

Research report

# Temperament profiles in physicians, lawyers, managers, industrialists, architects, journalists, and artists: a study in psychiatric outpatients

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## Abstract

**Background:** With the possible exception of cyclothymia in artists, there is a paucity of data in the literature on the temperament in different professions.

**Methods:** For this exploratory study, we sought to generate preliminary data on temperaments among psychiatric outpatients, including physicians ( $n=41$ ), lawyers ( $n=30$ ), managers and executives ( $n=35$ ), industrialists ( $n=48$ ), architects ( $n=27$ ), journalists ( $n=34$ ), and a mixed group of artists ( $n=48$ ). They were compared with age, sex, social class, and affective disorder matched outpatients outside of these professions, drawn from the same clinical settings to serve as our Comparison Group (CG,  $n=120$ ). We used an interview version of the Akiskal-Mallya criteria for temperaments. We finally used the DSM-III-R obsessive compulsive personality (OC traits).

**Results:** Compared with the CG, lawyers and physicians had high rates of dysthymic temperament and OC traits. Managers, like lawyers and doctors, had high rates on OC traits but were different in being very low on cyclothymic and twice as hyperthymic than the CG was. Industrialists, who, by definition, were self-made, had even higher rates of hyperthymic traits. Both architects and artists seemed to have benefited from being cyclothymic (3–4 times higher than CG's); interestingly, architects had higher levels of OC traits, and artists were less obsessional than the CG was. Overall, among managers/executives and lawyers, 41% met criteria for affective temperaments, whereas the equivalent rate among the remainder was 77%.

**Limitation:** Given that this is a chart review of existing clinical records, it was not possible to be blind to the profession of the patients. A mixed group of artists may have obscured differences among artists from different domains of art (e.g., poets vs. performing artists), and the same can be said of physicians (e.g., internists vs. surgeons). A disclaimer would be appropriate: Ours is not a study on eminence in the different professions but on the temperament and personality profiles that distinguish among them.

**Conclusions:** Despite the foregoing limitations and overlapping attributes in the different professions, they nonetheless emerged as having distinct temperamental and personality profiles. Dysthymic and obsessional attributes are notable in lawyers and

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physicians. We confirm the role of cyclothymia in artists and architects. The role of the hyperthymic temperament in managers, self-made industrialists, and journalists, to the best of our knowledge, is being reported for the first time. The role of cyclothymic and hyperthymic temperaments appears to be moderated by obsessional traits across the entire professional realm examined. In particular, artists' creative imagination appears "liberated" by low levels of OC traits, whereas among architects, relatively high levels of OC traits seem to contribute to the execution of their work. More tentatively, judging from the overall levels of affective temperaments in the remaining professions, on average, more of the managers/executives than self-made industrialists could be described as "colder" in temperament, and more of the physicians "warmer" than lawyers are. Journalists, as a group, appeared to possess the broadest representation of affective temperaments. The foregoing conclusions must be regarded as tentative, even hypothetical, in need of verification among professionals without major psychiatric disorders. Nonetheless, temperament profiles among psychiatrically ill professionals in the seven professional realms studies can help predict how they relate to their doctors, family members, colleagues, coworkers, and clients/patients. Such knowledge, in turn, can help the therapeutic process.

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## 1. Introduction

The notion that temperament has a role in professional "choice" goes back to, at least, Aristotle (Klibansky et al., 1996), who wondered why poets, philosophers, and statesmen were all of melancholic temperament. In modern times, Kretschmer (1931) wrote a fascinating monograph on men of genius, largely German poets and musicians, and, based on existing biographical data, declared them to be cyclothymic.

More recently, Andreasen (1987), based on a systematically studied sample of students of the creative writing workshop in Iowa and noncreative controls, confirmed Kretschmer's view. Richards et al. (1988), studying broadly defined "creativity" among the relatives of manic-depressive probands, found similar results. In our own study, among psychotic and affectively ill inpatients and outpatients, artistic creativity was limited to bipolars II and III characterized by high cyclothymia (Akiskal and Akiskal, 1988). A recent study of the biography of jazz musicians by Wills (2003) reported high prevalence of "sensation seeking." Earlier studies by Roe (1946), Drevdahl and Cattell (1958), MacKinnon (1965), and Barron (1972) among a variety of artistic domains, including architecture, had reported the following traits: adventuresome, nonconforming, self-assertive, introspective, self-critical, and sensitive. Such traits in aggregate suggest cyclothymia.

The foregoing studies nearly all pertain to artistic "professions". The largest formal study on personality

in different professions was conducted by the Swiss psychiatrist L. Szondi (Dietrich Blumer, personal communication, December 2003), whose work is not known outside Germanophone countries. Christodoulou (1994) found that residents in psychiatry, contrary to a prevalent stereotype, scored lower on neuroticism than did their counterparts in internal medicine.

The present preliminary communication on temperament and profession is based on a large sample of ambulatory patients examined in our clinical work. We routinely gather data on temperament and profession in our outpatient practice, whether in private or community settings. Such practice is based on the general philosophical stance that distinct temperament traits could be useful not only in professional achievement, but in overall emotional equilibrium and rehabilitation. This perspective is implicit in the ancient Greek concept of temperament as a "balance" between different attributes (Klibansky et al., 1996).

## 2. Methods

### 2.1. Sample

We reviewed the records of consecutive ambulatory patients with the full spectrum of mental disorders in our practices—all had been under our clinical care or those we had seen in consultation in different countries. Schizophrenia, dementia, and

adult mental retardation were excluded. We focused on lawyers ( $n=34$ ), physicians, including most major subspecialties ( $n=41$ ), architects ( $n=27$ ), a mixed group of artists ( $n=48$ ), journalists ( $n=34$ ), managers/executives ( $n=35$ ), and industrialists ( $n=48$ ). The industrialists we chose for study were “self-made”—who developed their particular industry rather than inheriting it from the family business. Most of those who inherited the family business and/or wealth without contributing to the development of the industry were classified among the managers and executives. This was not always a clear-cut assignment, but few who had made significant creative expansions to the family industry that they had inherited were classified as self-made industrialists. There were engineers among the self-made industrialists, but an engineering background was neither necessary nor sufficient for being assigned to the industrialist category—they had to be basically self-made, irrespective of their educational background. All individuals with architectural background were classified in a separate category, even if some “loosely” described themselves as industrialists (i.e., developers of architectural firms).

## 2.2. Controls

We chose a comparison group (CG,  $n=120$ ) of individuals from the same clinical settings; we did our best to match for age ( $\pm 5$  years), gender ratio (1.5 males:1 female), and social class. As many in the study group had affective and anxiety disorder diagnoses, we also endeavored, to the extent possible, to match the CG on these illnesses with respect to broad categorization (i.e., bipolar, unipolar, and anxiety groups). Most professionals examined were in their 30s and 40s. Managers and industrialists were somewhat older, and architects somewhat younger than the CG was.

Details on the psychiatric illnesses of the various professionals and the foregoing demographic characteristics are provided only in broad terms to not reveal more than the minimum necessary for the main theme under study. This method of chart review of existing clinical records of patients under one’s care or about whom one is consulted is consistent with the relevant regulations in the relevant countries for research on data obtained through interviews during the period of 1984–1996 (when these data were collected).

## 2.3. Measures

Temperament data on depressive, irritable, cyclothymic, and hyperthymic types were obtained based on the Akiskal et al. (1979) and Akiskal and Mallya (1987) criteria incorporated into the Mood-Clinic Data Questionnaire (Akiskal et al., 1978) and its Italian modification, the Semi-Structured Interview for Mood Disorders (Cassano et al., 1987). Of the seven items for each temperament, the subject had to meet  $\geq 5$ . These criteria have since been validated as the Temperament Evaluation of Memphis, Pisa, Paris, and San Diego-Interview Version (TEMPS-I; Placidi et al., 1998; Akiskal et al., 1998). Each patient was also evaluated with respect to the American Psychiatric Association’s (1987) Axis II rubric of obsessive-compulsive at the trait level (OC trait). The latter measure was “orthogonal” to the temperament measures. In other words, OC trait personality designation could be given to patients in addition to their categorical temperament attributes. Both temperament and OC trait were assigned on the basis of interview by one of the authors. Good interrater reliability (70–88%) for the crucial temperament categorization had been established in a sample of 30 affectively ill and an equal number of anxious patients (Cassano et al., 1992; Savino et al., 1993).

The temperament and OC trait for each of the professions under study were compared with that of CG. Because this was an exploratory study with the aim of generating hypotheses, we used one-tailed statistics, with  $p$  set at the  $<0.05$  alpha level.

## 3. Results

We summarize the significant findings, comparing each professional group to the controls (CG).

- Physicians had nearly twice as much as dysthymic temperament as CG did (21% vs. 12%) and nearly twice as much as OC traits (32% vs. 17%).
- On dysthymic and OC traits, lawyers had a profile essentially identical to that of the physicians, but somewhat less pronounced on dysthymia.
- Managers had double the level of hyperthymic (43% vs. 20%) and triple that of OC traits (50% vs. 17%); none had cyclothymic temperament.

- Industrialists had triple the rate of hyperthymic (61% vs. 20%).
- Journalists had twice as many with cyclothymic (21% vs. 10%) and hyperthymic (36% vs. 17%) and half as many with OC traits (8% vs. 17%).
- Architects had three times as many with cyclothymic (31% vs. 10%), half as many as dysthymic (5% vs. 12%), and nearly none with hyperthymic. Their OC trait level was nearly double that of CG (33% vs. 17%).
- Artists had four times as many cyclothymic (43% vs. 10%) and were low on OC traits (7% vs. 17%).

As far as cumulative rate of categorically defined temperaments, managers and lawyers were indistinguishable from that of the CG (41%). Artists, architects, industrialists, and physicians combined had a significantly higher rate of 77%.

## 4. Discussion

### 4.1. Temperament profiles

The findings presented above provide relatively distinct profiles for each of the professions. Except for high rates of dysthymic temperament and OC traits, lawyers and physicians were otherwise closest to the CG.

Managers, like lawyers and doctors, had high rates on OC traits but were different in being twice as hyperthymic and very low on cyclothymia. Their pronounced OC attributes, it would appear, brought strong task orientation to their hyperthymic energy. Industrialists, who, by definition, were self-made, had even higher rates of hyperthymic traits, necessary for new enterprises and/or their expansion.

Both architects and artists seem to have benefited from being cyclothymic (3–4 times higher than the CG's). While architects had a higher level of OC traits than the CG did; artists were significantly less obsessional. This seems to make sense in that architects require greater organization and perfectionism, whereas such attributes may interfere with other forms of artistic expression.

It is also relevant that being less obsessional was useful for journalists, perhaps because it permitted their hyperthymic and cyclothymic attributes to

function relatively unfettered. This profile may be particularly felicitous for investigative journalism!

One other finding is noteworthy: While managers/executives and lawyers, compared with CG, had about the same cumulative rate of affective temperaments, the other five groups of professionals had markedly high rates of such temperaments. This would suggest that, comparatively, more among the rank of managers and lawyers could be described as unremarkable in temperament and, perhaps, more “cerebral”, even somewhat “phlegmatic”. By contrast, artists, architects, physicians, journalists, and industrialists were, on the average, individuals with greater affective oscillations along many temperamental dimensions. These considerations, in turn, suggest that industrialists may come across as “warmer” than managers are, and physicians as “warmer” than lawyers are. As a group, journalists appeared to have the broadest representation of temperament. These conclusions are obviously tentative, requiring future rigorous testing with the relevant instruments among clinically well subjects.

### 4.2. Limitations

The main limitation of this study is that it was conducted in individuals with outpatient mental disorders. Therefore, we cannot entirely rule out the possibility that the temperaments characterize the underlying illnesses rather than the professions. Nonetheless, given the approximately comparable rates of different disorders in each of the study groups—further assured by our method of selection of the comparison group—the differences in temperament reported herein are unlikely to be unduly state dependent with respect to these disorders. We prefaced the query on temperament attributes with a statement such as “We would like to know the kind of person you have always been—not just now”, which would minimize undue state dependency. Finally, that rather distinct profiles emerged for each off the seven professional domains argues against the notion that the underlying psychiatric illnesses fashioned the rates of temperament in each of the professions.

The second possible limitation of our study is that, in clinical practice, it is not possible to be blind to the respective professions of one's patients—it is therefore legitimate to ask if the interview was biased

towards finding temperamental attributes in line with the authors' expectations. Such bias, if any, was minimized because each of the attributes of all patient temperaments were systematically and individually assessed as part of our routine practice. The fact that we studied a "mixed" group of artists and that of physicians may have prevented us from detecting a broader range of temperamental characteristics within each of those groups (i.e., poets vs. performers, internists vs. surgeons). Our sample did not have scientists in theoretical fields, who may have deviated temperamentally from the other "creative professions" studied. A final limitation, discussed in the Methods, is that the categorization of people as architects, industrialists, managers/executives was not always straightforward.

Our patient sample was largely outpatient, from which schizophrenic patients were excluded and had relatively few full blown manic depressive patients with psychotic features. Therefore, we cannot comment on the link between psychosis and professional achievement and/or attainment observed by some European investigators (Oedegaard, 1956; Karlsson, 2004).

#### 4.3. Design issues

We wish to make several disclaimers. This paper is not about what attributes are in aggregate operative in highest levels of eminence or genius (e.g., see Simonton, 1988; Ludwig, 1995; Sternberg, 1999), nor is it specifically on artistic creativity (Jamison, 1993; Schildkraut et al., 1994). Our aim was, in a sample of convenience, to describe the temperamental and selective personality profiles of professions in seven domains represented in our clinical practice. We nonetheless submit that our data are relevant not only for patients with these professions but may serve as a stimulus on how to conduct such a study in the future among professionals without major mental disorders. Such a study may present feasibility problems because affective and related disorders are prevalent in eminent people with the professions that we studied (Ludwig, 1995). Rather than controlling for eminence and major mental disorders, the investigator could perhaps focus on an appropriate comparison group outside the professions of interest. Within the limits of this study, we endeavored to accomplish this. Formal

studies with prospective design can shed further light on temperament and profession.

## 5. Conclusions

We submit that our data provide preliminary support for the overarching hypothesis of our study, namely, that different temperament profiles lend distinct advantages to each of the professions. We confirm the role of cyclothymia in creative professions, such as art and architecture. Hyperthymic attributes were highest in industrialists and managers/executives. More provocatively, levels of obsessiveness seem to modulate the degree to which professions can realize their respective talents. This could mean opposite things: In some professions, organizational skills are necessary, in others, low levels of perfectionism, order, and convention are needed to permit greater openness to experience and creative outburst. Ours is an exploratory analysis, and the findings are tentative. Methodologically, more robust studies are pending.

One should be cautious to extrapolate our findings to a psychiatrically well population of professionals in the seven domains under study. However, our findings can be useful in the therapeutic process with psychiatrically ill patients from the ranks of these professions. Our data and the considerations discussed herein can help predict how each of the distinct temperamental profiles would shape reactions to psychiatrists, other mental health professions and physicians, family members, and coworkers. Such knowledge, in turn, can help their therapists to steer them towards life adjustment choices more congruent to their respective temperamental "assets" and "liabilities". Such work is in progress.

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take the responsibility for all the conclusions in the final version of this paper.

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