

Social Consequences of Experiential Openness

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Openness to Experience is one of the 5 broad factors that subsume most personality traits. Openness is usually considered an intrapsychic dimension, defined in terms of characteristics of consciousness. However, different ways of approaching and processing experience lead to different value systems that exercise a profound effect on social interactions. In this article, the author reviews the effects of Openness versus Closedness in cultural innovation, political ideology, social attitudes, marital choice, and interpersonal relations. The construct of Openness and its measures could profitably be incorporated into research conducted by social psychologists, sociologists, political scientists, anthropologists, and historians.

Part of the excitement surrounding the recent rise of the five-factor model of personality (FFM; Digman, 1990; Goldberg, 1993) is due to the fact that it offers a new basis for integrative literature reviews. The model holds that the common variance among almost all personality trait constructs can be summarized in terms of the five recurrent factors of Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Personality measures developed in diverse theoretical contexts have in fact been shown to be related to these five factors (McCrae & Costa, 1996). The FFM thus offers a powerful conceptual tool for distinguishing between nominally similar constructs and recognizing the similarities among apparently different constructs, reducing the fallacious “jingle” and “jangle” (see Block, 1995) of personality scale labels. The heuristic value of the FFM has been shown—to cite two examples—in reviews of job performance (Barrick & Mount, 1991) and behavior genetics (Loehlin, 1992).

In this article, I seek to extend the integrative scope of one of the factors, Openness to Experience (Openness), to include constructs that have arisen more or less independently in several branches of the social sciences. By tracing conceptual similarities and reviewing empirical links, I hope to show that experiential Openness has important consequences for a wide range of social behaviors. One aim of this review, then, is to alert social scientists to a common dimension of human nature relevant to many different disciplines.

A second aim is to deepen understanding of Openness itself as a dimension of personality (McCrae, 1993–1994, 1994). This factor is the most controversial of the five (De Raad & Van Heck, 1994), confused with intelligence (e.g., Goldberg, 1981)

and trivialized as “bookishness” (Wolfe, 1993, p. 284). I argue that it is better understood as a fundamental way of approaching the world that affects not only internal experience but also interpersonal interactions and social behavior.

Intrapsychic and Interpersonal Aspects of Openness

Which one of the five basic dimensions of personality is most relevant to an understanding of social phenomena? That question might seem to invite a debate about the relative importance of Extraversion versus Agreeableness or Dominance versus Affiliation. These two pairs of dimensions are alternative axes for the circumplex that is thought to organize all interpersonal traits (Leary, 1957; Wiggins, 1979). However, from many perspectives, the personality dimension that most centrally influences social and interpersonal phenomena is Openness.

That assertion may seem paradoxical because Openness is usually portrayed as an intrapsychic dimension, describing individual differences in the structure and functioning of the mind. Openness is manifested in “the breadth, depth, and permeability of consciousness, and in the recurrent need to enlarge and examine experience” (McCrae & Costa, in press). The intrapsychic aspect of Openness has been described at length in a series of reviews (Costa & McCrae, 1978; McCrae, 1993–1994, 1994; McCrae & Costa, 1985, in press) that show that Openness is a broad and general dimension, seen in vivid fantasy, artistic sensitivity, depth of feeling, behavioral flexibility, intellectual curiosity, and unconventional attitudes—traits measured by the Openness facets of the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992a). The domain of Openness includes a wide variety of ostensibly dissimilar constructs, including intuition (Myers & McCaulley, 1985), thin mental boundaries (Hartmann, 1991), and typical intellectual engagement (Goff & Ackerman, 1992). Table 1 lists some of the empirical correlates of Openness.

This diverse and relatively unfamiliar dimension can perhaps best be communicated by an illustrative case study. Highly open people often claim to be exceptional (McCrae, 1994), and some of them are. A vivid example is provided by Jean-Jacques Rousseau (1781/1953), whose autobiography contains prototypical examples of Openness (see Table 2). So active was his imagina-

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Table 1
Some Constructs Related to Openness to Experience as Measured by the NEO-PI

Construct	Study	N	Gender	r
Intuition	MacDonald et al. (1994)	161	W	.65
		48	M	.71
Preconscious activity	Holland et al. (1991)	37	M	.50
		88	W	.61
Need for cognition	Sadowski & Cogburn (1995) ^a	85		.50
Absorption	Church (1994)	647		.54
Typical intellectual engagement	Goff & Ackerman (1992)	138		.65
Experience seeking	Zuckerman et al. (1993)	135		.43
Esoteric thinking	McCrae & Costa (in press)	59		.47
Flexibility	McCrae et al. (1993)	348		.42
Sentience	Costa & McCrae (1988a)	296		.55
Creative personality	Piedmont et al. (1991)	410		.42
Intellectance	J. A. Johnson (1994)	30		.39
Thin boundaries	McCrae (1994)	124		.66
Xenophilia	Kosmitzki & Pratto (1994) ^a	32		.63
Tough-mindedness	Conn & Rieke (1994)	257		-.56
Alexithymia	Bagby et al. (1994)	83		-.49

Note. All correlations significant at $p < .01$. NEO-PI = NEO Personality Inventory; M = men; W = women.

^a Used the short form of the NEO-PI Openness scale.

tion that his novels captivated Europe; so attuned was he to beauty that as a self-taught composer his single opera (Rousseau, 1752/1991) transformed French musical taste. His effusive emotions ignited the whole Romantic movement, and

his utter disregard for conventional behavior—late in life he began dressing in an Armenian caftan and cap—scandalized the peasants he lived among.

When in midlife, he turned his unorthodox intellect on the

Table 2
Facets of Openness to Experience in Rousseau's Confessions

Facet	Rousseau's statement
Fantasy	The impossibility of attaining the real persons precipitated me into the land of chimeras; and seeing nothing that existed worthy of my exalted feelings, I fostered them in an ideal world which my creative imagination soon peopled with beings after my own heart . . . I created for myself societies of perfect creatures celestial in their virtue and in their beauty, and of reliable, tender, and faithful friends such as I had never found here below. I took such pleasure in thus soaring into the empyrean in the midst of all the charms [of nature] that surrounded me, that I spent countless hours and days at it, losing all memory of anything else. (p. 398)
Aesthetics	I had brought from Paris the national prejudice against Italian music; but I had also received from Nature that acute sensibility against which prejudices are powerless. I soon contracted the passion which it inspires in all those born to understand it. When I listened to the barcarolles I decided that I had never heard singing till then; and soon I was so crazy for the opera that I grew tired of always chattering, eating, and playing in the boxes when all I wanted was to listen. (p. 294)
Feelings	All the foolish things that passed through my inconstant brain, fugitive desires that lasted only a day—a journey, a concert, a supper, a walk to take, a novel to read, a comedy to see, the most unpremeditated detail concerning my pleasures or my occupation—became so many violent passions, which in their ridiculous impetuosity caused me the most genuine torment. (p. 210)
Actions	I could have spent whole months with my crayons and pencils, without ever going out. This hobby became too attractive to me, and I had to be dragged away from it. It is always the same with any pursuit to which I begin to devote myself; it grows and becomes a passion, and soon I can see nothing else in the world but the amusement that occupies me. Age has not cured me of this weakness, nor has it even diminished it. And even as I write this, I have become infatuated, like any old scatter-brain, by yet one more new and useless pursuit [—botany]. (p. 174)
Ideas	If one has any taste for learning, however slight, the first thing one feels in applying oneself to it is the interconnection of the sciences, which causes them to attract, help, and throw light one on another . . . To know nothing at nearly twenty-five, and to wish to know everything, entailed making the very best use of my days. Not knowing at what point fate or death might put an end to my endeavors, I decided, come what might, to get some idea about every subject. (p. 223)
Values	These fresh beginnings led me by a new path into a different intellectual world, possessing a simple and dignified economy which I could not look upon without enthusiasm. Soon, as I continued to explore it, I could see only foolishness and error in the doctrines of our sages, nothing but oppression and misery in our social order . . . The contempt which my deep reflections had inspired in me for the customs, the principles, and the prejudices of my age made me insensible to the mockery of those who followed them. (pp. 387–388)

Note. From *The Confessions* (pp. 174, 210, 223, 294, 387–388, 398), by J.-J. Rousseau [J. M. Cohen, Trans.], 1781, London: Penguin Classics. Copyright 1954 by J. M. Cohen. Reproduced by permission of Penguin Books Ltd.

social questions of the day, he became a philosopher who showed a predictable independence of judgment. But his observation that “man was born free, and he is everywhere in chains” (Rousseau, 1762/1968, p. 49) was more than merely a fresh perspective on monarchical government; it was also a manifesto for political change. The social consequence of Jean-Jacques Rousseau’s experiential Openness is known to history as the French Revolution (Durant & Durant, 1967).

I do not wish to revive the discredited view that history is determined by the personalities of a few great individuals (Carlyle, 1841/1966), but I do argue that personality traits affect social interactions large and small and, in particular, that traits in the domain of Openness have powerful and pervasive influences. These effects can be seen in cultural change, political affiliations, patterns of friendship and family, and dyadic interactions. A consideration of Openness in all these areas illustrates a second, interpersonal aspect of Openness that has been relatively neglected in its conceptualization.

The idea that the structure of the mind can affect social behavior is certainly not new. It was perhaps most extensively developed by Rokeach and his colleagues in the classic volume, *The Open and Closed Mind* (Rokeach, 1960). In that work, Rokeach argued that, regardless of ideological content, a rigid cognitive organization of attitudes and values leads to predictable social consequences, including prejudice and authoritarian submission. He also showed that dogmatism was related to a wide range of psychological variables (e.g., aesthetic sensitivity), thus anticipating later conceptions of the dimension of Openness. Although Rokeach’s Dogmatism scale has been justifiably criticized (Altemeyer, 1981; Christie, 1991) and one of his central premises—that authoritarianism is as common on the left as on the right—has not been well-supported by subsequent research (Stone, 1980), there is a very real sense in which this review can be seen as a contemporary elaboration of his basic ideas.

Macrosocial Influences: Cultural Change, Social Attitudes, and Political Affiliation

Cultural Innovation

Not all social changes are as dramatic as the French Revolution, but all societies change, and cultural evolution has long been a major topic in anthropology. By and large, anthropologists have emphasized features of the culture that promote or discourage innovation (Plog, Jolly, & Bates, 1980), but some have focused on psychological characteristics of innovators. In his classic statement, Barnett (1953) noted that

individuals differ in their propensities and abilities to veer across the normal boundaries of acceptable deviation . . . these differences predispose some of them to a hesitant and retractile attitude toward experimentation with the new, while others are much more adventurous and intrepid. In short, some people, for whatever reason, are temperamentally more conservative than others. (p. 20)

E. M. Rogers (1983) discussed the diffusion of new ideas from innovators through early adopters to late adopters and “laggards.” Earlier adopters are characterized by greater empathy and imagination, an ability to deal with abstractions and to

cope with uncertainty, lower dogmatism, and more favorable attitudes toward change, education, and science. In contemporary American corporate culture, successful change agents are known to be higher in Openness (McDaniel, 1992).

For better or worse, in the past century most cultural change has been in the direction of modernization or westernization, and it is reasonable to hypothesize that individuals willing to consider new ideas and new ways of living would most readily adapt to such changes. Some data support that hypothesis. Yik and Bond (1993) administered Chinese adjective scales to 414 high school students in Hong Kong; they also asked the students to rate themselves on a 7-point scale from *extremely Chinese* to *extremely Westernized*. That item was unrelated to measures of emotional stability, application, restraint, helpfulness, and intellect, but it was significantly related to scales measuring Assertiveness, $r = .22$, Extraversion, $r = .30$, and especially Openness, $r = .40$.

Political Ideology: Liberalism and Conservatism

Not all change entails rejection of traditional values, as the recent rise of nationalist and fundamentalist movements shows. Reactionary change may sometimes appeal to open individuals (like the poet and fascist Ezra Pound), but in general it appears that, within Western societies, open individuals have an affinity for liberal, progressive, left-wing political views, whereas closed individuals prefer conservative, traditional, right-wing views (Trapnell, 1994). Indeed, a case can be made for saying that *variations in experiential Openness are the major psychological determinant of political polarities*.

Historians and political scientists might scoff at the idea that social movements and political affiliations are reflections of personality traits. Regional, religious, and especially social class differences are often far more important in determining political loyalties. Changing economic cycles and demographic shifts affect social and political views, and charismatic leaders and catastrophic events reshape the social structure. Politics is not a matter of enduring dispositions but of ever-shifting alliances and oppositions.

Yet there are recognizable patterns that endure beneath shifting political fashions, and the most conspicuous of these is the distinction between liberalism and conservatism. The basis of these two perspectives is ultimately not political, sociological, or economic but psychological. It is precisely because liberalism and conservatism transcend any political party that one can note shifts by each party toward the left or right; it is also for this reason that the Western world so quickly became accustomed to the notion that old guard communists in the former Soviet Union constitute the right wing in the new democracies. Liberal and conservative have psychological meanings that are more enduring and universal than the specific political and social attitudes they influence.

There is ample evidence that political conservatism is in fact related to psychological conservatism. As Table 3 shows, individuals with conservative social and political attitudes—measured in most of these studies by Wilson and Patterson’s (1968) Conservatism Scale—tend to be characterized by a number of related features that go beyond ideology. Conservative individuals tend to be unadventurous, behaviorally rigid, socially con-

Table 3
Some Psychological Correlates of Sociopolitical Conservatism

Variable	Study	N	Gender	r
Sensation seeking	Pearson & Sheffield (1975)	41	M	-.63**
		43	W	-.47**
	Levin & Schalmo (1974)	57	M	-.28*
		83	W	-.33**
Principled moral reasoning	Lapsley et al. (1984)	96		-.25*
	Fincham & Barling (1979)	55	W	-.22†
Intolerance of ambiguity	Ruch & Hehl (1983)	143		.28**
	Sidanius (1978)	195		.27**
	Ruch & Hehl (1983)	143		.26**
Rigidity	Ruch & Hehl (1983)	143		.28**
Sexual humor	Ruch & Hehl (1983)	143		.28**
Nonsense humor	Ruch & Hehl (1983)	143		-.27**
Value obedience	Feather (1979)	558		.33**
		357		.45**
Value broadmindedness	Feather (1979)	558		-.39**
		357		-.43**
Preference for visual complexity	Rump & Walker (1982)	25		-.52**
	Schneider (1985)	80	M	-.34**
		80	W	-.30**
Social conformity	Brief et al. (1994)	457		.29**
	Comrey et al. (1978)	90	M	.53**
		109	W	.49**

Note. M = men; W = women.
 * $p < .05$. ** $p < .01$. † $p < .05$, one-tailed.

forming, and conventional in their moral reasoning; they enjoy jokes about sex but not nonsensical humor; they prefer simple and regular visual designs. The studies in Table 3, incidentally, report data from South Africa, Germany, Australia, Great Britain, Sweden, the United States, and Russia, suggesting considerable cross-cultural generalizability for the psychological correlates of political ideology.

All the variables listed in Table 3 are conceptually related to Openness, but there is no empirical evidence that Openness as it is construed within the FFM is related to an appreciation of nonsense humor or a preference for visual complexity. In a study of New Zealanders, however, Joe (1974) reported that sociopolitical conservatism was related to high needs for order and cognitive structure and low needs for autonomy, change, sentience, and understanding—all known correlates of Openness (Costa & McCrae, 1988a). More directly, Riemann, Grubich, Hempel, Mergl, and Richter (1993) correlated political attitudes in a German sample with scales from the short version of the NEO-PI-R; the general Conservatism factor was strongly related to Openness, $r = -.57$, $N = 184$, $p < .001$. Similarly, Trapnell (1994) reported correlations between NEO-PI-R Openness facets and the Wilson-Patterson Conservatism Scale that ranged from $-.21$ for Fantasy to $-.64$ for Values, $N = 789$, $p < .001$.

A consideration of the behaviors that lead to attributions of liberal or conservative tendencies illustrates the psychological essence of these viewpoints. Positions on manifestly political issues like trade with Mexico or military intervention in Bosnia are often not very diagnostic. However consider two reactions to Michelangelo's *David*: Spectator A is stunned by its power and beauty; Spectator B is shocked by its full frontal nudity. Surely no one would hesitate to label Spectator A the *liberal* and Spectator B the *conservative* or to make predictions about

their stances on a variety of social and political issues. Yet it is difficult to articulate a rational ideology that explains why aesthetic responses or sexual mores should predict positions on the need for a capital gains tax cut or increased military spending. The unifying element is not ideological but psychological, reflecting differences in Openness.

If Openness is seen in the need for novelty, variety, and complexity and an intrinsic appreciation for experience, then Closedness to Experience (Closedness) is manifested in a preference for familiarity, simplicity, and closure and in a down-to-earth utilitarianism. Given these basic features of experiential style it is clear that closed individuals will tend to draw sharp lines between in-group and out-group and prefer the former to the latter—tendencies that lead to fervent patriotism. They will follow the rules they were taught, including obedience to authority. They will expect that others also follow the rules; if they do not, they will advocate strict punishment, not because they are vindictive but because punishment is the simplest way to enforce conformity. They will have little use for intellectuals or scholars—practitioners of the aptly named “liberal arts”—whose work is of questionable utility. They will regard sex with suspicion, as a dangerously powerful stimulus that must be tabooed to maintain psychic equilibrium and social order.

Psychologists and psychiatrists, who tend to be liberal (Bachtold, 1976; Eagle & Marcos, 1980), may regard that as an unflattering description. Many conservatives would not: Open and closed individuals differ markedly in what they consider socially desirable. Conservatives would point out that sex really is dangerous (as epidemics of unintended pregnancies [Ambuel, 1995] and notorious crimes of passion demonstrate) and that the threat of punishment really can deter crime (Watson, 1986)—as the pristine streets of Singapore attest. The stable, orderly, harmonious society conservatives envision would be

welcomed by everyone—were it not incompatible with some people's needs for diversity, novelty, and nonconformity.

It is surely possible to find open individuals with right-wing sympathies (e.g., Ezra Pound) and vice versa, but the data as a whole do not support Rokeach's (1960) view that dogmatism per se is ideologically neutral (Stone, 1980): Voters who preferred candidates like Nixon, Wallace, and Reagan scored higher on Rokeach's Dogmatism scale than did supporters of McGovern and Carter (Brant, Larsen, & Langenberg, 1978; Jones, 1973). It appears that Openness predisposes individuals toward liberal political views; or—to put the psychological cause before the ideological effect—the political views of a given time and place will be considered "liberal" just to the extent that they attract open individuals.

Openness and Authoritarianism

None of this comes as any surprise to readers familiar with the vast literature on authoritarianism (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950/1969; Stone, Lederer, & Christie, 1993). There are hundreds of studies showing links between political and social attitudes and behaviors and the complex of characteristics measured by the California *F* Scale and its derivatives (e.g., Peterson, Doty, & Winter, 1993). However authoritarianism has always been a controversial topic (Samelson, 1993). Initially favorable reactions to the construct soured in the 1950s when fascism had been defeated and the real menace seemed to be communism. The *F* scale had significant psychometric problems (notably, a lack of balanced keying), and the construct's theoretical ties to psychoanalysis proved a liability when psychoanalysis itself began to go out of fashion. Still, something about the phenomenon of authoritarianism has proven nearly irresistible, and there is currently a revival of interest in the topic (Peterson et al., 1993; Stone et al., 1993). The trait of Openness versus Closedness may provide a conceptual alternative that captures the insights of the earlier construct, while avoiding some of its drawbacks.

There is evidence that authoritarianism is closely related to the low pole of Openness. Trapnell (1994) reported a correlation of $-.57$ between NEO-PI-R Openness and Altemeyer's (1981) Right-Wing Authoritarianism (RWA) Scale; each of the six Openness facets was also significantly related to authoritarianism, $r_s = -.29$ to $-.63$, $N = 722$, $p < .001$.

Additional evidence is provided in Table 4, which lists some items from the California Psychological Inventory-Form 480¹ (CPI; Gough, 1957) that are associated with Openness (see McCrae, Costa, & Piedmont, 1993, for details on the sample). Items have been grouped according to content, using categories taken from the authoritarianism literature. For each item, correlations with the total NEO-PI Openness domain score are given in the first column. One of the Openness facets, Openness to Values, includes attitudinal content, and it might be supposed that the correlations are entirely due to this overlap. The last column of Table 4, therefore, reports correlations with a measure of Openness formed by adding only the Openness to Fantasy, Aesthetics, Feelings, Actions, and Ideas facets. It is clear from the table that there are numerous similarities between themes of authoritarianism and Openness versus Closedness. (The same conclusion would surely be reached if one imagined

Rousseau, clad in Armenian garb, responding to these CPI items!)

The items in Table 4 can be added to form an index of authoritarianism, which is related to age, $r = .32$, to years of education, $-.32$, and (modestly) to the NEO-PI Extraversion factor, $-.13$, $N = 348$, $p < .05$, but is unrelated to gender or NEO-PI Neuroticism, Agreeableness, or Conscientiousness factors. Authoritarianism is significantly correlated with each facet of Openness, $r_s = -.32$ to $-.55$, especially with total Openness, $r = -.62$. Even if total Openness is recalculated omitting Openness to Values and if age, education, and gender are controlled, the partial correlation of Openness with authoritarianism is still substantial, $r = -.48$, $N = 328$, $p < .001$. The items in this scale were selected on the basis of their correlation with Openness, so this value would probably be somewhat smaller on cross-validation in another sample. However, the NEO-PI and CPI were administered on different occasions over 1 year apart, so the value may underestimate the contemporaneous relation.

Openness and Authoritarianism are not, of course, conceptual mirror images. *Openness* is a psychological construct centered on intellectual engagement and aesthetic experience (J. A. Johnson, 1994) and only secondarily reflected in social and political attitudes. *Authoritarianism* is in some respects a political or sociological construct. In addition to extreme conservatism, it includes a propensity toward aggression that is related to low Agreeableness (Eysenck, 1954), and in some formulations it emphasizes moral strictness that makes it also akin to Conscientiousness (Kline & Cooper, 1984). My point is not that Openness versus Closedness completely explains the authoritarian personality—much less the rise of authoritarian movements—but that it is an indispensable element in the explanation.

Attitude Formation and Political Affiliation

The mechanisms by which Openness, a heritable personality trait (Bergeman et al., 1993; Loehlin, 1992), is expressed in political preferences and affiliations must surely involve processes of attitude formation and maintenance (Olson & Zanna, 1993), some of which have been examined by social psychologists. Shaller, Boyd, Yohannes, and O'Brien (1995) found that closed individuals—high in personal need for structure and low in need for cognition (Cacioppo & Petty, 1982)—tended to ignore situational factors that accounted for differences in performance of two hypothetical groups, thus developing inaccurate stereotypes of the groups' intelligence. Webster and Kruglanski (1994) reported that individuals high in need for cognitive closure resisted persuasion, provided they already had sufficient information to make a decision. Driscoll, Hamilton, and Sorrentino (1991) found that certainty-oriented people were less likely to recall information incongruent with their expectations. Such mechanisms help explain the characteristic ways of thinking of closed men and women.

One could easily write a book on the effects of dispositional Openness on attitude formation and change—as in fact Ro-

¹ The original CPI-Form 480 used in this research is now out of print. It has been revised and replaced with CPI-Form 434.

Table 4
Selected California Psychological Inventory Items Associated With NEO-PI Openness

Category and item content	r^a	r^b
Conventionalism		
I would be uncomfortable in anything other than fairly conventional dress.	-.25***	-.21***
Before I do something I try to consider how my friends will react to it.	-.20***	-.18***
Authoritarian submission		
I keep out of trouble at all costs.	-.25***	-.23***
Sometimes I rather enjoy going against the rules and doing things I'm not supposed to. (R)	-.32***	-.29***
I usually try to do what is expected of me, and to avoid criticism.	-.20***	-.19***
Disobedience to any government is never justified.	-.21***	-.17**
Authoritarian aggression		
People today have forgotten how to feel properly ashamed of themselves.	-.27***	-.22***
Parents are much too easy on their children nowadays.	-.25***	-.21***
I am in favor of a very strict enforcement of all laws, no matter what the consequences.	-.29***	-.26***
Anti-intracception		
I have at one time or another in my life tried my hand at writing poetry. (R)	-.33***	-.35***
I have frequently found myself, when alone, pondering such abstract problems as freewill, evil, etc. (R)	-.30***	-.31***
Dogmatism		
For most questions there is just one right answer, once a person is able to get all the facts.	-.28***	-.25***
I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.	-.24***	-.22***
Destructiveness and cynicism		
It's no use worrying my head about public affairs; I can't do anything about them anyhow.	-.20***	-.19***
It seems that people use to have more fun than they do now.	-.17**	-.11*
Sex		
Women should not be allowed to drink in cocktail bars.	-.17**	-.12*
A large number of people are guilty of bad sexual conduct.	-.21***	-.16**
Ethnocentrism		
We ought to worry about our own country and let the rest of the world take care of itself.	-.23***	-.21***
Only a fool would try to change our American way of life.	-.25***	-.21***
Intolerance of ambiguity		
I often wish people would be more definite about things.	-.22***	-.19***
People who seem unsure and uncertain about things make me feel uncomfortable.	-.22***	-.21***

Note. $N = 348$. Items followed by "R" are reverse keyed. NEO-PI = NEO Personality Inventory. Modified and reproduced by special permission of the publisher, Consulting Psychologists Press, Inc., Palo Alto, CA 94303 from *California Psychological Inventory-Form 480*, by H. Gough. Copyright 1956 by Consulting Psychologists Press, Inc. All rights reserved. Further reproduction is prohibited without the publisher's written consent.

^a Correlation with sum of Openness facets. ^b Correlation with sum of Openness facets except values.

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

keach (1960) did. However, political processes involve not only attitudes but also social interactions. Shared ideas and values can have an influence on social life only if the people who share them work together in caucuses, coalitions, political clubs, and party organizations. Differences in experiential Openness affect precisely these kinds of affiliative behaviors. At base, political groups are societies of like minds—alike with respect to Openness.

Kruglanski and Webster (Kruglanski, 1996; Kruglanski & Webster, 1996) made that point with respect to a particular form of Closedness, namely, need for cognitive closure. In a long series of studies, they have shown that individuals with a high need for closure "seize" on the most readily available information as the basis for decisions and, once made, "freeze" these opinions, leading them to particular styles of judgment and information processing. They speculated that these cognitive styles in turn are most compatible with "a 'conservative' group culture characterized by hierarchical power and decision-making structure, resistance to normative change and in-group favoritism" (Kruglanski, 1996, p. 493). Conservatives respect tradition because it squares with the views on which they have already frozen; they defer to authority because it gives them credible beliefs on which to seize.

Associations between group membership and personality are seen in an impressive study by Costantini and Craik (1980), who used the Adjective Check List (ACL; Gough & Heilbrun, 1965) in a large-scale characterization of Republican and Democratic party leaders. Because party affiliation is affected by so many factors, the personality differences they found between the two groups were quite small—the largest biserial correlation was .24—but the results were consistent. In both men and women, the largest associations were with scales measuring change—Republicans "seek stability and continuity in their environment and are apprehensive of ill-defined and risk-involving situations"—and lability—Democrats "seem impelled toward change and new experience in an endless flight from their perplexities" (Gough & Heilbrun, 1965; cited in Costantini & Craik, 1980, p. 652).

Open individuals—that is, liberals—prefer more open-ended discussions, more diversity of opinion, more equality of participation, and more complexity of thought (Sidanius, 1985; Tetlock, 1983). What they find intolerable is not dissent but the attempt to stifle dissent by appeal to authority or dogma. No one is more closed minded than an open individual when proselytized by a true believer, not necessarily because the views are abhorrent—sometimes they are intriguing—but because it is impossible to exchange ideas with someone whose mind is entirely made up.

In short, open and closed individuals find it difficult to work together in the task of shaping public policy. They begin with different values (art vs. business, liberty vs. law, progress vs. heritage) and find that they have vastly different styles of gathering information, forming opinions, and making decisions. Inevitably, they gravitate toward their own kind, forming left and right factions and wings even within a single party.

This phenomenon is remarkable because it is not simply an instance of similarity as the basis of attraction. One does not, after all, find systematic differences in Neuroticism, Extraversion, or Conscientiousness among political groups—perhaps

because maladjusted, introverted, and disorganized individuals could not form effective coalitions.² The case is more complex with regard to Agreeableness. That dimension does affect political sentiments, forming a factor of social attitudes that Eysenck (1954) and later Costa, McCrae, and Dye (1991) called "Tender-mindedness." Eysenck asserted that fascists were tough-minded conservatives, and communists tough-minded radicals. In combination with Openness, then, Agreeableness may affect political affiliation; in itself it does not seem to be the basis for political parties.³

Microsocial Influences: Family, Friends, and Interpersonal Interactions

Marriage and the Family

The same psychological processes that affect social movements might be expected to operate in that microcosm of the social world, the family. Costa and McCrae (1978) reported significant negative correlations between Levinson and Huffman's (1955) Traditional Family Ideology Scale and Openness to Fantasy, Aesthetics, Actions, Ideas, and especially Values, $r_s = -.20$ to $-.61$, $N = 433$, $p < .001$. In a study of sentence completions (McCrae & Costa, 1980), closed men responded with conventional views of family life (e.g., "a husband has a right to . . . come home and find his wife looking nice"), whereas open men were more egalitarian (e.g., "a husband has a right to . . . the same things that his wife has a right to"). Life in a family headed by experientially closed parents is typified by strict differentiation of sex roles (cf. Hartmann's, 1991, thick-boundary item: "A man is a man and a woman is a woman; it is very important to maintain that distinction") and a hierarchical structure in which parents command and children obey (cf. the *F*-scale item: "Obedience and respect for authority are the most important virtues children should learn," Adorno et al., 1950/1969).

Clearly, major differences of opinion on family ideology would be a source of continuing conflict in a couple, so it is hardly surprising that ideal mates are described as highly similar to oneself in Openness. Rytting, Ware, and Hopkins (1992) reported a correlation of $.58$, $N = 478$, $p < .001$, between self-descriptions and ideal mate descriptions on the Myers-Briggs Type Indicator (MBTI) Sensing-Intuition Scale. Do these preferences actually affect mate selection? If so, there should be concordance on the dimension of Openness in stably married couples.

Personality and mate preference has been studied for years, often by family therapists in search of reasons for marital conflict. One venerable hypothesis, still current among some students of psychological type (e.g., Keirse & Bates, 1978), is that opposites attract. The usual rival hypothesis is that similarity in personality is the rule; for example, similarity with respect to Neuroticism might be expected from the findings of Locke and Horowitz (1990), who reported that social interactions were more satisfying when participants were matched on levels of dysphoria. A more differentiated set of hypotheses can be derived from the principle of complementarity in some versions of interpersonal theory (Brokaw & McLemore, 1991). That principle suggests that there is similarity with respect to affil-

iation and dissimilarity with respect to dominance in stable relationships. Note that the 45° rotation of Extraversion and Agreeableness away from the axes of dominance and affiliation (McCrae & Costa, 1989b) means that the level of Extraversion in one spouse should be similar to the level of Agreeableness in the other, and vice versa. For example, friendly submissive individuals, high in Agreeableness, would complement friendly dominant extraverts.

Which of these possibilities is true—or whether personality effects are completely overshadowed by physical attractiveness, geographic proximity, or demographic factors—is a question of particular interest to behavior geneticists because assortative mating affects heritability and its calculation. Consequently, in several studies, researchers have examined agreement in personality among couples. Some report positive spouse correlations for a variety of traits (e.g., Buss, 1984); but in most studies, there is little evidence for assortative mating with respect to the most frequently studied dimensions, Neuroticism and Extraversion (Eysenck, 1990). By contrast, there is considerable evidence of concordance for social attitudes (Eaves, Eysenck, & Martin, 1989) and other variables related to Openness (Carlson & Williams, 1984). Farley and Davis (1977), for example, reported no spouse similarity for Neuroticism, Extraversion, or Psychoticism in a sample of 102 married couples, but significant spouse correlations for the Sensation Seeking Scale, the Experience Seeking subscale of which is known to be related to Openness (McCrae, 1993–1994). Table 5 summarizes some additional evidence on this question.

Only a few studies have included measures of all five factors. Waller (in press) measured versions of the big five personality traits along with Positive Valence and Negative Valence factors in a sample of 149 spouse pairs. None of the spouse correlations was significant except Conventionalism, $r = .41$, $p < .001$, the factor corresponding most closely to (low) Openness (McCrae, 1994). Botwin, Buss, and Shackelford (in press) used adjective measures of the five factors aggregated across self-reports, spouse ratings, and interviewer ratings. In addition to the effects for intellect-Openness reported in Table 5, they found significant assortment effects in both dating and married couples for Agreeableness and Conscientiousness, $r_s = .22$ to $-.33$.

Additional data, including direct measures of Openness, are available from the archives of the Baltimore Longitudinal Study of Aging (Shock et al., 1984). Table 6 shows correlations between factor scores from husbands' and wives' self-reports on the NEO-PI (see McCrae & Costa, 1989a, for details). This 5 × 5 matrix, incidentally, is more informative than the usual spouse correlations on single variables because it allows an examination of cross-factor correlations as well.

Most of the correlations are nonsignificant. There is certainly

² Costantini and Craik (1980) in fact found that party leaders in both the Republican and Democratic parties were higher than the general populace in Self-Confidence, Dominance, and Achievement.

³ Despite the "bleeding heart" epithet, liberal individuals are not higher in Agreeableness than conservative individuals; they are simply more likely to direct their sympathy toward out-group members. Indeed, leftist tendencies may sometimes be inspired as much by animosity toward the privileged "savage nobles" as charity toward the underprivileged.

no evidence that opposites attract, nor that dysphoric neurotics marry neurotics, nor that the interpersonally complementary factors of Extraversion and Agreeableness are a basis for marital choice—correlations between these two factors are actually negative. There is a small positive correlation between husband's and wife's Conscientiousness levels, but the largest correlation is seen for Openness. The magnitude of the association, $r = .33$, is more impressive if one recalls that these cross-method correlations (self-reports from two different sources) probably underestimate the true association.

It has been known for some time that couples tend to have congruent values (Coombs, 1961; Kirton, 1977), and Table 5 reinforces the view that the strongest concordances are found for measures of social attitudes. Is the agreement seen for overall Openness in Table 6 strictly a function of shared Openness to Values? Do other facets of Openness also show assortative mating effects? The largest dataset available to answer that question comes from an earlier study (McCrae, 1982) that assessed facets of Neuroticism, Extraversion, and Openness in 203 spouse pairs. Significant spouse correlations were found for total Openness, $r = .29$, and Openness to Values (.43) but also for Openness to Aesthetics (.18), Feelings (.31), and Ideas (.21). Furthermore, in this sample, it was possible to examine the influence of age or generational cohort and years of education—variables that might account for the observed association. Unfortunately, complete data were available for only 53 couples; but within that group, correlations remained significant, $p < .05$, one-tailed, for Aesthetics, Ideas, Values, and total Openness, partial r s = .24 to .44, after controlling for both age and education. In future studies, it would be useful to include measures of intelligence, social class, and perhaps religious affilia-

Table 5
Cross-Spouse Correlations for Some Openness-Related Traits

Construct	Study	<i>N</i> ^a	<i>r</i>
Social conformity	Price & Vandenberg (1980)	134	.26**
	Guttman & Zohar (1987)	138	.19*
Political conservatism	Feng & Baker (1994)	301	.54**
Radicalism-conservatism	Nagoshi & Johnson (1994)		
	European ancestry	37	.74**
Intellect-openness	Japanese ancestry	34	.38*
	Botwin et al. (in press)		
Achievement via independence	Dating couples	118	.51**
	Married couples	216	.38**
Intellectual efficiency	Buss (1984)	93	.22*
Psychological mindedness	Buss (1984)	93	.20†
Flexibility	Buss (1984)	93	.41**
	Buss (1984)	93	.22*
Dogmatism	Kirton (1977)	64	.41**
	Kirton (1977)	64	.51**
Intolerance of ambiguity	Kirton (1977)	64	.25*
Authoritarianism	Sorrentino et al. (1995)	37	.69**
Traditionalism	Vanyukov et al. (1994)	164	.38**
Absorption	Vanyukov et al. (1994)	164	.19*
Sensation seeking	Farley & Mueller (1978)		
	German couples	80	.54**
	American couples	80	.44**

^a Number of couples.

* $p < .05$. ** $p < .01$. † $p < .05$, one-tailed.

Table 6
Correlations Between NEO-PI Factor Scores
for Husbands and Wives

Wife's factor score	Husband's factor score				
	1	2	3	4	5
1. Neuroticism	.00	.17	.06	-.14	-.19
2. Extraversion	.02	.11	.05	-.16	.07
3. Openness	.07	.06	.33***	.02	-.11
4. Agreeableness	.11	-.12	.10	.08	.13
5. Conscientiousness	-.10	-.05	.06	.01	.21*

Note. NEO-PI = NEO Personality Inventory. $N = 103$.

* $p < .05$. *** $p < .001$.

tion as additional covariates, but findings to date suggest that Openness is the FFM factor most relevant to marital choice.⁴

Certainly Openness is not the only or even the most important determinant of mate selection. Rousseau, for example, lived with and eventually married a servant, who was apparently quite undistinguished intellectually and artistically. In many cultures and throughout most of history, marriages have been arranged chiefly on the basis of financial and social status considerations; couples were not allowed to select mates with compatible levels of Openness. Perhaps that is just as well; assortative mating leads to increasing polarization of the characteristic, and a society composed solely of extremely open and extremely closed members would risk political chaos.

Friendships and Social Relations

Openness may be less important in routine social interactions than in the intense intimacy of the family. In some respects, this is a matter of deliberate policy: Books on etiquette typically advise one to avoid discussions of religion or politics in polite conversation (Sherwood, 1897), in part because these topics might reveal unwelcome differences in Openness. By skirting divisive issues, open and closed people manage to coexist at parties, in offices, and at football games.

Yet there are also reasons to think that many elective social interactions are based in part on a shared standing on the dimension of Openness. For example, Openness is related to vocational interests (Holland, Johnston, Hughey, & Asama, 1991) and choices, and friendship groups are often the outgrowth of professional activities. It is hardly surprising that bankers and bohemians occupy very different social worlds.

Cheng, Bond, and Chan (1995) examined conceptions of the ideal friend in a Chinese high school student sample. Overall, Openness was considered neither desirable nor undesirable in a friend, but there was a strong correlation between Openness ratings of self and of one's ideal friend, $r = .56$, $N = 425$, $p < .001$. This was by far the strongest self-ideal friend correlation across eight scales. Cheng et al. (1995) speculated that the desire for similarity in Openness might be attributed to the fact

⁴ That initial choice, rather than convergence over time, is the reason for similarity is suggested by the results of a 20-year study on Allport-Vernon-Lindzey values (Caspi, Herbener, & Ozer, 1992).

that "Chinese are particularly sensitive to matching attitudes and avoiding conflicts of opinion" (pp. 103–104).

In addition, similarity is probably preferred because of shared interests (M. A. Johnson, 1989). A person who likes to see foreign films and dissect them at length afterward is not the ideal companion for someone whose taste in movies is limited to action thrillers. Open people are bored by the predictable and intellectually undemanding amusements of closed people; closed people are bored by what they perceive to be the difficult and pretentious culture of the open. These differences surely inhibit the development of friendships.

Interpersonal Processes and Dyadic Interactions

Marriages, professional ties, and friendships are all enduring relationships that develop with time and experience. It is of some interest, however, to ask by what processes they develop because these same interpersonal processes are also likely to be involved in the transient face-to-face encounters that occupy so much of daily life. How do open individuals perceive and react to closed ones? Are there difficulties in developing rapport, failures in communication? What is it about like-minded people that draws them together?

Gurtman (1995) identified interpersonal problems associated with low Openness. Closed individuals found it hard to understand and adapt to others' perspectives, thus they appeared inflexible. At the same time, they lacked a strong sense of self and felt that they were too easily swayed by others. It is easy to see why such people would feel most comfortable among people who shared their ideas and values.

Some studies have offered descriptions of interactions among married couples. Carlson and Williams (1984) reported that men and women classified as Sensing types (i.e., closed) described their spouses in concrete, observable terms, whereas Intuitive types emphasized abstract qualities. Sorrentino, Holmes, Hanna, and Sharp (1995) gave a detailed account of differences in marital quality for individuals high and low in uncertainty orientation. Overall, there was no association between uncertainty orientation and marital satisfaction, but individuals with high-uncertainty orientation had more ambivalent feelings about their spouses and more moderate levels of trust; they avoided both blind faith in and unfounded suspicion of their mates.

In the 1960s, Byrne conducted a series of studies on the determinants of interpersonal attraction, focusing on attitude similarity. These studies clearly showed that strangers who share similar views on a variety of topics have higher regard for each other. Byrne and Nelson (1965) interpreted this result in terms of positive reinforcement: "The learned drive to be logical and to interpret incoming information correctly is reinforced by consensual validation and frustrated by consensual invalidation" (p. 660). It seems likely that this interpretation would apply more strongly to closed individuals, whose need for cognitive closure (Kruglanski, 1996) has already been noted.

Repeated experiences of frustrating interactions is likely to lead to negative expectations and unflattering stereotypes, a phenomenon pointed out by Kirton (1976). He devised a scale to distinguish employees who focused on doing the job well (adaptors) from those who sought new ways of doing things

(innovators). The Kirton Adaptation–Innovation Inventory (KAI) appears highly saturated with content related to Openness. For example, the innovator "has fresh perspectives on old problems" and "needs the stimulation of frequent change"; the adaptor "is predictable" and "never acts without proper authority" (p. 626). In the course of developing this instrument, Kirton asked managers, themselves classified as adaptors or innovators, what they thought of their counterparts:

The adaptors thought that innovators tended markedly to be "neurotic," though adaptors were not able to define exactly what they meant by that term. They tended also to class innovators as extraverts, for example, showing periodic ebullience and insensitivity to others. . . . Innovators saw adaptors as dogmatic, inflexible, and conservative, with a marked distaste for venturing into the unknown. (pp. 625–626)

Interpersonal transactions among individuals characterized by different personality traits have been studied most frequently in terms of the psychological types measured by the MBTI (e.g., Carlson & Williams, 1984; Handley, 1982; Thorne, 1987). Popular accounts of these interactions by type sometimes go beyond the data, but the project to which these researchers are committed—the systematic explication of how differing individuals can and should interact—is certainly worthy of more attention (cf. Gilbert, 1991). Most of the research to date underscores the fundamental importance of Openness in shaping interpersonal interactions.

Origins of Openness

Given its social importance, questions about the development of Openness take on new interest. Historically, most attention has been paid to the Closed pole of this dimension. Much of the original theorizing on the authoritarian personality concerned hypotheses about family atmosphere and child-rearing practices that might instill in children the unquestioning obedience that an authoritarian state demands. Although such psychoanalytic approaches to the authoritarian personality are still sometimes pursued (Hopf, 1993), empirical support is very limited (Altemeyer, 1981).

A few studies have examined the childhood antecedents of other Openness-related variables. Believing Openness to be the natural human condition, suppressed only by acquired defenses, Carl R. Rogers (1961) argued that it should result from unconditional positive regard during childhood. In a test of that hypothesis, McCrae and Costa (1988) examined relations between Openness and adults' retrospective accounts of loving-rejecting parent–child relations. Significant, positive correlations were found for both fathers and mothers, but they accounted for less than 2% of the variance in adults' Openness scores. (A casual-demanding scale also showed only very modest associations with Openness.) Harrington (1993) reported that creative personality at ages 18 and 23 was predicted by observed maternal "poisonous pedagogy" in preschool years, $r_s = -.50$ and $-.29$, respectively, $N = 38$, $p < .05$, one-tailed, but only for girls; paternal parenting and self-reported maternal and paternal poisonous pedagogy were not related to later creative personality. Although these small and scattered findings are theoretically disappointing, they are not surprising in view of con-

temporary studies of behavior genetics, which consistently show little influence of shared environment on subsequent adult personality (Rowe, 1994).

By contrast, there is consistent evidence of substantial heritability for traits related to Openness. In a 1992 review, Loehlin concluded that Openness variables showed “the largest estimates for additive genetic variance . . . of any of the Big Five” (p. 66). Subsequent studies (Angleitner et al., 1995; Bergeman et al., 1993; Waller, in press) continued to report high estimates of heritability for Openness scores. The propensity to be open appears to be genetically determined to a substantial degree.

Furthermore, Openness (like the other major personality dimensions) shows impressive stability in adulthood. A 6-year longitudinal study of self-reports and spouse ratings showed stability coefficients ranging from .68 to .79 for facets of Openness; corrected for unreliability, many of these values exceeded .95 (Costa & McCrae, 1988b). Costa and McCrae (1992b) reported a retest correlation of .66 for Thoughtfulness over a 24-year interval; Finn (1986) found a correlation of .62 for Intellectual interests over 30 years. Despite stereotypes that portray older people as being rigid and conservative, analyses of mean levels of Openness show little evidence of maturational decline (McCrae & Costa, 1990).

The heritability and stability of Openness underscore its status as a dimension of personality. Social attitudes are clearly acquired and just as clearly change over time, and attitudes have usually been distinguished from personality traits. It would, therefore, be incorrect to identify Openness with the liberal-conservative dimension of attitudes. Instead, it would be more appropriate to regard Openness as the underlying personality dimension that predisposes individuals to develop liberal or conservative views (Olson & Zanna, 1993).

However, situational factors also affect attitude formation, and circumstances that enhance or diminish the need for cognitive closure can affect thought processes and outcomes in ways that mimic dispositional Openness. Readily manipulated conditions, such as ambient noise, dullness of task, or imposed time limits, can make individuals functionally closed (Kruglanski & Webster, 1996). Conversely, Kohn and Schooler (1983) have presented some tantalizing evidence that, over a 10-year period, job complexity enhances intellectual flexibility, and many studies have shown that college education is associated with “greater liberalism and sophistication in political, social, and religious outlook” (Sanford, 1962, p. 806). Life experiences may or may not influence intrinsic levels of personality traits, but they surely affect their expression.

Openness and the Social Sciences

In this review, I have illustrated some of the many ways in which the personality dimension of Openness is relevant to the study of social phenomena. Its effects are seen in interpersonal perceptions and interactions, at work and home, in political caucuses and social movements, in cultural innovations, and in shaping the course of history. It is no wonder that Openness is so central to social identity, whether as a proud patriot saluting the flag or as a defiant freethinker sitting on it. It is also no wonder that Kruglanski (1996) has argued that attention to vari-

ables in this domain offers “a new general paradigm for the study of social psychology” (p. 493).

Surely Openness should at least be incorporated into some of the existing paradigms. Conducting research on attitude formation or change without measuring Openness is like studying educational methods without assessing intelligence or psychotherapy without diagnosing psychopathology. Openness should play a role in the current revival of interest in authoritarianism, and sociologists, political scientists, and even historians should become acquainted with it.

The construct of Openness is recommended in part by its breadth. As one of five fundamental dimensions of personality, Openness subsumes a wide variety of more specific and focused constructs; by pointing out their similarities, it can help to integrate diverse literatures. Findings reviewed in this article from anthropology and industrial-organizational psychology reinforce and amplify the conclusions from social psychology and the study of psychological types.

The fact that many different traits are part of the same domain does not, of course, mean that they are interchangeable, but it does lead to many intriguing questions about how they are related. Does need for closure inhibit artistic creativity? Do thin mental boundaries facilitate cultural innovations? Is authoritarianism heritable? Such questions might not have arisen in the contexts in which these constructs originated, but answers to them could contribute to an integration of intrapsychic and interpersonal psychologies.

Attention to Openness might also yield methodological benefits. The FFM has been the subject of intense psychometric efforts over the past decade, yielding several well-validated measures (Costa & McCrae, 1992a; Goldberg, 1992; Trapnell & Wiggins, 1990). By contrast, there are significant psychometric problems with many conceptually related measures. The limitations of the *F* scale are well-known.⁵ Rokeach’s (1960) Dogmatism scale, although based on one of the most sophisticated conceptualizations in personality psychology, is equally problematic psychometrically (Altemeyer, 1981). Like the *F* scale, its 40 items are all scored in the same direction; many of the items (e.g., “there is so much to be done and so little time to do it in”) are of questionable relevance, and its record of external correlates is spotty (Holland et al., 1991).

Sorrentino et al.’s (1995) measure of uncertainty orientation is a combination of a self-report of authoritarianism and a Thematic Apperception Test measure of *n* Uncertainty, which are themselves uncorrelated. This yields a multidimensional scale of the kind Briggs and Cheek (1986) warned against. The KAI appears to contrast Openness at the innovation pole of the scale with some aspects of Conscientiousness at the adaptation pole. Both these measures may perhaps be optimal for the purposes for which they were designed, but it seems likely that they could benefit from psychometric assessment within the convergent and discriminant framework of the FFM.

In other areas, measures of Openness can provide tools that are not otherwise available. E. M. Rogers (1983), for example, reported that “personality variables associated with innovativeness have not yet received much research attention, in part because of difficulties of measuring personality dimensions in [anthropological] field interviews” (p. 257). However, growing evidence shows that the FFM is cross-culturally universal

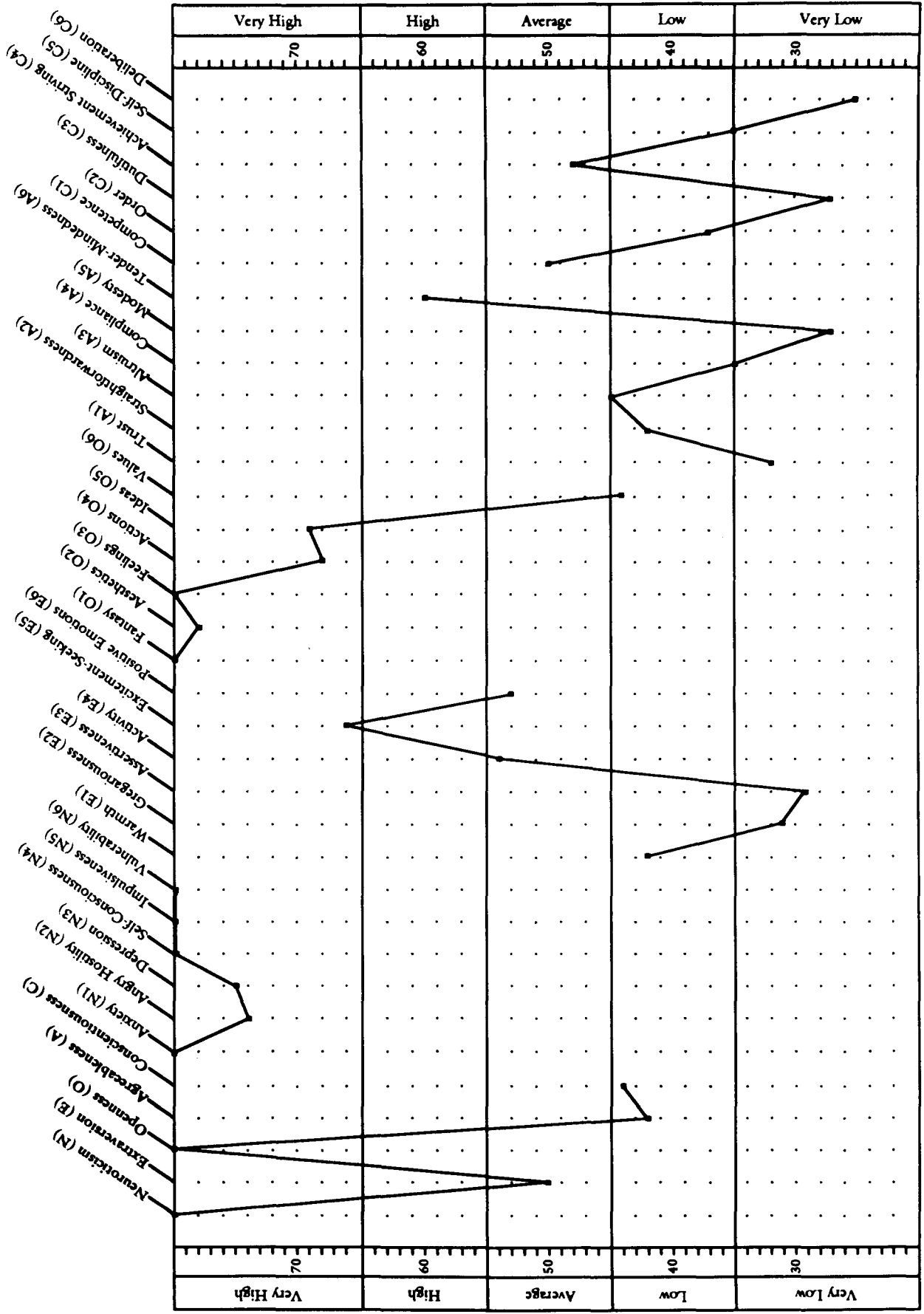


Figure 1. From Revised NEO Personality Inventory profile by Jean-Jacques Rousseau, as rated by A. M. Meizer. Profile form reproduced by special permission of the publisher, Psychological Assessment Resources, Inc., 16204 North Florida Avenue, Lutz, Florida 33549, from the NEO Personality Inventory-Revised, by Paul Costa and Robert McCrae. Copyright 1978, 1985, 1989, 1992 by PAR, Inc. Further reproduction is prohibited without permission of PAR, Inc.

(McCrae, Costa, & Yik, 1996), and translations of the NEO-PI-R appear to provide valid measures of Openness (McCrae, 1994). Granted, research methods do not easily cross disciplinary boundaries. Anthropologists might be reluctant to administer personality inventories, and reviewers for anthropology journals might look askance on such data. Still, measures of Openness could be attractive at least to methodological innovators within the discipline.

Contemporary personality measures might even help to quantify the study of history. Psychohistorians from Erikson (1962) to Simonton (1984) have sought psychological insights in historical data; psychologists may be able to return the favor by offering historians objective measures of personality traits in historical figures. The usual self-report questionnaires favored by personality psychologists are of course not applicable, but observer ratings provide a feasible and valid alternative (Costa & McCrae, 1992a). Standardized questionnaires could be used to quantify and systematize the detailed knowledge that scholars have gleaned from their research (Craik, 1988).

Figure 1 provides an encouraging example of such interdisciplinary collaboration. It presents the personality profile of Jean-Jacques Rousseau as rated (blind to the interpretations offered in this article) by political scientist and Rousseau scholar A. M. Melzer (see 1990). The very high Neuroticism and generally low Agreeableness scores in the profile show a dark side of Rousseau that is only hinted at in Table 1. However, much earlier the historian Thomas Carlyle (1841/1966) had said of him, "how the whole nature of the man is poisoned; nothing but suspicion [very low A1: Trust], self-isolation [very low E2: Gregariousness], fierce moody ways [very high N2: Angry Hostility]!" (p. 186)—traits that led to a life of imagined—and real—persecution.

But equally conspicuous in Figure 1 is the extreme elevation on most facets of Openness that allowed Rousseau to experience the world more intensely and insightfully than those around him.⁶ Carlyle (1841/1966) saw that too, as well as its social consequences:

Strangely through all that defacement, degradation and almost madness, there is in the inmost heart of poor Rousseau a spark of real heavenly fire. . . . He could be cooped into garrets, laughed at as a maniac, left to starve like a wild-beast in his cage;—but he could not be hindered from setting the world on fire. (pp. 186–188)

⁵ Altemeyer's (1981) Right-Wing Authoritarianism Scale is a psychometrically superior measure of the construct.

⁶ Rousseau's low standing on Openness to Values reflects his political thinking, which was much too complex to conform to conventional liberalism: "It is Rousseau's virtue as a thinker to destroy our habitual categories" (Melzer, 1990, p. 109) of left and right.

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