideas than to feelings, and those with artistic interests seem especially to have high levels of aesthetic appreciation. Thus, personality information can complement interest, value, and ability data and enable clients to more readily identify their niches in the world of work.

Personality data can also be used in niche-finding efforts with persons who are experiencing adjustment problems due to incongruence between their personality traits and the requirements of their work environments. For example, agreeable persons working in competitive, enterprising work environments may find more satisfaction in a social environment that encourages cooperation and is more congruent with their personalities. Similarly, more introverted clients may find occupations that require substantial levels of social interactions or assertiveness less than satisfying places to work. A less than open person may find that working in occupations that require creativity, intellectual stimulation, and autonomy (investigative and artistic) to be a poor fit and a source of dissatisfaction. Finally, investigative occupations may be more appealing to people whose openness is primarily defined by openness to ideas rather than feelings, whereas artistic occupations may be better niches for those scoring highest on an aesthetics facet of openness.

For those who find themselves in environments that are not congruent with their personality traits, counseling can be directed at exploring ways to (a) modify the current work environment (e.g., find ways to be of service to others instead of competing with them) or (b) change to jobs or occupations that may offer a better fit with their personalities. Where neither of these options is viable, counseling may entail exploring nonwork outlets that better allow one to express one's personality than does the current work setting (see Lent & Brown, Chapter 22, this volume).

USING PERSONALITY DATA TO STRUCTURE SESSIONS AND IMPROVE EFFECTIVENESS

Personality data may also allow counselors to plan their sessions and work with clients more effectively. For example, counselors might anticipate that clients scoring high versus low on measures of neuroticism may have chronic problems in making important life decisions (Brown & Rector, 2008) and may bring with them a constellation of other characteristics (e.g., tendency to experience negative emotions and focus on negative outcome expectations) that require individual (rather than group) counseling of a longer than typical duration (see Brown & Ryan Krane, 2000). Some research has also suggested that high levels of neuroticism might cause people to settle prematurely (as an avoidance strategy) on a less than satisfying career choice (see Brown et al., 2012).

There are meta-analytic data suggesting that many clients respond well to four or five sessions of career counseling and that individual and group forms of counseling may be equally effective for many clients (e.g., Brown & Ryan Krane, 2000; Whiston, Brecheisen, & Stephens, 2003). However, our clinical experiences suggest that these data might not hold well for clients entering counseling with high levels of neuroticism and chronic indecisiveness (Brown & Ryan Krane, 2000). The first author, for example, once saw a client who displayed rather high levels of neuroticism (scored two standard deviations above the mean on the NEO-FFI Neuroticism scale) for 35 sessions of individual counseling that lasted approximately a year and a half. She also scored rather high on the NEO-FFI Conscientiousness scale and in the average ranges on the other three NEO-FFI scales. This client indicated early in counseling that she frequently felt a good deal of anxiety in making important decisions in her life and usually opted for the least threatening option in these situations. She had chosen her current career field because she had little doubt that she had the skills to perform adequately in it but was now seeking counseling because she was bored with her work and found it to be exceptionally unchallenging.

Interest, value, and ability data had converged by the fifth counseling session to suggest several more challenging occupational options; the client specifically noted that one of the options generated from these assessment data was one that she had fantasized about for a number of years. She chose as one goal in counseling to see if she could pursue this option. The next 30 sessions focused, in part, on (a) helping her develop goals for entry into this occupational field (e.g., acquiring the necessary education and persevering in these educational pursuits, generating support from her family and social networks), (b) supporting her as she implemented her goals, and (c) challenging her when she downplayed her accomplishments

and successes. Counseling also involved helping her learn to challenge her negative cognitive style. By the end of counseling, she had successfully completed her first semester of full-time graduate study, acquired a mentor in her field, and seemed to be making progress in managing her personality tendencies in school and other areas of her life.

Clients' levels of conscientiousness may also have implications for how counselors work with them. For example, clients displaying low levels of conscientiousness may not follow through on between-session activities as consistently as more conscientious clients. They might also fail to keep counseling appointments as frequently as their more conscientious peers (Costa & McCrae, 1992). The client discussed in the previous paragraphs who had also scored high on the NEO-FFI Conscientiousness scale attended every scheduled session over the 18 months of counseling and worked very diligently to establish and accomplish between-session (and long-term) goals. Thus, despite her high level of neuroticism, her conscientiousness seemed to facilitate substantially the successes she achieved in counseling. Others of the authors' clients who seemed to be less conscientious, however, have not fared as well and have required more strenuous efforts to keep them on track (even for those with other personality traits that would have suggested an easier course of counseling).

IMPLICATIONS FOR PREVENTIVE AND DEVELOPMENTAL INTERVENTIONS

As we have previously suggested, there appears to be a core set of personality traits (e.g., emotional stability, extraversion, and conscientiousness) that can have long-range effects on career development and occupational attainment. These core traits seem to be related to the amount of career exploration and planning undertaken by adolescents and young adults, as well as to their confidence in their abilities to make career decisions and to arrive at a satisfying career choice. These traits have also been shown to relate to different indices of career success in adulthood (e.g., work performance and satisfaction, occupational attainment, and financial stability). Openness has also been implicated in career exploration and planning success.

These data suggest to us that the behaviors and attitudes associated with these core traits may be important targets for early intervention efforts. It is not clear whether early intervention efforts will result in substantial personality changes (although they might, because traits seem to be more malleable in youth than in adults). However, the personality data do suggest that if we can help children and adolescents acquire more conscientious and extraverted ways of behaving, as well as more positive ways of viewing themselves and their futures, such efforts, if successful, might have long-term benefits for their work and personal lives and help them find their niches and grow their personalities.

CONCLUSIONS AND PRACTICE IMPLICATIONS

In summary, we have attempted to show how an understanding of clients' personalities (especially their levels of emotional stability, extraversion, openness, agreeableness, and conscientiousness) has implications for career counseling practice. The most important points that we tried to make in this chapter include the following:

- There appears to be a core set of traits (i.e., emotional stability, extraversion, and conscientiousness) that seem to be related to all major career development tasks and later occupational attainment. Openness also seems to be related to several outcomes, including vocational identity development, level of educational and career aspirations, involvement in career planning, decision-making flexibility, and willingness and ability to engage in organizational citizenship behavior at work.
- Although personality traits (including all of the Big 5 traits) show high levels of individual stability in adulthood, change is possible, especially if persons engage in, or are helped to engage in, trait-congruent experiences. Helping adolescents and young adults find their occupational niches may not only improve their lives but also help them develop their personalities in adaptive ways.
- Personality data might be collected routinely in counseling (at least as routinely as information on interests, values, and abilities are collected).
- Personality data, if routinely collected, can enrich the counseling process by providing important diagnostic information, facilitating clients' niche finding, and enabling counselors to better tailor counseling to the uniqueness of each client.
- Personality, though related to a variety of important career outcomes, accounts for only a small proportion of the variance in these outcomes. There are, therefore, a variety of other personal and contextual variables that influence career development and adjustment. However, helping clients find (at whatever age) their occupational niches (those places where their personalities, interests, values, and abilities can find a good-fitting home) may start them on the road to a more satisfying life, regardless of where they started out.

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