

A Scale of Personality Styles Based on DSM-III-R for Investigating Occupational Choice and Leisure Activities*

Catherine B. Silver
*Brooklyn College and the CUNY Graduate Center
New York City*
and
Jean E. Malone
University of North Carolina, Greensboro

This article presents measures of six personality styles designed to investigate occupational choice and leisure activity in survey research among normal populations. The instrument is composed of scales of seven items each that describe Narcissistic, Paranoid, Obsessive, Hysterical, Depressive and Impulsive personalities based on axis II of DSM-III-R (1987) and Shapiro's *Neurotic styles* (1965). The scales were validated on several independent samples (443 undergraduate students, 802 undergraduate and graduate students, 293 students and adult workers). We found that the measures of personality styles satisfied several tests of internal consistency, validity, and reliability. Although the results from our preliminary assessment of the difference in personality styles among selected occupational groups are not fully definitive, they do suggest that theoretically meaningful differences exist.

In order to analyze the ways individuals — as integrated collections of cognitive and affective attributes — select occupations and leisure activities, we need to shift the focus from an analysis of discrete characteristics of individuals to the understanding of styles of functioning or types of personality (Shapiro, 1965; Millon, 1986; Caspi, 1987). Vocational theories have defined personality types, using categories based on work-related interests (e.g., Super, 1942; Strong, 1943; Roe, 1956; Schein, 1978; Holland, 1966, 1985). Although these classifications have been useful, some

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methodologists have argued that scales based on a major theoretical tradition are preferable to scales that are developed primarily on the basis of factor analysis or scale homogeneity (Comrey, 1988; Kaplan & Saccuzzo, 1989). In this paper, we describe the construction of a scale based on psychoanalytic theory, specify the steps taken in scale development, and demonstrate its applicability to life choices in leisure and occupation.

Our interest in psychoanalytic theory and its relevance to social phenomena, such as career choice and leisure activities, stems from clinical reports concerning the tendency of patients with certain neurotic personality styles to self-select into particular types of occupations and to enjoy performing certain leisure activities (e.g., Silver, 1992; Silver & Spilerman, 1990; Oldham & Morris 1990; Kernberg, 1984). For example, individuals with hysterical personality styles have been observed to gravitate toward careers such as writer or artist and engage in leisure activities where intuition is rewarded and where they can directly share and express emotional experience. Those with obsessive-compulsive styles tend to choose occupational fields and leisure activities that draw upon technical skills, require limited emotional affect, and reward a "driven personality."

These observations suggest that mild "personality disorders," as defined in axis II of DSM-III-R, are not necessarily handicaps to occupational success (Kernberg, 1984; Vaillant, 1977). They become assets in social contexts that reward and reinforce specific character structures (Hochschild, 1983; Silver & Spilerman, 1990). Therefore, we would expect to find associations between particular vocational choices and personality styles. We would also expect individuals to engage in leisure activities that best fit their character structure. Leisure is an important arena for testing our ideas because, unlike occupational choices, the social constraints involved in selecting leisure activities are more limited.

Aside from instruments used in clinical evaluations — such as Millon's MCMI-II (1987) — which are long and often require trained interviewers or qualified professionals, there are no practical measures of personality styles for survey research. For a review and critique of the instruments used by clinicians see Boulanger (1985) and Kass, Skodol, Charles, Spitzer, and Williams (1985). For this reason we have developed scales which are suitable for administration in a *survey questionnaire* of normal, noninstitutionalized populations. The present article reports the development of this instrument and an evaluation of its psychometric properties using samples of college undergraduates, graduate students, and adult workers.

Conceptualization of Personality Styles

Personality style, sometimes called character structure (Freud, 1913; Reich, 1933), refers to relatively stable forms of symptomatology; that is, "enduring patterns of perceiving, relating to, and thinking about the environment and oneself...[which] generally are recognizable by adolescence or early adult life and are characteristic of most of adult life" (American Psychiatric Association [APA], 1987, pp. 335-6). Our conceptualization of personality styles is derived from clinical case descriptions. It has been suggested that the DSM-III-R categories and Shapiro's styles of functioning

predict to various social behaviors in normal populations (Strack, 1987; Wiggins & Pincus, 1989; Romney & Bynner, 1989; Silver & Spilerman, 1990). The DSM-III-R classifications can be understood as describing extreme forms of underlying dimensions of normal personalities derived from main stream psychoanalytic theories. While the categories are based on the formulations of clinicians, they have been subject to field research and revised periodically to improve validity and increase diagnostic reliability.

We focus on six personality styles of functioning: *paranoid*, *obsessive-compulsive*, *hysterical*, *narcissistic*, *depressive*, and *impulsive*. We selected these personality styles because they are more likely to be found in non-institutionalized populations. The conceptualization of our six personality styles is based on axis II of DSM-III-R Personality Disorders (1987) and David Shapiro's *Neurotic Styles* (1965) in the following way: *Obsessive-compulsive* (DSM-III-R: #301.40 and Shapiro pp. 23-53); *Paranoid* (DSM-III-R: #301.00 and Shapiro pp. 54-107); *Hysterical/hysterical* (DSM-III-R: #301.50 and Shapiro pp. 108-133); *Narcissistic* (DSM-III-R: #301.81); *Depressive* (DSM-II-R: #300.40); and *Impulsive* (Shapiro pp. 134-156). The impulsive personality has some similarity with the DSM-III-R, antisocial character disorder — especially the aggressive, irritable and physical aspects of the behavior and the weak superego. However, the impulsive personality is different enough to warrant using another label. As described by David Shapiro, it is characterized by high risk-taking, impulsivity and limited tolerance of frustration without the connection to illegal activities such as stealing, drinking, and use of drugs. For the purpose of studying styles of functioning in normal populations, the impulsive style can be applied more widely, for example to the analysis of entrepreneurs and business people. Our original research also included measures intended to be indicative of self-defeating personality (previously known as masochistic personality), but the results from this scale did not meet the validation criteria. Although we expect each personality style to be distinct, our formulations do not require that they be unrelated to one another.

1. *Paranoid personality style*. Individuals characterized by a paranoid personality style of functioning have an unusually acute and active form of attentiveness. They are good observers, continually searching with rigid attention for any external threat. There is a constant sense of anticipation, which ensures that an individual will not be taken by surprise (Maccoby, 1976; Shapiro, 1965). The paranoid person's intense and directed attention to uncovering clues is combined with attempts at attributing hidden motives to others' behavior. Facts are never accepted at face value but are viewed in terms of underlying meaning (Henri, 1949). Paranoid individuals have the ability to hide behind a mask and pretend to feel emotions, adjusting mood to the demands of changing situations. This facade allows them to interact smoothly with people in power. Paranoid individuals have an especially strong advantage in highly competitive settings, where success is based on out-maneuvering others (Kanter, 1977; Jackall, 1988). The paranoid style of functioning is expected to be successful in complex organizational settings such as corporations and in occupational fields such as law that require an intensive search for imputed meanings and the uncovering of hidden clues.

2. *Obsessive-compulsive personality style.* Obsessive-compulsive personality styles are characterized by limited affect, narrow-mindedness, obsessive doubting, and driven activities. Obsessive-compulsives strive for perfection and are never fully satisfied with what they have accomplished. They are characterized by an overly strict superego that leads them to constantly judge harshly themselves and others. They tend to have rigid modes of thinking, paying great attention to technical details, and having a need to control people and things around them. These qualities contribute to the successful performance of systematic tasks and are likely to be characteristic of those in occupations such as accounting and scientific research.

3. *Impulsive personality style.* Impulsive personality types are characterized by short-term practical interests and concerns. They want things to happen right away, and have little tolerance for frustration. Long-range planning, abstract thinking, and reflection are weak traits among these individuals (Shapiro, 1965). Impulsive personality types have historically been found among independent entrepreneurs and charismatic capitalists, to use Max Weber's term, such as the 19th Century Rockefellers and Mellons, who performed well in situations of uncertainty, took risks, and were capable of making quick decisions toward short-term, practical goals. In modern technologically advanced society, in addition to entrepreneurial ventures, impulsive personalities are likely to be found in activities such as stockbroking, real estate, and sales where intense, short-term practical concerns are likely to bring immediate profitable outcomes.

4. *Hysterical personality style.* Hysterical personality types are characterized by intuitive rather than logical thinking. They react quickly to slight changes in nuances, feel intense emotions, and respond to emotional tones rather than to purely technical details. Hysterical personalities are likely to chose careers in the arts, design, or media where there tends to be relatively weak bureaucratic constraints and where the work culture sustains highly charged emotional tones.

5. *Depressive personality style.* Depressive personality types are characterized by a subdued and withdrawn affective style. Because individuals with depressive personality can be hypersensitive to rejection and apprehensive to signs of social derogation, they often isolate themselves. In general, they are pessimistic about life and have limited amount of physical or emotional energy. They are likely to be reactive to events and shy away from making decisions that involve risk-taking. Their style reflects underlying anger that is often expressed in passive-aggressive behavior such as procrastination, stubbornness, and inefficiency. Occupational settings which do not stress competitive behavior nor require quick decision-making are safe environments for those with depressive styles.

6. *Narcissistic personality style.* Narcissistic personality types have an inflated sense of self and a need for full attention, constant support, adulation, and admiration, all of which often confer a sense of vulnerability and lack of individuation (Kernberg, 1975). Grandiose phantasies of success and recognition form the core of the narcissistic self, combined with manipulative tactics used to achieve goals. Unlike obsessive-compulsives, narcissistic individuals will not fight or compete openly for what they want.

They use manipulation and (self) deceit to achieve their goals of being loved and accepted. They tend to do well in occupations and lines of work that have built-in audiences onto which their aggrandizing self-images can be projected. Occupational cultures such as those found among high-level political, religious, corporate, and medical personnel provide contexts in which narcissistic styles can be legitimately rewarded.

Method

Pretesting. The scale items were formulated based on conceptualizations of personality styles of functioning drawn from the DSM-III-R and Shapiro's clinical reports (1965) as described earlier. The items were discussed with 16 psychoanalysts belonging to mainstream theoretical orientations (Freudian, Ego Psychology, and Object Relations). Several small pretests were undertaken to identify problems with item wording. The initial version of the instrument consisted of a total of 98 items — 14 statements for each of seven personality types — (including self-defeating personality, which was later discarded), and was administered to a sample of 443 undergraduate students. We used the results from item analysis and factor analysis to identify items which were not statistically well associated with the dimensions of personality. These pretest procedures were similar to the analyses described later on in the paper. Some wording changes were made on the basis of subject interviews as well as the statistical analyses, and the six revised scales were administered to two additional samples.

Subjects. The six revised scales were administered to a new sample of 802 undergraduate and graduate students, and to a separate sample of 293, which included both students and adult workers. The inclusion of a small sample of adult workers reflect our desire to contrast aspirations with actual occupational choice, to assess the need to carry out further research on adult working populations. We found that scale validation procedures produced similar results using the separate samples, thus we will present findings using the combined sample, or a total of 1095 respondents.

The combined sample represented men and women in about equal proportions (51% female, 49% male). The median age was 25 years. Although 95% of the subjects were students on campuses in a major Northeastern metropolitan area, we also collected data from 54 working adults, 92% of whom were lawyers or law enforcement officers. Forty-two undergraduate majors were represented by 645 respondents who declared a major. About 70% of the undergraduates were in their junior or senior year. Twenty-two graduate majors were represented by 355 subjects, with a median of 2 years of completed graduate study.

About 56 percent of the subjects reported ethnicity as White-American, 12% as African-American, 11% as Hispanic-American, 8% as Asian-American, and 13% as citizens of other countries. More than half the respondents (57%) reported their religion as Christian, 26% as Jewish, and 9% as atheist, agnostic, or none. About a fifth of the sample reported that their fathers did not finish high school, about a quarter reported high school or vocational school graduation, and slightly more than half reported that their fathers went to college.

The samples represent a range of majors on several campuses, as well as a small subset of working adults in the law and law enforcement fields. They are not intended to be representative of college or working populations. However, we believe that the size of the combined sample, and replication of validation and reliability procedures for each of the two independent samples, provide satisfactory tests of scale properties.

Procedures. Using both theoretical meaning and statistical properties, we retained seven items for each personality type from the original 84 items (masochism had been deleted). We wanted our response categories to allow for estimation of both direction and intensity as well as permit a neutral response. Recent research suggests that reliability increases with the number of response categories, although the rate of increase slows (Alwin, 1992). Therefore, we decided on the familiar 7-point scale. Table 1 shows the final 42 items. Responses range from 1 (totally unlike me) to 7 (totally like me) for each item.

The retained items were factor analyzed to test that we were measuring six distinct personality types. Our theoretical orientation does not require that personality styles be orthogonal, so we used oblique rotation. The first 6 unrotated factors explained 44% of the total variance. The pattern matrix of factor loadings provided strong support for distinct subscales. For each scale, all seven items in that scale loaded most strongly on one common factor. The factor loadings for items 1 through 7 of the subscales are presented in Table 2. We replicated the factor analysis for each scale in two independent samples. The general picture remained the same: the items factored out into six distinct subscales both times.

Cronbach's alpha coefficients for the six subscales indicated useful levels of internal consistency: Hysteria (.70), Impulsivity (.75), depressive (.75), Obsession (.69), Narcissism (.84), and Paranoia (.77).

In order to assess the suitability of giving equal weight to each item in a scale, we submitted each of the six scales to separate unrotated principal components analysis, and examined the factor loadings on the first principal component. The smallest loading for any item was .47 and the largest was .78. We concluded that the relative similarity of factor loadings supported equal weighting of items within each scale, an easier and more stable method of scaling than factor scoring. Reanalysis of the data for each of the independent samples, and for men and women separately, supported this decision.

Results

Scale dimensions. Personality styles are complex constructs. We were interested in the dimensionality within each personality style and associations among the styles, as well as internal consistency. We first examined the results from the principal components analysis. Two subscales produced second principal components with eigenvalues greater than 1.0. The second factor for the Hysteria scale (eigenvalue = 1.09) contrasted "screaming" and "erupting," with positive coefficients greater than .4, and "drama" and "colorful expression," with negative coefficients. As we will describe later, the positive items account for some of the correlation between the Hysteria and the Impulsivity subscales.

Table 1
Scales for Personality Styles of Functioning*

Paranoia

1. I think that people say all kinds of bad things about me.
2. I am on guard when people are friendlier than I expect.
3. Even when there are no obvious dangers, I feel it is safer to trust no one.
4. Even with friends, I have to be on the alert to avoid being taken advantage of.
5. I fear that people are trying to trick me.
6. I don't show my true feelings because they could be used against me.
7. People often do things to annoy me.

Obsession-Compulsion

1. I do the same thing over and over again until I get it just right.
2. Technical details always seem important to me.
3. I straighten up my desk or my house the minute it gets out of order.
4. I can't finish what I am doing unless I feel it's perfect.
5. Before I decide on anything, I think about the pros and cons for a long time.
6. I am a very organized person.
7. I have to stop and think before I act, even in trivial matters.

Impulsivity

1. In order to get things done, I ruffle people's feathers.
2. I grab whatever I need in life.
3. To get by, I make up convenient stories.
4. I think about hurting people and destroying things.
5. I often behave recklessly.
6. I do ruthless things to get what I want.
7. I feel a need to do shocking things.

Hysteria

1. I can experience a wide range of feelings in a short time.
2. I can share intense emotions with people I don't know well.
3. I have a theatrical and dramatic style.
4. My feelings are just below the surface and can erupt unexpectedly.
5. I am very excitable.
6. I enjoy being colorful when expressing myself.
7. I express my anger by screaming and throwing things around.

Depression

1. I shy away from meeting new people.
2. I feel hopeless about the future.
3. I tend to be an underachiever.
4. I don't like to be bothered with making decisions.
5. Most of the time I feel that I have little energy.
6. I never think I am up to life's challenges.
7. I feel I have little to contribute in this world.

Narcissism

1. I feel disappointed when people don't think I am special.
2. My feelings get hurt when I go unrecognized.
3. I expect other people to give me special treatment.
4. I want everyone to love me no matter what.
5. When I finish a task, I expect to be complimented.
6. I want to be adored by everyone.
7. When I see a person of my own age doing better than me, I feel envious.

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The second factor for the Obsessive-Compulsive scale (eigenvalue = 1.19) contrasted "thinking about pros and cons" and "stop and think," with positive coefficients greater than .39, and "organized" and "straighten things up," with negative coefficients. Although the Hysteria and Obsessive subscales show some evidence of multidimensionality, the second factors are fairly weak, and the factor loadings on the first principal component are strong. We conclude that — at least with a short list of items such as should be suitable for use in a field survey — it is appropriate to treat the scales as unidimensional concepts.

We next examined intercorrelations among the personality scales, presented in Table 3. As we expected, there are moderate associations among some scales.

The item analysis of patterns of correlations of each item with all subscales, and with its own scale, net of the effect of that item, suggests some substantive interpretations of the scale intercorrelations. For Hysteria, "express by screaming" is related to Impulsivity slightly more strongly than to its own scale-net-item, and for Impulsivity, "grab what is needed" is slightly more highly related to Hysteria. These associations account for some of the correlations between the two scales. When the item analysis is replicated for the two independent samples, and for men and women separately, only three items of the total of 168 show slightly stronger associations with other subscales than with their own scale-net-item.

In a test of construct validity, the items were sent to 65 psychoanalysts randomly selected from the National Registry of Psychoanalysts who classified each item according to one of the six personality styles. For four of the six scales, 80% of their classifications agreed with our conceptualization. However classification agreement was only 49.5% for Impulsivity and 64.0% for Hysteria. Misclassification of Hysteria items was primarily due to crossovers into the Impulsivity category. For Impulsivity items, Hysteria and Narcissism were the primary misclassification categories.

The overlap between Hysteria and Impulsivity items is not surprising. In our sample of college students, we found significant correlations between Impulsivity and Hysteria. However, alpha coefficients and factor analyses implied higher internal consistency than would be suggested by analysts' classification. We believe that our derivation of the Impulsivity category from a source other than the DSM-III-R caused problems in the analysts' classifications that are not mirrored in survey applications. However, further investigation of the measurement of these two personality styles is needed.

The analyses of item and scale associations support our contention that the scales are internally consistent. Few indicators of lack of fit appear in repeated and detailed analyses of the independent samples. The estimates of dimensionality show a strong first dimension and suggest that the personality styles appear coherent. Finally, the scales are not independent of one another but a requirement of complete independence would not be consistent with the theory and complexity of personality styles.

Scoring and group differences. Summary scores for the six personality styles were computed by adding the seven items within each scale. The means and standard deviations are given in Table 4.

We estimated the stability of mean scores across groups by computing differences for the two independent samples, gender, race, religion, and SES (operationalized by father's education). To compensate for the number of tests, we applied the Bonferroni Adjustment, dividing the significance level (.05) by the number of tests (30), and considered differences to be statistically significant if the probability level for any one test was greater than .0017. Results from analysis of the two samples were similar. The one exception was depression, where a statistically significant difference of two points was found between the two samples.

The similarity of results between the two samples indicates acceptable stability for the scales. However, we did not expect that assessment would be similar for different social groups. Established clinical assessment instruments, such as the MCMI-II, have demonstrated patterned differences among demographic groups (Millon, 1987). Because we wish to emphasize that social background is an important factor in the interpretation of results, we will here present group differences found in our samples. However, we consider investigation and interpretation of these differences as a substantive issue that is not within the range of this report.

Although we found no differences for SES categories, we found several differences among ethnic groups. African- and Hispanic-Americans, compared to White- and Asian-Americans, reported higher levels of Obsession and lower levels of Narcissism. In addition, African-Americans reported a higher level of Paranoia than any other ethnic group. There were also some differences among religious groups: Christians, compared to Jews and Non-religious, reported higher levels of Obsession and lower levels of Narcissism. From this set of comparisons, we speculated that the scale may be sensitive to cultural differences among groups.

Means and standard deviations for women and men are similar and are presented in Table 4. Only the Impulsivity scale showed gender differences, with men scoring higher than women.

The personality scales are sensitive to age differences. Although almost 75% of respondents in these samples were under 30 years of age, and more than 90% under 40, age was negatively correlated with all subscales except Obsession.

Criteria-related validity. In a preliminary exploration of the association between personality styles and occupational choice, we constructed profiles for seven groups with specific occupations or occupational plans: accounting students ($n = 41$), civil engineering students ($n = 15$), students who planned to enter medicine ($n = 41$), undergraduate and graduate theater students ($n = 30$), students who planned to enter criminal law ($n = 13$), and working criminal lawyers ($n = 18$). Findings were consistent with our theoretical expectations. We base this analysis on the expectation that students, especially advanced undergraduate and graduate students, have a reasonable familiarity with their selected occupations, and have made the choice, in part, in terms of the perceived fit of their personality with job demands.

Using ANOVA, and covarying for the effects of age and gender, we examined the association between personality types and occupational plans. Although we found no main effects for Obsession or Paranoia, we found that

Table 2
Factor Loadings for All Items (Oblique Rotation)

	Factor 1 Impulsive	Factor 2 Depress	Factor 3 Obsess	Factor 4 Narciss	Factor 5 Hysteria	Factor 6 Paranoid
Items						
Hysteria						
1	-.11	.11	.01	.07	.51	-.07
2	.01	.12	.01	.06	.41	.12
3	.12	-.13	-.01	.10	.48	.07
4	.06	.16	.04	-.06	.45	-.15
5	.03	-.18	-.03	.10	.56	-.22
6	.05	-.18	.03	.10	.52	.11
7	.22	.10	.00	-.04	.26	-.11
Impulsive						
1	.26	-.06	.02	.09	.14	-.16
2	.25	-.14	.14	.12	.21	-.08
3	.34	.09	-.05	.25	-.05	-.15
4	.46	.19	-.05	-.02	.01	-.15
5	.49	.17	-.06	-.04	.21	.02
6	.71	-.03	.05	.13	-.09	-.07
7	.39	.06	-.07	.13	.19	-.14
Depressive						
1	-.08	.33	.01	.02	-.13	-.19
2	.07	.64	.02	.01	.04	-.02
3	.08	.51	-.11	-.02	.03	.06
4	-.00	.45	.01	.14	.08	.04
5	-.03	.54	-.01	.02	.05	-.12
6	-.04	.61	.06	.08	.05	-.07
7	.12	.51	.06	.04	-.09	.02
Obsessive- compulsive						
1	-.01	-.01	.52	-.01	.08	-.05
2	-.03	-.00	.41	-.01	.05	-.16
3	.10	.01	.60	-.06	-.02	.13
4	.02	.09	.71	.06	-.01	.05
5	-.15	.05	.36	.07	-.04	-.13
6	-.01	-.14	.45	-.07	-.01	.05
7	-.05	.10	.32	.12	-.03	-.19
Narcissistic						
1	-.13	.09	-.07	.71	.10	.02
2	-.14	.09	-.07	.70	.08	-.01
3	.19	-.03	.02	.60	.01	.05
4	.03	.05	.05	.62	.03	.03
5	.02	-.11	.07	.62	-.00	-.04
6	.07	-.01	.00	.72	.03	.07
7	.04	.16	-.08	.48	-.04	-.10

Table 2 (Continued)
Factor Loadings for All Items (Oblique Rotation)

	Factor 1 Impulsive	Factor 2 Depress	Factor 3 Obsess	Factor 4 Narciss	Factor 5 Hysteria	Factor 6 Paranoid
Paranoid						
1	-.01	.25	-.11	.09	.06	-.38
2	.01	-.00	.04	-.01	.01	-.50
3	.08	.01	.10	-.05	-.01	-.60
4	.03	-.06	.07	.01	.09	-.66
5	.13	.10	-.01	.16	-.03	-.53
6	.11	.11	.09	.03	-.09	-.36
7	.22	.05	-.11	.05	.10	-.40

Table 3
Intercorrelations Among Personality Subscales

	Hysteria	Impulse	Depress	Obsess	Narciss
Impulse	.48*				
Depress	.12*	.32*			
Obsess	.05	.03	.01		
Narciss	.43*	.45*	.36*	.06	
Paranoid	.27*	.51*	.44*	.23*	.34*

* $P < .01$.

Table 4
Means and Standard Deviations (In Parentheses) for Personality Styles

	Full Sample		Women		Men	
Hysteria	26.19	(7.78)	26.91	(7.88)	25.56	(7.65)
Impulsivity	18.78	(7.47)	17.66	(6.91)	20.03	(7.82)
Depression	19.60	(7.68)	19.29	(7.69)	20.02	(7.51)
Obsession	28.36	(7.43)	28.15	(7.56)	28.48	(7.25)
Narcissism	24.21	(9.34)	23.94	(9.55)	24.62	(9.16)
Paranoia	21.58	(7.98)	21.00	(7.97)	22.22	(7.90)

the highest level of Obsession was reported by students studying civil engineering, and the highest level of Paranoia was reported by accounting students.

The most notable feature of the profile of students who planned to become physicians was an elevated level of Narcissism. Although Narcissism levels were not significantly different from the overall mean in this sample, we had also found high levels of Narcissism for medical students in our pretest sample.

Our expectation of similar profiles for students of criminal law and for working criminal lawyers was not supported. Although we did not find statistically significant elevations for these two groups, the profiles are suggestive. For the students, the highest levels in the profile were for Hysteria and Impulsivity; for *working* criminal lawyers, the highest levels were for Obsession and Narcissism. There may be consistent differences between students who aspire to a profession and those who work in the profession due to self-selection in completing study and pursuing a vocation.

We found that students who were majoring in drama, and planned a career in theater, displayed significantly elevated levels of Hysteria and Narcissism. We found comparable profiles for both undergraduates ($n = 19$) and graduate students ($n = 11$).

We also examined the association between personality and leisure activities. The choice of leisure activities reflects our concern with minimizing the impact of social constraints on individual choice in our analysis. We assume that individuals have greater flexibility in selecting leisure activities than in making occupational choice and thus the selection of leisure activities is expected to match more closely personality styles.

The personality styles correlate in meaningful ways with reported leisure activities. Respondents were asked to rate their enjoyment of 15 leisure activities on a scale of 1 to 7. Factor analysis suggested four leisure factors:

1. Competitive activities — competitive team sports; games where wits are used to win money, such as gambling; video games, where battles are won; and watching violent events, such as boxing.
2. Physical activities — one-on-one physical activities like tennis; physical activities such as jogging; dangerous activities such as mountain climbing; and a negative scoring of staying at home.
3. Solitary activities — doing something outdoors alone like fishing or gardening; manual activities such as car repair or sewing; and thinking activities such as chess.
4. Social activities — hanging around with friends in public places.

Table 5 presents the correlations between personality styles and leisure activities. Those with depressive personality styles do not endorse any of the leisure activities, and are particularly unlikely to enjoy physical activities. Those with Hysterical and Narcissistic personality styles endorse the social activities more strongly than they do any other type of activity. Impulsive

and Paranoid types endorse competitive activities, and those with Obsessive styles report enjoying solitary activities, many of which involve detailed thought or carefully controlled behavior.

Table 5
Correlations Between Personality Styles and Leisure Activities

	Competitive	Physical	Solitary	Social
Histrionic	.12**	.07*	-.01	.26**
Impulsive	.33**	.16**	.04	.23**
Depressive	-.02	-.27**	-.07*	-.02
Obsessive	-.00	.01	.19**	-.06
Narcissist	.06*	-.05	-.06*	.19**
Paranoid	.18**	-.03	.02	.03

Conclusion

The measures of personality styles presented in this paper are supported by a variety of tests of internal consistency, validity, and reliability. Although the results from our assessment of the difference in personality styles among selected groups are preliminary, they do suggest that some theoretically meaningful differences exist. We suggest that the theoretical basis of the scales and their development as a questionnaire instrument rather than a detailed clinical inventory, would add to their utility in social surveys and counseling assessment. Such an instrument could contribute to an analysis of social behavior and processes, such as vocational choice, job satisfaction, leisure activities and aging, where the expected outcome is, everything else being equal, a function of the fit — or lack of fit — between personality styles and the tasks and requirements of the situation at hand.

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