# PERSONALITY AND THE PREDICTION OF CONSEQUENTIAL OUTCOMES

## Daniel J. Ozer and Verónica Benet-Martínez

*Department of Psychology, University of California, Riverside, California 92521;*
*email: daniel.ozer@ucr.edu, veronbm@mail.ucr.edu*

**Key Words**   individual differences, traits, life outcomes, consequences

■ **Abstract**   Personality has consequences. Measures of personality have contemporaneous and predictive relations to a variety of important outcomes. Using the Big Five factors as heuristics for organizing the research literature, numerous consequential relations are identified. Personality dispositions are associated with happiness, physical and psychological health, spirituality, and identity at an individual level; associated with the quality of relationships with peers, family, and romantic others at an interpersonal level; and associated with occupational choice, satisfaction, and performance, as well as community involvement, criminal activity, and political ideology at a social institutional level.

## CONTENTS

## INTRODUCTION

What makes a personality characteristic important? While theory may direct attention to some variables, and factor analytic analyses of trait terms and measures might suggest other variables, the ultimate test of any individual difference

personality characteristic is its implicative meaning. Does the construct help us understand what people want, say, do, feel, or believe? Although personality characteristics have the capacity to predict individual differences in behavior within circumscribed laboratory contexts, such results are largely of theoretical interest unless the specific situation is one of compelling importance. But certain life outcomes and events are widely recognized as important—important for individuals and important for the society in which they live. Successful prediction of such consequential outcomes is a demonstration of the practical importance of personality that demands attention, and any successful theory of personality must account for those personality differences that have consequential implications.

Recent emphases in personality research have included personality structure, personality process, and personality stability and change (see, for example Caspi et al. 2005, Cervone 2005). Each of these topics has been a core concern of personality psychology throughout its history. But these topics do not directly address what we understand to be the source of abiding interest in individual differences in character and temperament since antiquity. Personality matters, not just in ways that interest the differential psychologist or those attached to a "romantic" conception of human nature (Hofstee & Ten Berge 2004), but also in ways that matter to most people and policy makers.

There is not and probably never will be some final list of important life outcomes. There will always be disagreement about what makes an outcome consequential or important, and such disagreement will not be resolved by new data or advances in theory. Beliefs about what are important life outcomes are not simply value-laden, but are constitutive of values. So we make no claim that all of the outcomes we examine will be regarded as universally important, or that we have included all of the important outcomes that might be nominated. Rather, we suggest that most of our readers will find most of the outcomes we discuss to be of consequence in their own lives. We assert, without providing evidence, that most people care about their own health and well being, care about their marital relationships, and care about success and satisfaction in their career. These may not be outcomes understood as universally important across time and culture, but neither are they concerns unique to our own venue of southern California at the start of the twenty-first century.

What personality characteristics might be used to forecast consequential life outcomes, and what characteristics might best serve to enable a useful summary of the current literature? Personality psychology is now in the fortunate position to offer the same answer to both questions: The broad superordinate dimensions (extraversion, agreeableness, conscientiousness, neuroticism, and openness or intellect) of the Five Factor Model of Personality (John & Srivastava 1999) are now widely used in the personality and prediction literature, and studies that utilize different dimensions often reference these dimensions of the Big Five model. Of the many different kinds of units used in personality psychology (Hooker & McAdams 2003), trait dimensions, by virtue of their context independence and noncontingent nature, should be most useful for predicting the multiply determined outcomes that arise from the natural aggregation of acts and events as they occur through time

and across situations. More contingent and context-specific units may well be required to understand the mechanisms by which traits and outcomes are related; but that is not the present task. Alternatively, there is much to be said for the use of narrow traits and more focused predictor variables (Paunonen et al. 2003). From the perspective of maximizing accuracy in prediction, using multiple, narrow trait measures is likely to be more effective than using fewer broader measures. But there is no consensus about what might constitute even the beginning of a comprehensive list of narrow traits. Ideally, prediction would utilize a consistent set of broad superordinate dimensions (like the Big Five) plus whatever narrow predictors provided incremental validity for specific outcomes. Identifying narrow predictors for specific outcomes with incremental validity above the Big Five as a criterion is a research endeavor only now really getting underway. There is yet another reason to focus on the prediction of outcomes from the Big Five: Further refinement of these factors might best be pursued by attending to the structure of the external correlates of the factors (as Gangestad & Snyder 2000 show for the case of self-monitoring) rather than solely on the structure of the factor indicators.

In our review of the literature, we characterize three different types of outcomes: Individual, interpersonal, and social/institutional. By individual outcomes, we mean those outcomes that can be manifested by an individual outside of a social context, in contrast to interpersonal outcomes that inherently involve other individuals. Moreover, this involvement is personal in a sense: It generally matters who the other is. By social/institutional outcomes, we mean more impersonal, organizational, and sometimes, societal-level processes involving interactions with more generalized others. These distinctions are as much a convenience for organizing a vast literature as they are a claim about the structure of consequential life outcomes.

## INDIVIDUAL OUTCOMES

By individual outcomes, we mean those that do not inherently depend upon a social process in order to define or give meaning to the outcome variable. Physical health and psychopathology are routinely understood as individual outcomes, while the inclusion here of happiness, spirituality, and virtue reflects the growing influence of positive psychology. Although these variables might be understood as features of personality rather than outcomes influenced by personality, we would argue that conscientiousness (to choose the most difficult trait for our view) as a virtue and conscientiousness as a trait are not quite the same things, though they clearly are related. Someone might be conscientious (in the trait sense) for purely instrumental purposes, and this would not constitute a virtue under at least some conceptions of that term.

Identity and self-concept, understood as outcomes, provide the greatest challenge to this kind of organizational scheme. The role of the individual, important others, and the larger social environment most certainly play a part in the

development of self and identity; but ultimately, we believe that individuals experience aspects of their identity as a part of themselves, and so we include identity as an individual outcome.

## Happiness and Subjective Well-Being

Few topics have attracted as much recent attention in personality psychology as the study of subjective well-being (SWB), persons' evaluations of their own lives (Diener et al. 1999). SWB includes both a cognitive component, such as a judgment of one's life satisfaction (Diener et al. 1985), and an affective component that includes the experience of positive and absence of negative emotions (Larsen 2000). Two robust conclusions from studies in this area are that personality dispositions are strong predictors of most components of SWB (see Diener & Lucas 1999 for a review), and demographic and contextual factors, including age, sex, marital status, employment, social class, and culture, are only weakly to moderately related to SWB (Diener et al. 1999, Ryan & Deci 2001).

Studies trying to unpack the link between personality dispositions and SWB mainly point to the relations between certain largely genetic, affective/cognitive traits related to neuroticism and extraversion (e.g., positive and negative affect, optimism, self-esteem) and the way individuals appraise and react to environmental rewards and punishments (DeNeve & Cooper 1998). Specifically, individuals high in extraversion and low in neuroticism tend to see events and situations in a more positive light, are less responsive to negative feedback, and tend to discount opportunities that are not available to them. Individual differences in conscientiousness, agreeableness, and openness to experience are less strongly and consistently associated with SWB, mostly because these traits sources reside in "rewards in the environment" (Diener & Lucas 1999). In summary, SWB is strongly predicted by personality traits that are largely a function of temperament (i.e., extraversion and neuroticism) and moderately predicted by personality dispositions significantly driven by environmental influences (conscientiousness, agreeableness, and openness to experience).

Recent cross-cultural studies of SWB (Benet-Martínez & Karakitapoglu-Aygün 2003, Kwan et al. 1997, Schimmack et al. 2002) shed light on some possible moderator and mediator variables in the relation between personality factors and SWB. First, the links between both extraversion and neuroticism and SWB are moderated by culture. In individualist societies like the United States, where pleasure and positive mood are highly emphasized and valued, hedonic balance (i.e., the ratio of positive to negative affect) is a particularly strong predictor of SWB (Schimmack et al. 2002). Secondly, across cultures, the links between the Big Five and SWB are largely mediated by intra- and interpersonal esteem evaluations. Specifically, self-esteem appears to be a powerful mediator of the influence of extraversion, neuroticism, and conscientiousness on SWB, whereas relational esteem (i.e., satisfaction with relationships with family and friends) mediates the influence of agreeableness and extraversion on SWB (Benet-Martínez & Karakitapoglu-Aygün 2003, Kwan

et al. 1997). Although the relative weights of self-esteem and relationship harmony in predicting SWB vary across cultures (e.g., self-esteem is a uniquely important predictor in Western cultures), the weights of each of the Big Five dimensions on self-esteem and relationship harmony seem to be cross-culturally equivalent (Benet-Martínez & Karakitapoglu-Aygün 2003, Kwan et al. 1997).

## Spirituality and Virtues

There is very little research directly investigating the relation between personality dispositions and variables referring to religious or spiritual concerns. This lack of attention to spiritual matters in personality psychology is puzzling for two reasons, as described by Emmons (1999): First, personality psychologists such as Allport and Murphy were among the first to study religion and spirituality from a psychological perspective. Despite this early interest in spirituality, the topic fell out of favor in the 1960s and 1970s, as various controversies flourished. Second, personality psychology's neglect of spirituality has occurred in the context of a discipline centrally concerned with understanding the whole person, a concern that undoubtedly involves understanding what is meaningful to the person and how this meaning is experienced as bringing growth and transcendence to one's life. Emmons (1999) argues that spiritual and religious goals and practices are not only a distinctive element of a person's beliefs and behaviors; for many, religious beliefs and practices may be a central theme of their identity.

Piedmont (1999, 2004) developed a measure of spiritual transcendence, with universality, connectedness, and prayer fulfillment subscales, that is unrelated to the traits of the Five Factor Model and has incremental validity in predicting post-treatment symptoms and coping resources in an outpatient substance abuse sample. MacDonald (2000) also explored the links between basic personality traits and spiritual concerns and behaviors. Five distinct components are identified and described by MacDonald: cognitive orientation (perceptions and attitudes regarding spirituality), experiential/phenomenological (mystical, transcendental, and transpersonal experiences), existential well-being (a sense of meaning, purpose, and resilience regarding one's existence), paranormal beliefs (including ESP and other paranormal phenomena), and religiousness (religious practices). These five components are differentially related to the Big Five personality constructs but are not subsumed by them. In particular, the religiousness and cognitive orientation components were most notably predicted by agreeableness and conscientiousness. Not surprisingly, the experiential/phenomenological and paranormal components were predicted by openness, while existential well-being was strongly predicted by extraversion and low neuroticism.

Recent theoretical work on the classification and delineation of core character strengths and virtues—which can be grouped in terms of their relevance to wisdom, courage, humanity, justice, temperance, and transcendence (Peterson & Seligman 2002)—convincingly relates most of these attributes to different sets of personality dispositions. Clearly, certain traits facilitate or impede the development of specific

strengths and virtues (e.g., agreeableness facilitates compassion, conscientiousness facilitates perseverance, openness fosters creativity), while at the same time the cultivation of these virtues consolidates the very same personality dispositions from which these virtues sprang. Although most of the aforementioned personality-virtue links have yet to be examined empirically, the following virtues have been shown to have clear associations with personality: gratitude (extraversion and agreeableness; McCullough et al. 2002), forgiveness (agreeableness and openness; Thompson et al. 2005), inspiration (extraversion and openness; Thrash & Elliot 2004), and humor (low neuroticism and agreeableness; Cann & Calhoun 2001).

## Physical Health and Longevity

Personality traits have a stable and cumulative effect on both the health and length of individuals' lives (Caspi et al. 2005). With regard to longevity, studies show that positive emotionality (extraversion) and conscientiousness predict longer lives (Danner et al. 2001, Friedman et al. 1995), and hostility (low agreeableness) predicts poorer physical health (e.g., cardiovascular illness) and earlier mortality (Miller et al. 1996). The relation between neuroticism and health and longevity is more complex, given that some studies support an association between neuroticism and increased risk of actual disease, whereas others show links with illness behavior only (Smith & Spiro 2002). The link between personality and health may reflect three different though overlapping processes (Contrada et al. 1999). First, personality traits are associated with factors that cause disease. The hostility component of low agreeableness (i.e., anger, cynicism, and mistrust) is associated with sympathetic nervous system activation that is in turn associated with coronary artery disease (Smith & Spiro 2002). Whether personality has a causal role or whether the association is spurious remains unclear (Caspi et al. 2005). Second, personality may lead to behaviors that protect or diminish health. Extraversion is associated with more numerous social relationships and greater social support, both of which are positively correlated with health outcomes (Berkman et al. 2000). Various unhealthy habits and behaviors including smoking, improper diet, and lack of exercise are negatively correlated to conscientiousness (Bogg & Roberts 2004, Hampson et al. 2000). Last, personality traits are related to the successful implementation of health-related coping behaviors (David & Suls 1999, Scheier & Carver 1993) and adherence to treatment regimens (Kenford et al. 2002). The increasing evidence for these three personality-health processes is clarifying the particular health outcomes associated with particular traits (Caspi et al. 2005): Agreeableness (e.g., hostility) seems to be most directly associated with the disease processes, conscientiousness (e.g., low impulse control) is clearly implicated in health-risk behaviors, and neuroticism (e.g., vulnerability and rumination) seems to contribute to disease by shaping reactions to illness.

Finally, in contrast with the more traditional medical approach to personality and health, which tends to focus on "negative" traits such as anxiety, hostility, and impulsivity, positive psychology research informs us about personality

traits that define resiliency (e.g., optimism, self-esteem, creativity), predict health, and represent important resources for the individual and society (Seligman & Csikszentmihalyi 2000). There is growing evidence that the positive emotions and dispositions subsumed by the extraversion dimension lead to improved coping and the development of psychological skills and resources (Fredrickson & Joiner 2002).

## Psychopathology

The previously described links between personality and SWB are not sufficient for understanding the relation between personality and psychopathology (e.g., personality disorders, clinical depression, and schizophrenia). This is so because SWB is not synonymous with mental or psychological health (Diener et al. 1999). Some delusional individuals may feel happy and satisfied with their lives, and yet we would not say that they possess mental health.

Recent research demonstrates strong links between the personality dispositions and both Axis I and II psychological disorders. Specifically, substance abuse disorders are largely predicted by higher openness and lower conscientiousness (Trull & Sher 1994). Anxiety disorders are primarily predicted by higher neuroticism, and depression is mostly linked to neuroticism and low extraversion (Trull & Sher 1994). Associations between personality traits and Axis II disorders are even more evident given the growing prevalence of dimensional conceptualizations of personality disorders. Dimensional models of personality disorders suggest that they may be understood as extreme expressions of personality traits (Trull & Durrett 2005). It is apparent that personality disorders have substantial associations with the five factors; neuroticism has the strongest relationship with personality disorders, whereas openness to experience has only a modest relationship.

## Self-Concept and Identity

While many psychologists would understand self-concept and identity to be an integral part of personality, how one characterizes oneself, the groups one belongs to, and the goals and values one possesses may be understood as outcomes as well. The structure of social and personal identifications, goals, and priorities that constitute self and identity (Marcia 1980) may be understood not only as a function of life experience and cultural context, but also as a domain where personality dispositions play a part. How do personality traits influence self-concept and identity? Work in this area shows that personality traits affect the formation of identity, while at the same time identity both directs and becomes a part of personality through exploration and commitment processes in identity development (Helson & Srivastava 2001). Clancy & Dollinger (1993) have shown robust relations between personality traits and Marcia's (1980) four categories of identity development (achieved, moratorium, diffuse, and foreclosed). Specifically, foreclosure is predicted by low levels of openness to experience; identity achievement is predicted by low neuroticism, conscientiousness, and extraversion. Both moratorium and diffusion stages involve neuroticism. Additionally, diffusion is inversely related to

agreeableness. Openness to experience may be the most important personality trait in terms of impact on identity development (Duriez et al. 2004, Helson & Srivastava 2001).

Furthering this typological approach to identity, recent longitudinal studies have explored the interactive roles of personality and identity over the life span, while focusing on more complex identity constructs such as identity consolidation (development of a coherent, grounded, and positive identity; Pals 1999) and identity integration (Helson & Srivastava 2001). This work shows that identity consolidation is predicted by an early configuration of personality traits related to openness to experience (desire for exploration and stimulation), low neuroticism (low rumination), and conscientiousness (ambition). This pattern of personality traits leads to an organized and committed yet flexible exploration of identity, which in turn predicts well-being. These identity choices lead to particular personal and professional choices that consolidate earlier personality traits (Helson & Srivastava 2001, Pals 1999). The influence of personality traits is seen both at the level of narrower, cognitive, identity-relevant processes such as identity language (Pennebaker & King 1999), autobiographical memories (Thorne & Klohnen 1993), and self-concept clarity (Campbell et al. 1996), as well as at the broad level of life story narratives (McAdams 2001).

Personality dispositions also influence more contextualized types of identities, such as cultural identity. For example, among immigrants, ethnic cultural identity is mainly predicted by conscientiousness and agreeableness (i.e., warmth and commitment towards one's culture of origin), whereas identification with the dominant host culture is largely predicted by openness and extraversion (Benet-Martínez & Haritatos 2005, Ryder et al. 2000). Further, supporting other studies on identity consolidation, openness to experience and low neuroticism predict the degree to which an individual's ethnic and mainstream identities are well integrated within a coherent sense of self (Benet-Martínez & Haritatos 2005).

## INTERPERSONAL OUTCOMES

One of the most important tasks faced by individuals is the establishment and maintenance of successful relationships with friends and peers, family members, and romantic partners. Relationships do have emergent properties, but the nature and quality of the relationship nonetheless is partially shaped by the dispositions and skills of the individuals involved. The length and quality of most relationships is predicted by socioemotional competence (or socioemotional intelligence), a broad cognitive, affective, and behavioral construct typically operationalized in terms of social skills (e.g., ability to engage and effectively maintain social interaction), emotional skills (expression, empathy, regulation), popularity, and relationship satisfaction (Bost et al. 1998, Cantor & Kilstrom 1987).

Although socioemotional competence involves personality characteristics related to all the Big Five domains (Sjöberg 2001, van der Zee et al. 2002, Vollrath

et al. 2004), the strongest personality links are shown for the components of empathy, which seems to be primarily a combination of extraversion and agreeableness, and emotional regulation, which is best predicted by low neuroticism. The above personality–social behavior links are robust and interesting but too broad for an adequate understanding of the role played by personality in more specific types of relationships, including family, peer, and romantic relationships, as we describe below.

## Peer and Family Relationships

Much of the research examining personality and its role in friendships and peer relations has been conducted with children and adolescents. Given how much time children spend at school and playing with friends, understanding how children and adolescents successfully establish and maintain friendships is important for its own sake (i.e., to predict personal and school adjustment) and also because social adjustment in childhood has been shown to be a very strong predictor of the quality of relationships in adulthood (Parker & Asher 1987).

Of all of the Big Five dimensions, agreeableness and extraversion are the best predictors of processes and outcomes related to peer relations in children, such as peer acceptance and friendship (Jensen-Campbell et al. 2002). Specifically, low agreeableness (hostility) and low extraversion (being withdrawn) are associated with rejected peer status (Newcomb et al. 1993). These findings are not surprising given that both agreeableness and extraversion are related to motives and skills necessary to build and maintain satisfying relations with peers. Longitudinal studies of peer relations in children show that the benefits of agreeableness accumulate over time by protecting children from victimization (Jensen-Campbell et al. 2002).

Personality also affects the quality of the relationship young adults have with their parents. These intergenerational relationships are negatively affected by young adults' neuroticism, low conscientiousness, and low extraversion (Belsky et al. 2003). These findings support the notion that the very same life events and experiences that affect intergenerational relationships in young adulthood (e.g., timing of parenthood, when the young adult leaves home, or length of unemployment) could be a function of earlier and concurrent personality traits (Caspi et al. 2005).

Surprisingly few studies have examined the personality predictors of popularity, status, and peer acceptance in adulthood. This is unfortunate since these social outcomes (i.e., amount of respect, influence, and prominence a person enjoys in the eyes of others) presumably influence professional and personal social networks and support. Most of the available evidence points to extraversion (but not agreeableness) as the most important predictor of popularity and status among adults. Paunonen (2003), for instance, finds evidence that extraversion is related to popularity, dating variety, and self-reported attractiveness. The Anderson et al. (2001) study of the links between personality and status also supports extraversion as the main predictor of social acceptance, concurrently and over time, and for both

sexes. This study is also informative regarding the role (or lack thereof) played by the other Big Five dimensions in adult peer relations: Neuroticism appears to be a (negative) predictor of status among men only, supporting the traditional gender role expectation that men who feel anxious and vulnerable are less deserving of status and respect (Anderson et al. 2001). Agreeableness does not predict status for either women or men, which supports the socioanalytic notion that status (or "getting ahead") may be inimical to "getting along" (Hogan 1983). Status is un-related to either conscientiousness or openness in informal groups; however, as noted by Anderson et al. (2001), conscientiousness may play a role in more formal organizations and professional groups, where task performance and achievement play a central role.

## Romantic Relationships

Some of the richest evidence for the consequentiality of personality dispositions with regard to interpersonal relations stems from longitudinal studies exploring the links between adult personality and romantic relationships. Attaining and main-taining a satisfying romantic relationship is a central feature of most adult lives, and such relationships play a key role in fostering emotional well-being and physical health (Berscheid 1999). Do personality dispositions explain why some individu-als are involved in satisfying romantic relationships, whereas others are involved in less satisfying and more distressed relationships?

Neuroticism and low agreeableness consistently emerge as predictors of neg-ative relationship outcomes such as relationship dissatisfaction, conflict, abuse, and ultimately dissolution (Karney & Bradbury 1995). Naturally, the predisposi-tion to easily experience anger and frustration, distress, and anxiety is potentially destructive for relationships (although see Gottman 1994 for a discussion of how interpersonal conflict may not always be detrimental in intimate relationships). Relationship quality is directly affected by neuroticism (Donnellan et al. 2005); this relation between neuroticism and relationship dissatisfaction involves a recip-rocal process such that negative emotions increase relationship distress, which in turn accentuates negative emotionality (Robins et al. 2002). These effects seem to be consistent across relationships, as neuroticism and low agreeableness predict dissatisfaction across relationships with different partners (Robins et al. 2002). Longitudinal evidence shows that personality traits predict not only concurrent relationship outcomes, but also future ones (Donnellan et al. 2005).

Recent multimethod research with dyads shows that the link between person-ality and relationship status and quality is more than an artifact of shared method variance arising from self-report measurement procedures (Donnellan et al. 2004, Watson et al. 2000). Watson et al. (2000) used both self-ratings and partner ratings of personality in both dating and married samples. Positive and negative affect were related to relationship satisfaction in the predicted direction in both samples. Con-scientiousness and agreeableness predicted satisfaction in dating couples, whereas extraversion predicted satisfaction in the married couples.

In general, there appears to be modest to moderate assortative marriage across a wide range of psychological characteristics (e.g., intellectual abilities, values, political attitudes, and religious beliefs) and sociodemographic variables (e.g., age, education). But recent studies of personality and assortment indicate low levels of partner similarity in personality (Gattis et al. 2004, Luo & Klohnen 2005, Watson et al. 2004). It is not clear whether spouse similarity and relationship satisfaction are related, with some studies suggesting a positive relation (e.g., Luo & Klohnen 2005), whereas others (Gattis et al. 2004) report that personality similarity does not independently predict relationship satisfaction.

Finally, it is important to note that personality dispositions, besides predicting romantic relationship outcomes such as quality, satisfaction, and length, also influence relationship-relevant cognitive-motivational mechanisms such as attitudes, goals, and emotional scripts that people bring to their romantic relationships. Traits from all the Big Five domains have been related to attachment styles (Shaver & Brennan 1992), dating attitudes and behavior (Schmitt 2002), and love styles (Heaven et al. 2004).

## SOCIAL/INSTITUTIONAL OUTCOMES

In this section, we examine three outcomes in the world of work and occupation: vocational interests, work satisfaction, and job performance. These three outcomes subsume the basic components of work of interest to psychology: What kind of work is preferred, how well is it performed, and how much satisfaction is attained? There has been a surge of recent interest in the relation between personality and political attitudes and ideology, giving proof to the longevity and fruitfulness of the construct of authoritarianism. Criminality and community involvement are also discussed below, representing the extremes of antisocial and prosocial societal outcomes.

### Occupational Choice and Performance

Organizations and institutions require individuals to fill specific roles that require different skills and bestow different rewards. Individuals seek, to varying degrees, roles that provide personal satisfaction and reward. This is most clearly true in the context of individuals' work, occupation, and relation with an employer, but is also true in their relations with their community, though here arrangements may be much less formal.

Two recently completed meta-analyses (Barrick et al. 2003, Larson et al. 2002) examining the relation between personality traits and occupational types concurred in finding that extraversion was related to social and enterprising occupational interests, agreeableness to social interests, and openness to investigative and artistic interests. Neuroticism was not related to any occupational interest. Barrick et al. (2003) (but not Larson et al. 2002) reported conscientiousness to be related to

conventional interests. Personality traits appear to broadly influence occupational interests and choices.

The meta-analytic finding that conscientiousness predicts job performance reported by Barrick & Mount (1991) was broadly influential. Research examining job and occupational variables began to include personality and especially Big Five measures, and personality researchers began to examine the consequential meaning of the five factors. Barrick et al. (2001) performed a meta-analysis of the meta-analytic studies of the relation between job performance and Big Five personality traits. Conscientiousness predicts performance, assessed in various ways, in all included occupations. Smaller, though nearly as broad, effects were found for extraversion and emotional stability—which seem important for some, though not all, occupational groups—while only weak and narrow effects for agreeableness and openness were identified. So, for example, agreeableness relates to job performance when a teamwork criterion is used. Perhaps the most well known occupation-specific measure of job performance is grade point average for students, and it can hardly be a surprise to find a positive relation between GPA and conscientiousness (Paunonen 2003). Another educational outcome, the number of years of education, is related to intellect, or openness (Goldberg et al. 1998).

Although job performance is inarguably an important outcome from the standpoint of the employer, the employees may be more concerned with their feelings about work and their perceptions of the workplace. The meta-analysis of Thoresen et al. (2003) examined work attitudes and job perceptions and their relation to positive and negative affect. For present purposes, equating these affect variables with extraversion and neuroticism is straightforward because (*a*) studies using measures of extraversion and neuroticism included in the meta-analysis were so coded, and (*b*) a trait-state moderator variable had little effect. The results of Thoresen et al. (2003) show that extraversion and emotional stability are associated with job satisfaction and organizational commitment, and are negatively related to a wish to change jobs and with outcomes associated with burnout. Conscientiousness may best predict how well one does at work, but extraversion and emotional stability are more important for understanding how one feels about work.

Career success may be understood as having both extrinsic (e.g., salary and authority) and intrinsic (satisfaction) components. In longitudinal data, both extrinsic and intrinsic career success were predicted by childhood conscientiousness, openness, and emotional stability. When controlling for other personality variables, agreeableness was negatively related to extrinsic success (Judge et al. 1999).

Roberts et al. (2003) report that personality assessed in late adolescence affects various workplace experiences and outcomes in early adulthood. Emotional stability (negative emotionality) is most strongly related to financial security; agreeableness (positive emotionality-communion) is related to occupational attainment. Resource power and work involvement are predicted by extraversion (positive emotionality-agency).

## Political Attitudes and Values

Although political attitudes may be most frequently understood as predictor rather than outcome variables, the political attitudes and beliefs of individuals in a democratic society may affect social policies in diverse and consequential ways. Certainly, candidates for public office and those who financially support these candidates appear to believe that political attitudes are important. Since the publication of *The Authoritarian Personality* (Adorno et al. 1950), linkages between personality and political beliefs have been of considerable interest. Saucier's (2000) analysis of the broad domain of social and political attitudes ("isms") suggests that openness is related to the content of social attitudes, with political conservativism and right-wing authoritarianism being negatively related to this personality characteristic. Heaven & Bucci (2001) also report this negative association between openness and right-wing authoritarianism. Van Hiel et al. (2004) report this same negative correlation between openness and conservative political beliefs, as well as smaller relations between these same beliefs and low agreeableness and conscientiousness.

Jost et al. (2003a) integrate personality characteristics within a motivated social cognition approach to understanding political conservativism, and their meta-analysis suggests that death anxiety, dogmatism–intolerance of ambiguity, and the needs for order, structure, and closure are positive correlates of conservativism, whereas negative correlates include openness to experience, uncertainty tolerance, and integrative complexity. These traits, individually and as a set, suggest a susceptibility to a fear of uncertainty that may be assuaged by political conservativism. Greenberg & Jonas (2003) object to the Jost et al. (2003a) claims, posing an alternative conception of conservativism and suggesting that other political points of view may also serve the same psychological function. In their view, the rigidity or fixedness of one's political point of view is independent of the left-versus-right content of political belief. Jost et al. (2003b) respond both by considering the temporal context of political movements and by directly pitting a "rigidity-of-the-right" hypothesis against the alternative "ideological extremity" hypothesis. The evidence reviewed by Jost et al. (2003a,b) is more consistent with associating conservativism rather than extremity of belief with psychological rigidity, though some studies do suggest that both processes may be involved. One of the next challenges would appear to be to examine extreme liberalism to determine when rigidity does, and does not, come into play.

One might also ask whether specific substantive features of conservative ideology are associated with particular person attributes. Van Hiel & Mervielde (2004) found political conservativism to be negatively related to openness, and their data suggest that this relationship is apparently more a function of cultural than of economic conservative beliefs.

When it comes to candidates and elections, Caprara & Zimbardo (2004) describe a model of the political process that depends directly and considerably on the personalities of voters and their perceptions of candidates' personalities. They

report that those supporting more liberal candidates describe themselves and the candidates they prefer as higher on openness and agreeableness, whereas those who support more conservative candidates describe themselves and the candidates they support as more extraverted and conscientious. This congruency involving the perceived personality of the politician, the personality of the voter, and the ideological preferences of the politician and the voter suggests a deep involvement of personality in the political process.

## Volunteerism and Community Involvement

Among the more socially important kinds of outcomes that might be imagined are prosocial behavior and volunteerism. Clearly, there are important differences among people in their willingness to get involved in helping others, both in formal contexts of volunteering and social service as well as in less planned, everyday acts of helping. Penner et al. (1995) have developed a measure of prosocial behavior that includes an other-oriented empathy scale that correlates strongly with agreeableness. Helpfulness, a second factor on Penner's measure, appears more related to extraversion. These interpersonal traits are related to a wide variety of prosocial behaviors and volunteerism (Penner 2002). The link between volunteerism and the interpersonal traits of extraversion and agreeableness was also found in a large college student sample (Carlo et al. 2005), where there is some evidence that the trait-behavior link was mediated by prosocial motivation.

Extraversion and agreeableness not only predict community involvement, but these same traits also seem to predict who assumes a leadership role. The interpersonal traits of extraversion and agreeableness are positively associated with a transformational leadership style among community leaders (Judge & Bono 2000).

## Criminality

Criminal activity lies at the opposite end of the spectrum of community involvement, but it is not simply the opposite or lack of altruism. Krueger et al. (2001) found that antisocial behavior and altruism are distinct, with different origins and correlates. In contrast to the involvement of extraversion in prosocial behavior, antisocial behavior was associated with low constraint and negative emotionality (low conscientiousness and neuroticism).

Low conscientiousness seems to be consistently associated with various aspects of criminal and antisocial actions: It is related to behavior problems in adolescent boys (Ge & Conger 1999), antisocial behavior (Shiner et al. 2002), deviance and suicide attempts (Verona et al. 2001), and along with low agreeableness, low conscientiousness is associated with substance abuse (Walton & Roberts 2004). Wiebe (2004) reports that low agreeableness and low conscientiousness predict criminal acts in college student and in prison samples. But Wiebe (2004) also warns that self-deception and/or other deception may importantly attenuate the ability to predict criminal acts from self-reported personality traits.

**TABLE 1**  Summary of the relation between personality traits and consequential outcomes*

| | Individual outcomes | Interpersonal outcomes | Social institutional outcomes |
|---|---|---|---|
| Extraversion | Happiness: subjective well-being<br>Spirituality & virtues: existential well-being, gratitude, inspiration<br>Health: longevity, coping, resilience<br>Psychopathology: (−) depression, (−/+) personality disorders<br>Identity: majority culture identification (for minorities) | Peer & family relations: peers' acceptance and friendship (children and adults); dating variety, attractiveness, status (adults)<br>Romantic relations: satisfaction | Occupational choice & performance: social and enterprising interests, satisfaction, commitment, involvement<br>Community involvement: volunteerism, leadership |
| Agreeableness | Spirituality & virtues: religious beliefs and behavior, gratitude, forgiveness, humor<br>Health: longevity: (−) heart disease<br>Psychopathology: (−/+) personality disorders<br>Identity: ethnic culture identification (for minorities) | Peer & family relations: peers' acceptance and friendship (children)<br>Romantic relations: satisfaction (dating couples only) | Occupational choice & performance: social interests, job attainment, (−) extrinsic success<br>Community involvement: volunteerism, leadership<br>Criminality: (−) criminal behavior |
| Conscientiousness | Spirituality & virtues: religious beliefs and behavior<br>Health: longevity, (−) risky behavior<br>Psychopathology: (−) substance abuse, (−/+) personality disorders<br>Identity: achievement, ethnic culture identification (for minorities) | Peer & family relations: family satisfaction<br>Romantic relations: satisfaction (dating couples only) | Occupational choice & performance: performance, success<br>Political attitudes & values: conservatism<br>Criminality: (−) antisocial and criminal behavior |
| Neuroticism | Happiness: (−) subjective well-being<br>Spirituality & virtues: (−) existential well-being, (−) humor<br>Health: (−) coping<br>Psychopathology: anxiety, depression, (+/−) personality disorders<br>Identity: (−) identity integration/consolidation | Peer & family relations: (−) family satisfaction, (−) status (males only)<br>Romantic relations: dissatisfaction, conflict, abuse, dissolution | Occupational choice & performance: (−) satisfaction, (−) commitment, (−) financial security, (−) success<br>Criminality: antisocial behavior |
| Openness | Spirituality & virtues: existential/phenomenological concerns, forgiveness, inspiration<br>Psychopathology: substance abuse<br>Identity: (−) foreclosure, identity integration/consolidation, majority culture identification (for minorities) | | Occupational choice & performance: investigative and artistic interests, success<br>Political attitudes & values: (−) right-wing authoritarianism, liberalism |

*Note: (−) indicates a negative relation between the trait and outcome.

## CONCLUSION

In discussing the relation between personality characteristics and consequential outcomes, we have not attempted to evaluate effect size. The various meta-analyses cited here provide such estimates, and in not noting the specific results, we do not wish to suggest that such quantitative indicators are unimportant. However, making fine distinctions about the relative sizes of particular effects may be largely premature, and we wish to emphasize a rather different consideration. Any nonzero effect of a personality characteristic on most of the outcome measures we describe would be a large effect in practical terms. In parallel to the argument of Abelson (1985), it should be clear that even if the relation between agreeableness and volunteerism is small, then even a small change in mean agreeableness scores might increase by thousands the number of volunteers serving community needs in AIDS clinics and elsewhere. Our claim is not that personality effects are "large" at a completely disaggregated level of analysis (i.e., the prediction of what one person will do on a particular occasion), but rather that personality effects are ubiquitous, influencing each of us all the time, and when aggregated to the population level such effects are routinely consequential.

Our account of specific outcomes associated with personality factors is summarized in Table 1. At first glance, it is apparent from the table that each of the five superordinate traits is broadly implicative. It would be impossible, simply from the summary of the evidence as presented in Table 1, to claim that any of the five traits has a narrow and circumscribed set of correlates. There is, in fact, but one empty cell in the table: Openness as yet has no well-documented effects in the interpersonal domain that we were able to locate. Any nominee for a sixth factor should possess the same kind of breadth in its external correlates as shown by the present five. This is not to say that additional variables outside of the five-factor structure are not useful in prediction. But the expectation, at present, is that such a variable will have a narrower band of consequential outcomes. Nor should Table 1 be taken as an endorsement of the claim that the five superordinate traits are those that should be used in applied prediction contexts. As noted earlier, there is both good reason and some evidence to expect that larger effects would be obtained by using multiple narrow predictor variables (Paunonen et al. 2003). Although such an approach would maximize predictive accuracy, it would do so at the price of cumulative knowledge of the kind depicted in Table 1. When the mechanism that relates personality process to consequential outcome is identified, then the time to utilize specific measures of that process will have arrived.

Arguments about whether personality is consistent over time and context, arguments about the proper units of personality, and arguments about the utility of different types of measures have all had one common and unfortunate effect: They have obscured the reasons why proponents of different positions cared about personality in the first place, and first and foremost among these reasons is that personality matters.

**The *Annual Review of Psychology* is online at http://psych.annualreviews.org**

## LITERATURE CITED

Abelson R. 1985. A variance explanation paradox: when a little is a lot. *Psychol. Bull.* 97:129–33

Adorno TW, Frenkel-Brunswik E, Levinson DJ, Sanford RN. 1950. *The Authoritarian Personality*. New York: Harper

Anderson C, John OP, Keltner D, Kring AM. 2001. Who attains social status? Effects of personality and physical attractiveness in social groups. *J. Personal. Soc. Psychol.* 81: 116–32

Barrick MR, Mount MK. 1991. The Big Five personality dimensions and job performance: a meta analysis. *Personal. Psychol.* 44:1–26

Barrick MR, Mount MK, Gupta R. 2003. Meta-analysis of the relationship between the Five Factor model of personality and Holland's occupational types. *Personal. Psychol.* 56:45–74

Barrick MR, Mount MK, Judge TA. 2001. Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *Int. J. Sel. Assess.* 9:9–30

Belsky J, Jaffee SR, Caspi A, Moffitt T, Silva PA. 2003. Intergenerational relationships in young adulthood and their life course, mental health, and personality correlates. *J. Fam. Psychol.* 17:460–71

Benet-Martínez V, Haritatos J. 2005. Bicultural Identity Integration (BII): components and socio-personality antecedents. *J. Personal.* 73:1015–50

Benet-Martínez V, Karakitapoglu-Aygün Z. 2003. The interplay of cultural values and personality in predicting life-satisfaction: comparing Asian- and European-Americans. *J. Cross-Cult. Psychol.* 34:38–61

Berkman LF, Glass T, Brissette I, Seeman TE. 2000. From social integration to health. *Soc. Sci. Med.* 51:843–57

Berscheid E. 1999. The greening of relationship science. *Am. Psychol.* 54:260–66

Bogg T, Roberts BW. 2004. Conscientiousness and health behaviors: a meta-analysis. *Psychol. Bull.* 130:887–919

Bost KK, Vaughn BE, Washington WN, Cielinski KL, Bradbard MR. 1998. Social competence, social support, and attachment: demarcation of construct domains, measurement, and paths of influence for preschool children attending Head Start. *Child Dev.* 69:192–218

Campbell JD, Trapnell PD, Heine SJ, Katz IM, Lavallee LF, Lehman DR. 1996. Self-concept clarity: measurement, personality orrelates, and cultural boundaries. *J. Personal. Soc. Psychol.* 70:141–56

Cann A, Calhoun LG. 2001. Perceived personality associations with differences in sense of humor: stereotypes of hypothetical others with high or low senses of humor. *Humor: Int. J. Humor Res.* 14:117–30

Cantor N, Kihlstrom JF. 1987. *Personality and Social Intelligence*. Englewood Cliffs, NJ: Prentice Hall

Caprara GV, Zimbardo PG. 2004. Personalizing politics: a congruency model of political preference. *Am. Psychol.* 59:581–94

Carlo G, Okun MA, Knight GP, de Guzman MRT. 2005. The interplay of traits and motives on volunteering: agreeableness, extraversion, and prosocial value motivation. *Personal. Individ. Differ.* 38:1293–305

Caspi A, Roberts BW, Shiner RL. 2005. Personality development: stability and change. *Annu. Rev. Psychol.* 56:453–84

Cervone D. 2005. Personality architecture: within-person structures and processes. *Annu. Rev. Psychol.* 56:423–52

Clancy SM, Dollinger SJ. 1993. Identity, self, and personality: I. Identity status and the Five Factor model of personality. *J. Res. Adolesc.* 3:227–45

Contrada RJ, Cather C, O'Leary A. 1999. Personality and health: dispositions and processes in disease susceptibility and adaptation to illness. In *Handbook of Personality*,

ed. LA Pervin, OP John, pp. 576–604. New York: Guilford

Danner DD, Snowdon DA, Friesen WV. 2001. Positive emotions in early life and longevity: findings from the nun study. *J. Personal. Soc. Psychol.* 80:804–13

David J, Suls J. 1999. Coping efforts in daily life: role of Big Five traits and problem appraisal. *J. Personal.* 67:119–40

DeNeve KM, Cooper H. 1998. The happy personality: a meta-analysis of 137 personality traits and subjective well-being. *Psychol. Bull.* 124:197–229

Diener E, Emmons RA, Larsen RJ, Griffin S. 1985. The Satisfaction with Life Scale. *J. Personal. Assess.* 49:71–75

Diener E, Lucas RE. 1999. Personality and subjective well-being. In *Well-Being: The Foundations of Hedonic Psychology*, ed. D Kahneman, E Diener, N Schwarz, pp. 213–29. New York: Russell Sage Found.

Diener E, Suh EM, Lucas RE, Smith HL. 1999. Subjective well-being: three decades of progress. *Psychol. Bull.* 125:276–302

Donnellan MB, Conger RD, Bryant CM. 2004. The Big Five and enduring marriages. *J. Res. Personal.* 38:481–504

Donnellan MB, Larsen-Rife D, Conger RD. 2005. Personality, family history, and competence in early adult romantic relationships. *J. Personal. Soc. Psychol.* 88:562–76

Duriez B, Soenens B, Beyers W. 2004. Personality, identity styles, and religiosity: an integrative study among late adolescents in Flanders (Belgium). *J. Personal.* 72:877–908

Emmons RA. 1999. Religion in the psychology of personality: an introduction. *J. Personal.* 67:873–88

Fredrickson BL, Joiner T. 2002. Positive emotions trigger upward spirals toward emotional well-being. *Psychol. Sci.* 13:172–75

Friedman HS, Tucker JS, Schwartz JE, Tomlinson-Keasey C, Martin LR, et al. 1995. Psychosocial and behavioral predictors of longevity. *Am. Psychol.* 50:69–78

Gangestad SW, Snyder M. 2000. Self-monitoring: appraisal and reappraisal. *Psychol. Bull.* 126:530–55

Gattis KS, Berns S, Simpson LE, Christensen A. 2004. Birds of a feather or strange birds? Ties among personality dimensions, similarity, and marital quality. *J. Fam. Psychol.* 8:564–74

Ge X, Conger RD. 1999. Adjustment problems and emerging personality characteristics from early to late adolescence. *Am. J. Community Psychol.* 27:429–59

Goldberg LR, Sweeney D, Merenda PF, Hughes JE. 1998. Demographic variables and personality: the effects of gender, age, education, and ethnic/racial status on self-descriptions of personality attributes. *Personal. Individ. Differ.* 24:393–403

Gottman JM. 1994. *What Predicts Divorce? The Relationship Between Marital Processes and Marital Outcomes*. Hillsdale, NJ: Erlbaum

Greenberg J, Jonas E. 2003. Psychological motives and political orientation–the left, the right, and the rigid: comment on Jost et al. 2003. *Psychol. Bull.* 129:376–82

Hampson SE, Andrews JA, Barckley M, Lichtenstein E, Lee ME. 2000. Conscientiousness, perceived risk, and risk-reduction behaviors: a preliminary study. *Health Psychol.* 19:247–52

Heaven PC, Bucci S. 2001. Right-wing authoritarianism, social dominance orientation and personality: an analysis using the IPIP measure. *Eur. J. Personal.* 15:49–56

Heaven PC, DaSilva T, Carey C, Holen J. 2004. Loving styles: relationships with personality and attachment atyles. *Eur. J. Personal.* 18:103–13

Helson R, Srivastava S. 2001. Three paths of adult development: conservers, seekers, and achievers. *J. Personal. Soc. Psychol.* 80:995–1010

Hofstee WKB, Ten Berge JMF. 2004. Personality in proportion: a bipolar proportional scale for personality assessments and its consequences for trait structure. *J. Personal. Assess.* 83:120–27

Hogan R 1983. A socioanalytic theory of

personality. In: MM Page ed. *Nebraska Symposium on Motivation 1982*, Lincoln: Univ. Nebraska Press, pp. 55–89

Hooker K, McAdams DP. 2003. Personality reconsidered: a new agenda for aging research. *J. Gerontol. B Psychol. Sci. Soc. Sci*. 58:296–304

Jensen-Campbell LA, Adams R, Perry DG, Workman KA, Furdella JQ, Egan SK. 2002. Agreeableness, extraversion, and peer relations in early adolescence: winning friends and deflecting aggression. *J. Res. Personal*. 36:224–51

John OP, Srivastava S. 1999. The Big Five Trait taxonomy: history, measurement, and theoretical perspectives. In *Handbook of Personality: Theory and Research* ed. LA Pervin, OP John, pp. 102–38. New York: Guilford

Jost JT, Glaser J, Kruglanski AW, Sulloway FJ. 2003a. Political conservatism as motivated social cognition. *Psychol. Bull*. 129:339–75

Jost JT, Glaser J, Kruglanski AW, Sulloway FJ. 2003b. Exceptions that prove the rule—using a theory of motivated social cognition to account for ideological incongruities and political anomalies: reply to Greenberg and Jonas 2003. *Psychol. Bull*. 129:383–93

Judge TA, Bono JE. 2000. Five Factor model of personality and transformational leadership. *J. Appl. Psychol*. 85:751–65

Judge TA, Higgins CA, Thoresen CJ, Barrick MR. 1999. The Big Five personality traits, general mental ability, and career success across the lifespan. *Personnel Psychol*. 52:621–52

Karney BR, Bradbury TN. 1995. The longitudinal course of marital quality and stability: a review of theory, method, and research. *Psychol. Bull*. 118:3–34

Kenford SL, Smith SS, Wetter DW, Jorenby DE, Fiore MC, Baker TB. 2002. Predicting relapse back to smoking: contrasting affective and physical models of dependence. *J. Consult. Clin. Psychol*. 70:216–27

Krueger RF, Hicks BM, McGue M. 2001. Altruism and antisocial behavior: independent tendencies, unique personality correlates, distinct etiologies. *Psychol. Sci*. 12:397–402

Kwan VS, Bond MH, Singelis TM. 1997. Pancultural explanations for life-satisfaction: adding relationship harmony to self-esteem. *J. Personal. Soc. Psychol*. 73:1038–51

Larsen RJ. 2000. Toward a science of mood regulation. *Psychol. Inq*. 11:129–41

Larson LM, Rottinghaus PJ, Borgen FH. 2002. Meta-analyses of Big Six interests and Big Five personality factors. *J. Voc. Behav*. 61:217–39

Luo S, Klohnen EC. 2005. Assortative mating and marital quality in newlyweds: a couple-centered approach. *J. Personal. Soc. Psychol*. 88:304–26

MacDonald DA. 2000. Spirituality: description, measurement, and relation to the Five Factor model of personality. *J. Personal*. 68:153–97

Marcia JE. 1980. Identity in adolescence. In *Handbook of Adolescent Psychology*, ed. J Adelson. New York: Wiley, pp. 159–87

McAdams DP. 2001. The psychology of life stories. *Rev. Gen. Psychol*. 5:100–22

McCullough ME, Emmons RA, Tsang J. 2002. The grateful disposition: a conceptual and empirical topography. *J. Personal. Soc. Psychol*. 82:112–27

Miller TQ, Smith TW, Turner CW, Guijarro ML, Hallet AJ. 1996. A meta-analytic review of research on hostility and physical health. *Psychol. Bull*. 119:322–48

Newcomb AF, Bukowski WM, Pattee L. 1993. Children's peer relations: a meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychol. Bull*. 113:99–128

Pals J. 1999. Identity consolidation in early adulthood: relations with ego-resiliency, the context of marriage, and personality change. *J. Personal. Soc. Psychol*. 67:295–329

Parker JG, Asher SR. 1987. Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychol. Bull*. 102:357–89

Paunonen SV. 2003. Big Five factors of personality and replicated predictions of behavior. *J. Personal. Soc. Psychol*. 84:411–22

Paunonen SV, Haddock G, Forsterling F, Keinonen M. 2003. Broad versus narrow personality measures and the prediction of

behaviour across cultures. *Eur. J. Personal.* 17:413–33

Pennebaker JW, King LA. 1999. Linguistic styles: language use as an individual difference. *J. Personal. Soc. Psychol.* 77:1296–312

Penner LA. 2002. Dispositional and organizational influences on sustained volunteerism: an interactionist perspective. *J. Soc. Issues* 58:447–67

Penner LA, Fritzsche BA, Craiger JP, Freifeld TR. 1995. Measuring the prosocial personality. In *Advances in Personality Assessment*, ed. J Butcher, CD Spielberger, 10:147–63. Hillsdale, NJ: Erlbaum

Peterson C, Seligman M. 2002. *The VIA Taxonomy of Human Strengths and Virtues*. Washington, DC: Am. Psychol. Assoc.

Piedmont RL. 1999. Does spirituality represent the sixth factor of personality? Spiritual transcendence and the Five Factor Model. *J. Personal.* 67:985–1013

Piedmont RL. 2004. Spiritual transcendence as a predictor of psychosocial outcome from an outpatient substance abuse program. *Psychol. Addict. Behav.* 18:213–22

Roberts BW, Caspi A, Moffitt TE. 2003. Work experiences and personality development in young adulthood. *J. Personal. Soc. Psychol.* 84:582–93

Robins RW, Caspi A, Moffitt TE. 2002. It's not just who you're with, it's who you are: personality and relationship experiences across multiple relationships. *J. Personal.* 70:925–64

Ryan RM, Deci EL. 2001. On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annu. Rev. Psychol.* 52:141–66

Ryder AG, Alden LE, Paulhus DL. 2000. Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *J. Personal. Soc. Psychol.* 79:49–65

Saucier G. 2000. Isms and the structure of social attitudes. *J. Personal. Soc. Psychol.* 78:366–85

Scheier MF, Carver CS. 1993. On the power of positive thinking. *Curr. Dir. Psychol. Sci.* 2:26–30

Schimmack U, Radhakrishnan P, Oishi S, Dzokoto V, Ahadi S. 2002. Culture, personality, and subjective well-being: integrating process models of life-satisfaction. *J. Personal. Soc. Psychol.* 82:582–93

Schmitt D. 2002. Personality, attachment, and sexuality related to dating relationship outcomes: contrasting three perspectives on personal attribute interaction. *Br. J. Soc. Psychol.* 41:589–610

Seligman M, Csikszentmihalyi M. 2000. Positive psychology: an introduction. *Am. Psychol.* 55:5–14

Shaver PR, Brennan K. 1992. Attachment styles and the "Big Five" personality traits: their connections with each other and with romantic relationship outcomes. *Personal. Soc. Psychol. Bull.* 18:536–45

Shiner R, Masten AS, Tellegen A. 2002. A developmental perspective on personality in emerging adulthood: childhood antecedents and concurrent adaptation. *J. Personal. Soc. Psychol.* 83:1165–77

Sjöberg L. 2001. Emotional intelligence: a psychometric analysis. *Eur. Psychol.* 6:79–95

Smith TW, Spiro A. 2002. Personality, health, and aging: prolegomenon for the next generation. *J. Res. Personal.* 36:363–94

Thompson L, Snyder CR, Hoffman L, Michael ST, Rasmussen HN, et al. 2005. Dispositional forgiveness of self, others, and situations. *J. Personal.* 73:313–59

Thoresen CJ, Kaplan SA, Barsky AP, Warren CR, de Chermont K. 2003. The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration. *Psychol. Bull.* 129:914–45

Thorne A, Klohnen E. 1993. Interpersonal memories as maps for personality consistency. In *Studying Lives Through Time: Personality and Development*, ed. DC Funder, RD Parke, C Tomlinson-Keasey, K Widaman, pp. 223–54. Washington, DC: Am. Psychol. Assoc.

Thrash TM, Elliot AJ. 2004. Inspiration: core

characteristics, component processes, antecedents, and function? *J. Personal. Soc. Psychol.* 87:957–73

Trull TJ, Durrett CA. 2005. Categorical and dimensional models of personality disorder. *Annu. Rev. Clin. Psychol.* 1:355–80

Trull TJ, Sher KJ. 1994. Relationship between the Five Factor model of personality and Axis I disorders in a nonclinical sample. *J. Abnorm. Psychol.* 103:350–60

van der Zee K, Thijs M, Schakel L. 2002. The relationship of emotional intelligence with academic intelligence and the Big Five. *Eur. J. Personal.* 16:103–25

Van Hiel A, Mervielde I. 2004. Openness to experience and boundaries in the mind: relationships with cultural and economic conservative beliefs. *J. Personal.* 72:659–86

Van Hiel A, Mervielde I, DeFruyt F. 2004. The relationship between maladaptive personality and right wing ideology. *Personal. Individ. Differ.* 36:405–17

Verona E, Patrick CJ, Joiner TE. 2001. Psy-chopathy, antisocial personality, and suicide risk. *J. Abnorm. Psychol.* 110:462–70

Vollrath M, Krahé B, Hampson S. 2004. Editorial: personality and social relations. *Eur. J. Personal.* 18:239

Walton KE, Roberts BW. 2004. On the relationship between substance use and personality traits: abstainers are not maladjusted. *J. Res. Personal.* 38:515–35

Watson D, Hubbard B, Wiese D. 2000. General traits of personality and affectivity as predictors of satisfaction in intimate relationships. evidence from self- and partner-ratings. *J. Personal.* 68:413–49

Watson D, Klohnen EC, Casillas A, Nus Simms E, Haig J, Berry DS. 2004. Match makers and deal breakers: analyses of assortative mating in newlywed couples. *J. Personal.* 72:1029–68

Wiebe RP. 2004. Delinquent behavior and the Five Factor model: hiding in the adaptive landscape? *Individ. Differ. Res.* 2:38–62